

Second Meeting of the Third  
**Renewable Energy & Energy Efficiency Advisory Committee**  
**To the Secretary of Commerce**

*March 12, 2015*

- **Opening**
  - The meeting was opened by Designated Federal Officer Drew Bennett, who provided news and updates on Department of Commerce activities and events relevant to the RE & EE industries, including:
    - March 25<sup>th</sup> Briefing on RE opportunities in Germany
    - May 4-7 Energy Sector Mission at World Bank
    - May 5 – 8 Utilities Telecom Council Technology Summit in
    - May 12 – 14 African Utility Week in Cape Town
    - June 9 – 11 PowerGen Europe in Amsterdam
  
- **Introductions and request for sub-committee volunteers**
  - Committee Chair Scott Sklar led introductions of the 29 REEEAC members present, as well as members of the public and other inter agency observers (see attachment: “Attendees...”)
  - The chair called for sub-committee volunteers and laid out broad objectives for the Committee and its sub-committees, including:
    - seek more opportunities for engagement with the secretary, not just written recommendations;
    - develop sub-committee recommendations and proposals that are fully formed: Committee rejections of sub-committee proposals should be rare;
    - sub-committees should have autonomy, seek dialogue with interagency, and drive Committee actions;
    - and each sub-committee should identify three problems or opportunities to address.
  
- **Briefings and Discussions: U.S.-China RE & EE Trade Issues and Upcoming Business Development Mission**
  - Scott Tatlock, *Director of Global Markets Office of China and Mongolia*, International Trade Administration
    - Provided overview of activities of ITA’s China office, focusing on U.S.-China government to government engagements touching on energy issues.
    - In Q&A, he responded to inquiries about market barriers impacting technology companies in China, stressing the importance for USG to work with industry to gain data on information on how a more open market will benefit China; he also highlighted interagency coordination and export promotion of

- U.S. energy companies in Africa as an example of efforts to ensure that U.S. companies are competing on the continent.
- Jennifer Andberg, *Deputy Director*, Department of Commerce Office of the Business Liaison
    - Highlighted four energy-related trade missions led by Secretary Pritzker, including upcoming joint DOC/DOE Business Development Mission to China, April 12 – 17:
      - Topics - Smart grid & smart technology, water & waste water, air quality, CCUS (Climate change), etc.
      - Beijing – senior government meetings & networking events
      - Shanghai – Trade & investment roundtables
      - Guangzhou – high level government meetings and smart growth conference to engage with delegation member. Topics include energy, environmental tech, smart buildings & smart cities.
    - Q&A discussion focused on Committee letter to Secretary Pritzker on Trade Mission, and Department of Commerce continued interest in working with U.S. industry to identify, quantify, and communicate trade issues to stakeholders in China. This remains a goal of Trade Mission preparation and execution.
  - Maria DiGiulian, *Policy Advisor*, U.S. Department of Energy Office of International Affairs
    - Overview of work of DOE office of International Affairs/Asia and the many areas of engagement with China, including:
      - Efforts to implement joint presidential objectives on climate change announced between U.S and China in November. This is helping push toward Paris COP and there are a number of relevant events this year that DOE will inform industry of.
      - Major carbon capture and sequestration projects involving U.S. companies in China.
      - Technical components of upcoming trade mission, including efforts to build common cost-benefit analysis on energy and environment between DOE and China counterparts; and State Department-led Smart Cities projects.
    - Q&A discussion focused on technology partnership opportunities in China, including smart cities, air quality, and shift away from Coal. DOC and DOE efforts on standards and technology partnerships were highlighted, as was work of Advocacy Center.
  - **Grid of the Future: Department of Energy Presentation and Discussion**
    - Eric Lightner, *Director of the Federal Smart Grid Task Force*, U.S. Department of Energy
      - Background and next steps for the DOE's Grid of the Future Initiative and how the Committee may be able to help:

