

ACEC Environment & Energy Committee
Summer Meeting
ACEC Headquarters
1015 15th Street, N.W., Washington, DC
August 24th and 25th, 2016

Agenda

<i>Wednesday, August 24, 2016</i>

Theme: resources, locations, applications, finance, regulatory barriers. This meeting will examine the challenges and opportunities of cities in regions where there are escalating interdependencies of energy and water resources and infrastructure.

With the **WRI Ross Center for Sustainable Cities** we will learn about the WRI program with 30 cities to achieve sustainability goals. The **US Council of Mayors** will highlight water service rate and revenue issues. A panel will review the operation of the **National Environmental Policy Act** over the past four decades and whether it is becoming a major barrier in infrastructure development. From **HDR** and the **Water Design Build Council** we will hear the latest developments in public, private and P3 project financing in municipal water projects. We will hear about challenges posed by the “**Keep It in the Ground**” movement from the **Energy Equipment Industry Alliance**. From the **Army Corp**, and **Bureau of Reclamation** and **National Association of Clean Water Agencies** and **American Water Works Association**, we will learn about regional power and water challenges and strategies and the developments in “water utilities of the future.”

Speakers from the **National League of Cities** the **Smart Cities Council** will discuss US cities of opportunity and innovation in terms of energy and environmental resources management.

Finally, we will get an update on new developments in cyber security regulation and design from **Joel deJesus**. With the Ukrainian power disruption late last year, federal initiatives (**Supply Chain Rule**) now suggest need for both manual measures and industrial control system component certification.

With the regional, urban, finance, and regulatory background of the meeting, a robust discussion should point to objectives and goals for ACEC advocacy and awareness in the next congress and administration.

8:00 a.m. **Breakfast**

8:15 a.m. **Opening Remarks, Introductions & Announcements**

Jack Hand, Chairman, ACEC Environment & Energy Committee
POWER Engineering

Lynn Schloesser, Director, ACEC Environmental & Energy Programs

8:30 a.m. **Governmental Affairs – Federal Overview Legislative, Regulatory, Judicial**
Lynn Schloesser

9:15 a.m. **Urban Resource Challenges and Regulatory Barriers –**

- What and where are the major challenges to available resource access and use to meet urban needs?
- What are the major financial/regulatory barriers to energy and water infrastructure investments that would meet these challenges?

Panelists:

- [Jennifer Layke](#), Director Building Efficiency, WRI Ross Center for Sustainable Cities ([PowerPoint](#))
- [Richard Anderson](#), Senior Advisor, US Council of Mayors ([PowerPoint](#))

10:30 a.m. **Break**

10:45 a.m. **Financial Trends - Federal, State, Private and P3 –**
Are the current frameworks for investment working?

- What are the trends?
- What are the barriers that need to be addressed?

Panelists:

- [D. J. Gribbin](#), HDR (formerly with Macquarie); ([PowerPoint](#))
- [Linda Hanifin Bonner](#), Water Design Build Council ([PowerPoint](#))

12:00 Noon **Lunch**

12:30 p.m. **Pipeline Action Group - Energy Equipment and Infrastructure Alliance**
The “Keep it in the Ground Movement” appears organized to stop pipeline construction.

- How effective is it?
- How is industry responding?

Speaker:

- [Toby Mack](#), President and CEO, EEIA ([PowerPoint](#))

1:30 p.m. **North American Energy Infrastructure –Through the NEPA Lens –**
NEPA has been in place for more than 4 decades, and replicated around the world, how has it worked or not worked?

- Does NEPA need reform?
- If so, what reform?