- Started in December 2013 and has included many multi-stakeholder events, discussions, and reports on necessary transitions – if not revolutions – to come for energy infrastructure.
  - Main findings included: need to move to distributed generation, but not replace centralized; increasing role of energy storage; enhanced demands to balance supply and demand; bigger role for consumer and their shifting expectations; increasing complexity of markets and expansion of players therein.
- Main findings:
  - Generation – centralized and distributed, dispatchable and non-dispatchable, micro-grids – complementary not replacement
  - Energy Storage
  - Balancing Supply and demand
  - Consumers – different expectations and options
  - Markets – wholesale and retail, emergence of third party non-competitive players.
- Recommendations: to engage “the ecosystem” of stakeholders:
  - 1. Establish clear and comprehensive guiding principles to develop a unifying architecture to ensure interoperability across the entire grid.
  - 2. Create a transition framework for guiding investments that will assist with regional/state planning which includes standardized industry markets and foundational investments
  - 3. Drive solutions through stakeholder engagement and education.
  - 4. Address technology challenges and limitations through robust research and analysis.
- Goal is to implement recommendation 1 &2 within the new few years.
- Q&A discussion of next steps, including:
  - DOE work to develop unifying architecture – they are engaged with stakeholders who are getting first hand experience, like NY state.
  - Need for continued industry input – REEEAC members noted that “industry” *does* include centralized generation.
  - Need to link w/ other agencies and ensure there is top-level intellectual capital from the government invested in this initiative.
  - How the Committee, DOE, and others can help promote this effort and the resulting architecture and transition framework to

international stakeholders. Though other nations will be different, it will be important that this broader effort to manage transition in a systematic and inclusive manner be a model.

- **Working Lunch: Review and Discussion of Draft Renewable Energy Top Markets Studies 2015**

- Drew Bennett and Cora Dickson from DOC/ITA Energy office presented on preliminary results for the 2015 Top Markets Reports for Renewable Energy, Renewable Fuels, and Smart Grid.
  - Highlights included improved methodologies, in-depth case studies, and continued focus on analysis that will improve government actions driving trade in these industries, along with informative research that will be accessible to U.S. exporters.

- **Working Session and Discussion Led by the Chair: Defining Sub-Committees and their objectives.**

- Committee discussed and made changes to the one-page summary on Committee structure (see attached “REEEAC III Sub Committees...”)
- Refining Sub-committees (1:10pm) lead by Scott Sklar
  - Resiliency and Infrastructure
    - Comment - includes smart grid, meters and sensors
    - Comment - addresses hybrid & DG systems
  - Smart Transportation:
    - Comment – include fleets. Accepted.
    - Comment – all vehicles are included.
  - Global Energy Delivery
    - Comment – Markets are implicit in all these categories
    - Comment – include manufacturing in all sub-committees.
    - Comment – include market growth and structure under ALL sub-committees.
  - Smart communities/cities
    - Elegant integration of all other committees
    - Comment – efficiency suggested and accepted.

- **Working Session: sub-committee breakout groups to identify key issues and objectives:**

- Transportation
  - Trade embargoes
  - US manufacturing
  - Diff tech
  - Impact of oil prices on exports
  - Problem areas:
    - Trade promotion – vital
      - Focus on 4 areas – US policy (low prices), offering energy security solutions, country regulations (tariffs, standards, etc), infrastructure

- Resiliency in infrastructure – includes the ability to withstand stress, how do you recover when something occurs that damages infrastructure.
  - Cyber security, physical security
  - Expanding energy & water nexus, to include water & food, energy & gas
  - Sensors, controls, micro-grids
  - Developing business models
  - Incorporate safe energy
  - How to measure benefits
  - Risks
    - Impact of the EPA (coal generation). If shift from coal to gas, what are the risks in the coal-gas nexus?
    - What is being done with federal regulation – electric-gas concerns
    - Look out how all that will impact infrastructure here, and export abroad
- Global energy development
  - All ideas are good ideas, general ideas:
  - Working with UN to give safe energy to displaced populations
  - Promote US manufacturing and services for exports
  - Work with government agencies before negative things happen
  - Look at model similar to that of DOD – link with US exports, help US exports
  - Finding ways of finance
  - Faster financing – once done, should be repeatable.
  - Revisit trade barriers and tariffs
  - Arrange meetings with branches of government so can search out help
  - Look into trade policy – can we change something in the policy to support those objectives
- Smart communities, cities
  - Recognize federal and multinational programs – inventory of what is out there.
  - Provide packages to these technologies, based on environment climates
  - Value added knowledge – how to share these overseas.
  - Assessment of tools – tools are unknown. Commercialize them.
  - Develop relationships with existing smart communities overseas & having them perform reverse trade to showcase our technologies.
- Subcommittee Chairs were selected:
  - Global Energy Delivery - Mukesh Dulani
  - Resiliency & Infrastructure - Gary Rackliffe
  - Smart Transportation - Cindy Thyfault
  - Smart Communities - Mita Burke