Panelists:

- [Peter R. Steenland](#), Counsel, Sidley Austin LLP Washington, D.C. ([PowerPoint](#))
- [Lucian Pugliaresi](#), President, Energy Policy Research Foundation, Inc. ([PowerPoint](#))

2:50 p.m. **Break**

3:00 p.m. **Integrated Regional Resource Management**

North American regional water-energy resource interdependencies are rising. Deepening droughts and water demand growth, separately or together, are driving regional water-energy management issues across federal and state jurisdictional boundaries. Urban/energy/industrial, agricultural, transportation, recreational, and fishery demands are in ever stiffening competition on a regional basis. The most acute interdependencies and conflicts appear to be in the southwest (Los Angeles, Phoenix, SRP). But other regional examples are growing: southeast (Atlanta (GA/AL/FL)). Some areas appear to have less conflict (TVA, Bonneville, Great Lakes) due to natural circumstances and long institutional development to address water-energy resource issues.

- How are interdependencies of water-energy-food resources managed in the federal government and with Canada and Mexico?
- How are these models of interdependent resource management successfully adapting to foreseeable changing demands?
- Are there institutional gaps that should be filled?

Panelists:

- [Steven Barton](#), US Army Corp of Engineers ([PowerPoint](#))
- [David Raff](#), Science Advisor, Bureau of Reclamation ([PowerPoint](#))

4:00 p.m. **Developments in the Water Utility of the Future**

Utility business models have changed and are changing. Telecommunications and electricity have, and are undergoing, enormous change. Water utilities (providing both safe and clean water services) are following a similar path along a continuum toward the Water Resources Utility of the Future. In some respects, many water utilities have already achieved this future form, where compliance

with federal statutes and other requirements is simply the floor, above which they are moving in exciting new directions.

- How is a focus on resource recovery changing the way water utilities do business?
- What efforts are underway to better enable water utilities to take risks on new and innovative technologies?
- What type of innovative partnering and financing arrangements are being explored by water utilities?

Panelists:

- [Nathan Gardner-Andrews](#) National Association of Clean Water Agencies ([PowerPoint](#))
- [Adam Carpenter](#) American Water Works Association ([PowerPoint](#))

5:00 p.m. **Adjourn**

6:00 p.m. **Committee Dinner** TBD one option:
Lincoln Restaurant
1110 Vermont Ave, NW
Washington, DC

<i>Thursday, August 25, 2016</i>

8:15 a.m. **Breakfast**

9:00 a.m. **Energy and Water - Cities of Opportunity and Innovation**

The National League of Cities has thousands of members who participate in the development and execution of a federal advocacy program.

- What are the NLC's advocacy priorities?
- What are the NLC energy, water and environmental infrastructure issues?

Speaker:

- [Carolyn Berndt](#), National League of Cities ([PowerPoint](#))

The Smart Cities Council envisions a world where digital technology and intelligent design create smart, sustainable cities with high-quality living and jobs. SCC promotes smart market development through advocacy and action. SCC promotes gathering and use of data from smart devices and sensors embedded in roadways, power grids, buildings and other assets to create valuable information and digitally enhanced services.

- How does the SCC program apply to infrastructure planning and development to meet energy, air, water, and waste challenges?

- What are the regulatory concerns or barriers in smart city development?

Speaker:

- [Jason Nelson](#), Smart Cities Council ([PowerPoint](#))

10:00 a.m. Break:

10:15 a.m. **Innovation and Regulation – Supply Chain Rule ...**

Conventional and unconventional means to bolster reliability and resiliency of infrastructure are under development or consideration. This year the U.S. Naval Academy has returned to training on the use of the sextant. The US Senate Energy Committee held a hearing in July on research into manual technologies to address Ukrainian-like grid threats and a few days later FERC issued its final supply chain rule that included a suggestion that manual systems may be reasonable cyber security measures.

- What do these developments mean for design?
- How can industry and regulatory bodies improve collaboration on reliability, security and resiliency while fostering innovation?

Speaker:

- [Joel de Jesus](#), Dinsmore & Shohl LLP ([PowerPoint](#))

11:00 a.m. **Discussion/Lunch**

- Suggested Advocacy/Awareness/Education Action Items
- Topics and Date for Committee Winter Meeting (February 2017)

1:00 p.m. **Adjourn**

References

FERC Supply Chain Rule; NERC SDT

<https://www.ferc.gov/media/news-releases/2016/2016-3/07-21-16-E-8.asp#.V7zCEk0rLcs>

<http://www.nerc.com/pa/Stand/Pages/Project201603CyberSecuritySupplyChainManagement.aspx>

[x](#)

Recent Water Reports

<http://www.usbr.gov/climate/secure/>

<http://www.usbr.gov/lc/region/g4000/24mo.pdf>

<http://www.circleofblue.org/2016/world/u-s-water-utilities-not-prepared-catastrophe/>

<https://www.dhs.gov/sites/default/files/publications/niac-water-resilience-study-draft-06-09-16-508.pdf>

WRDA

H.R. 5303

<http://transportation.house.gov/wrda-2016/>

S. 2848

<https://www.congress.gov/bill/114th-congress/senate-bill/2848>

Energy bill

H.R. 8

<https://www.congress.gov/bill/114th-congress/senate-bill/2012/text/eah>

White House veto threat of H.R. 8

https://www.whitehouse.gov/sites/default/files/omb/legislative/sap/114/saphr8r_20151130.pdf

S. 2012

<https://www.congress.gov/bill/114th-congress/senate-bill/2012/text/es>

Side by Sides of H.R. 8 and S. 2012

<https://www.ase.org/resources/side-side-comparison-hr-8-and-s-2012>

<http://www.globalpowerlawandpolicy.com/2016/06/updated-comprehensive-energy-policy-legislation-a-side-by-side-comparison-of-h-r-8-s-2012/>

Blackburn-Schrader

The advocates on either side of the model building codes issue (H.R. 8 section 3141, S. 2012 section 1001) are as follows:

1. Alliance to Save Energy (ASE) is steadfastly against Blackburn-Schrader
<https://www.ase.org/blog/breaking-down-bill-series-building-energy-codes> .
2. American Council for an Energy Efficiency Economy (ACEEE) supplies ASE studies to oppose Blackburn-Schrader <http://aceee.org/sites/default/files/ee-legislation-9-15-15.pdf> . But ACEEE is concerned about studies that tend to support Blackburn-Schrader <http://aceee.org/blog/2016/04/looking-studies-are-critical-energy> ; <http://aceee.org/sites/default/files/critiques-ee-0416.pdf>
3. ASHRAE opposes Blackburn-Schrader
[file:///C:/Users/lischloesser/Downloads/ASHRAE-Testimony-EC-Apr-2015-FINAL%20\(1\).pdf](file:///C:/Users/lischloesser/Downloads/ASHRAE-Testimony-EC-Apr-2015-FINAL%20(1).pdf)

4. The American Gas Association and building materials manufacturers are supportive of Blackburn-Schrader ;
 - a. <http://www.apga.org/blogs/dave-schryver/2015/10/01/house-energy-and-commerce-committee-approves-comprehensive-energy-bill>;
 - b. <https://www.nahb.org/en/advocate/~media/BD8782D85CAD4F09B529B2435CC92AAB.ashx>
 - c. <http://archive.constantcontact.com/fs131/1102482301929/archive/1123059414326.html>
5. US Chamber, NAM and others support Senate bill language:

<https://www.uschamber.com/letter/multi-association-hill-letter-energy-bill-conferees-supporting-energy-efficiency-provisions>

Pax Urbanica and Automation

1. Connectography, Parag Khanna, 2016

<https://www.amazon.com/Connectography-Mapping-Future-Global-Civilization/dp/0812988558>

“We are moving into an era where cities will matter more than states and supply chains will be a more important source of power than militaries — whose main purpose will be to protect supply chains rather than borders. Competitive connectivity is the arms race of the 21st century.”
2. Rise of the Robots, Martin Ford, 2015

https://www.amazon.com/Rise-Robots-Technology-Threat-Jobless/dp/0465097537/ref=sr_1_1?s=books&ie=UTF8&qid=1472489577&sr=1-1&keywords=rise+of+robots