- **Public Comment Period**
  - There were no comments from the public
- **Next steps and closing**
  - Next Meeting
    - June 18<sup>th</sup> (Thursday) – confirmed
    - Before end of April, each sub-committee should have a conference call
    - Further meeting, September 17<sup>th</sup>?
    - Are people interested in inter-agency meetings?
      - Power Africa meeting at some point?
      - Another talk on financing
      - State & Treasury – funding
- **Meeting closed by Designated Federal Officer at 3pm.**

**Meeting participants:**

First Name	Last Name	Title	Organization	REEEAC Member
Todd	Foley	Senior Vice President- Policy and Government Relations	The American Council on Renewable Energy	x
Jennifer	Derstine	Director of Strategy, Policy, and Corporate Development	Capstone Turbine Corporation	x
Maja	Wessels	Executive Vice President- Global Public Affairs	First Solar	x
Karl	Gawell	Executive Director	The Geothermal Energy Association	x
Terry	Fry	Senior Vice President- Utility Services	Nexant	x
Jennifer	von Bismarck	President	TowPath Partners	x
Dan	Delurey	President	The Association for Demand Response and Smart Grid	x
Bruce	Bauchmire	Director of Renewable Energy Services	DLZ Corporation	x
Kevin	Gresham	Vice President- External Affairs	E.ON North America	x
Ken	Kramer	Managing Director	Rushton Atlantic	x
Matt	Card	Vice President- Global Sales and Marketing	Suniva	x
Gary	Rackliffe	Vice President of Smart Grid Systems	ABB North America	x
Linda	Church-Ciocci	Executive Director	The National Hydropower Association	x
Ross	Malme	Partner	Skipping Stone	x
Fred	Sisson	CEO	Synnove Energy	x

Scott	Sklar	Stella Group President and REEEAC Chair	The Stella Group	x
Trey	Taylor	Co-Founder & President	Verdant Power	x
Cindy	Thyfault	Founder and CEO	Westar Trade Resources	x
Frank	Yang	Vice President of Business Development	Stion Corporation	x
Joe	Desmond	Senior Vice President of Marketing and Government Affairs	BrightSource	x
Joel	Velasco	Senior Vice President	Amyris	x
Kelly	Davis	General Counsel	The Renewable Fuels Association (RFA)	x
Thomas	Meth	Executive Vice President- Sales and Marketing	Enviva	x
Matthew	Fedors	Principal	Leaf Clean Energy	x
Barry	Haaser	Executive Director	The OpenADR Alliance	x
Mita	Burke	CEO	Sunshine Industries USA	x
Michael	Canada	CEO	EnerDel	x
Mukesh	Dulani	President	SolarWorld Industries America Inc.	x
Tom	Werner	President and CEO	SunPower	x
Eric	Lightner	Director - Federal Smart Grid Task Force	U.S. Department of Energy	
Tanya	Burns	Department of Energy Consultant	Energetics	
Jennifer	Andberg	Deputy Director	U.S. Department of Commerce Office of the Business Liaison	
Aya	Kantorovich	Member of the Public	The George Washington University	
Andrew	Bennett	REEEAC Designated Federal Officer	U.S. Department of Commerce: International Trade Administration	
Catherine	Vial	Environment Team Lead	U.S. Department of Commerce: International Trade Administration	
Alyssa	Teddy	Intern, Office of Energy and Environmental Industries	U.S. Department of Commerce: International Trade Administration	
Sandra	Collazo	Commercial Specialist	U.S. Department of Commerce: International Trade Administration	
Karl	Cress	Smart Grid Team Lead	U.S. Trade and Development Agency	
Ellen	House	France Desk Officer	U.S. Department of Commerce	

Anthony	Quinn	Member of the Public	ASTM International
Wendolyn	Holland	Member of the Public	Holland Consulting
Hannah	Hunt	Member of the Public	AWEA
Kathryn	Clarke	Renewable Energy Specialist	U.S. Department of State