Summer Meeting Summary

1. Next Environment and Energy Committee meetings:
 - a. Broadmoor Resort, Colorado Springs, CO, ACEC Fall Conference October 21, 2016 10:15 am mountaintime.
 - b. 2017 winter meeting, Washington DC, February 8-9.
 - c. Next summer meeting to be held at location outside of Washington, DC. Host firm, or firms, to be determined. Denver was suggested as easily accessible and likely to have local resources to support presentations.
2. Attendance was good (21) with new participation from Bechtel, Burns and McDonnell, AECOM, Clark-Hill, and HDR.
3. Legislation/regulation
 - a. ExIm Bank remains less than fully operational with lack of a quorum on the board and resistance from Senate leadership to fill vacancies. This remains a major issue for ACEC members.
 - b. WRDA (Senate version) is thought to have high likelihood of passage this Congress. Committee remains engaged to support passage. House action lags and

will likely be responsive to Senate floor passage. Senate version has QBS and Flint fix.

- c. Energy bill is in a slow moving conference that needs substantial energy and non-energy compromise to continue to final passage. Energy efficiency and permitting of fossil energy facilities are points of contention with the White House. ACEC supports compromises to continue to final passage. Look to think tanks to settle the payback period issue and related mitigation v. adaptation investment choices. Like WRDA, the bipartisan Senate version is thought to have higher likelihood of passage than the House version.
 - d. FERC final Supply Chain rule has moved to NERC implementation. Two ACEC members have been nominated to represent ACEC in the standards drafting team. The team has one year to report a standard back to FERC. The ACEC interest is substantial and EEC will keep other ACEC organizations informed of the NERC activities concerning implementation.
 - e. Simple and effective NEPA reforms could be supported in a non-threatening manner:
 - i. address EPA's role under section 309, CAA
 - ii. have CEQ find adequacy of an EIS and an EA
 - f. "Keep it in the ground" movement is growing and effectively stopping pipeline projects through legal delay. Pipelines need grassroots participation from industry supply chain. New pipelines that enable decreases in GHG emissions, and are safer than existing lines or alternative transportation, are being delayed or canceled. Global oil prices influence domestic oil and gas pipeline economics. NEPA is used to raise climate change impacts from projects. Pipeline transportation of oil is far more economic and safer than rail.
4. Many cities' advocacy priorities (energy and water) align with ACEC. Both NCL and USCM can be strong ACEC partners in advocacy on energy, water and project finance issues. USCM – any new permit requirements must be affordable. SRF funding increases are needed – a zero interest loan is equivalent to a 47% grant. 16,000 POTW's spent \$117.5B in 2013, creating many jobs.
 5. Water project finance – P3. Lots of private money ready to jump into P3, but there is not a big difference between \$100M P3 and a \$1B P3 to an investor. In the Past 20 years every single infrastructure P3 job that has failed has done so for political reasons. Getting more water P3 opportunities may mean a more streamlined process to get investor participation.
 6. Urban infrastructure innovations (Smart Cities Council) are constrained by procurement barriers, not technology. ACEC can partner with SCC to influence procurement processes to generally consider innovative technologies.
 7. Regional water management is highly organized and routinely exercised at the basin level, e.g., Columbia River, Army Corp. Energy-water nexus is actively and continuously addressed by DOI/BR and USACE. Both BR and USACE would like to return to ACEC/EEC meetings to discuss NEPA and climate change. [2016 Secure Water Act Report to Congress](#)
 8. Water utility (NACWA, AWWA) initiatives are faced with public expectations of services at little or no cost. Operations are looking for new resource recoveries and efficiencies to help meet revenue needs and as part of regulatory challenges e.g., CPP.

9. QER, FERC Orders 1000 (Transmission Planning) and 829 (Supply Chain Cyber Security) remain of high interest to EEC.

End