2020 FERC Power Market Software Conference – June 23-25
Welcome and Introductory Remarks

Word frequency
from 2020 abstracts

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Administrative Announcements

- <u>All virtual</u>: Due to COVID-19, conference is virtual (WebEx) this year

- <u>Slides/materials</u>: Download from <u>ferc.gov</u> calendar or <u>go.usa.gov/xwvED</u>

- <u>Timing</u>: 20 minutes of presentation time and 10 minutes of Q&A

- <u>Muting</u>: Commission staff will try to keep all attendees muted, except for the presenter and Q&A participants

- <u>Q&A</u>:

  - Please type questions or topics into the "chat" portion of the WebEx

  - Staff will call on questions and unmute you when you are called on during the Q&A (time permitting)

- <u>WebEx registration</u>:

  - You received a confirmation email from FERC with *three* WebEx links, one to register (with WebEx) for each day of the conference

  - Multiple WebEx registrations are necessary to reserve slots for registered participants (given our WebEx license limitations)
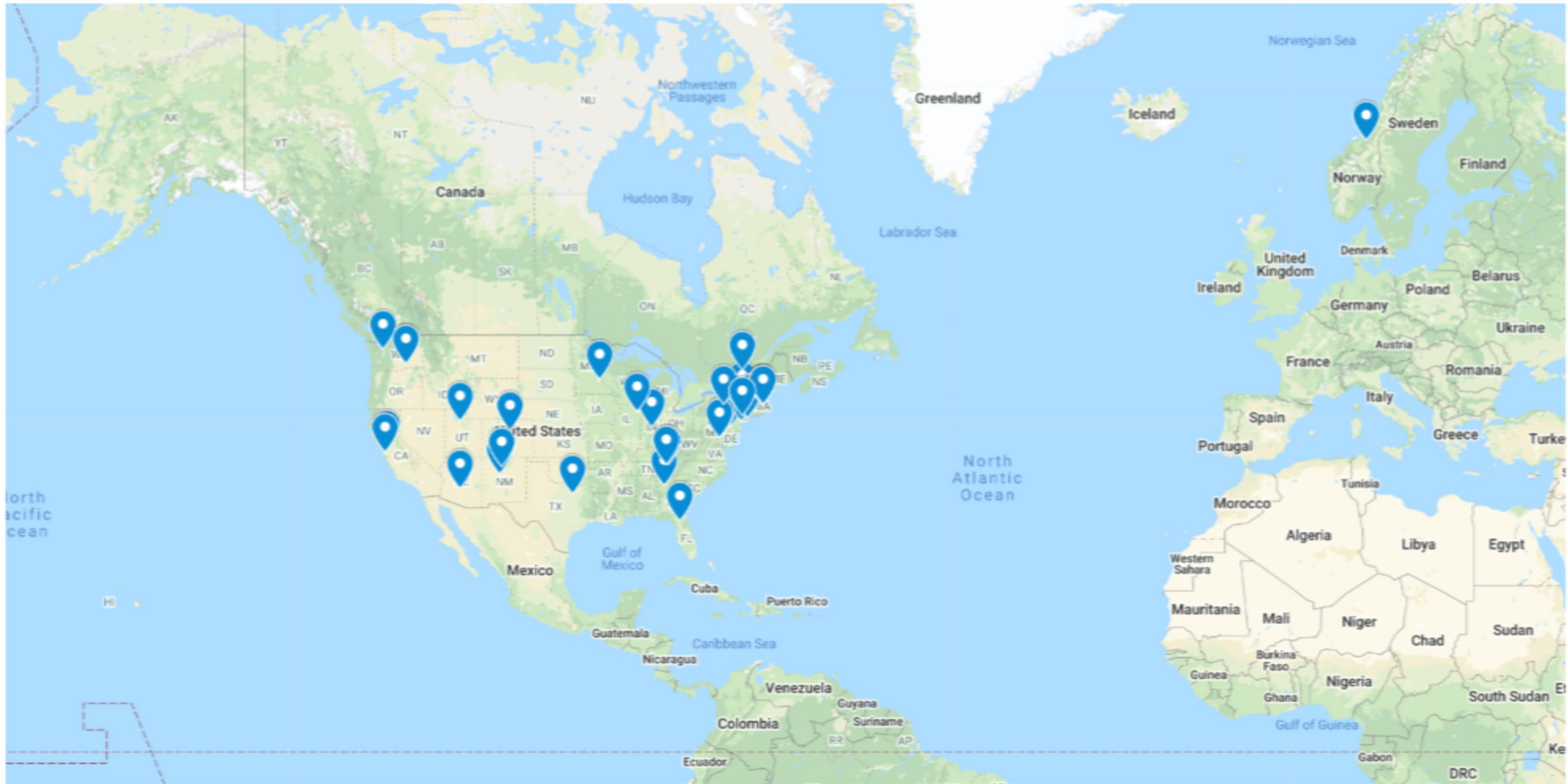
Federal Energy Regulatory Commission

Conference Facts

- This year is the 11th annual conference

- Started in 2010 by Office of Energy Policy and Innovation (OEPI)

- In the last 11 years, there have been more than 500 presentations, and attendees from 6 continents

- This year has:

  - Virtual attendees from at least 4 continents and 8 countries, representing 16 nationalities

  - 32 presentations from 101 individual authors representing 32 organizations

- Mix of seasoned industry veterans and student presenters

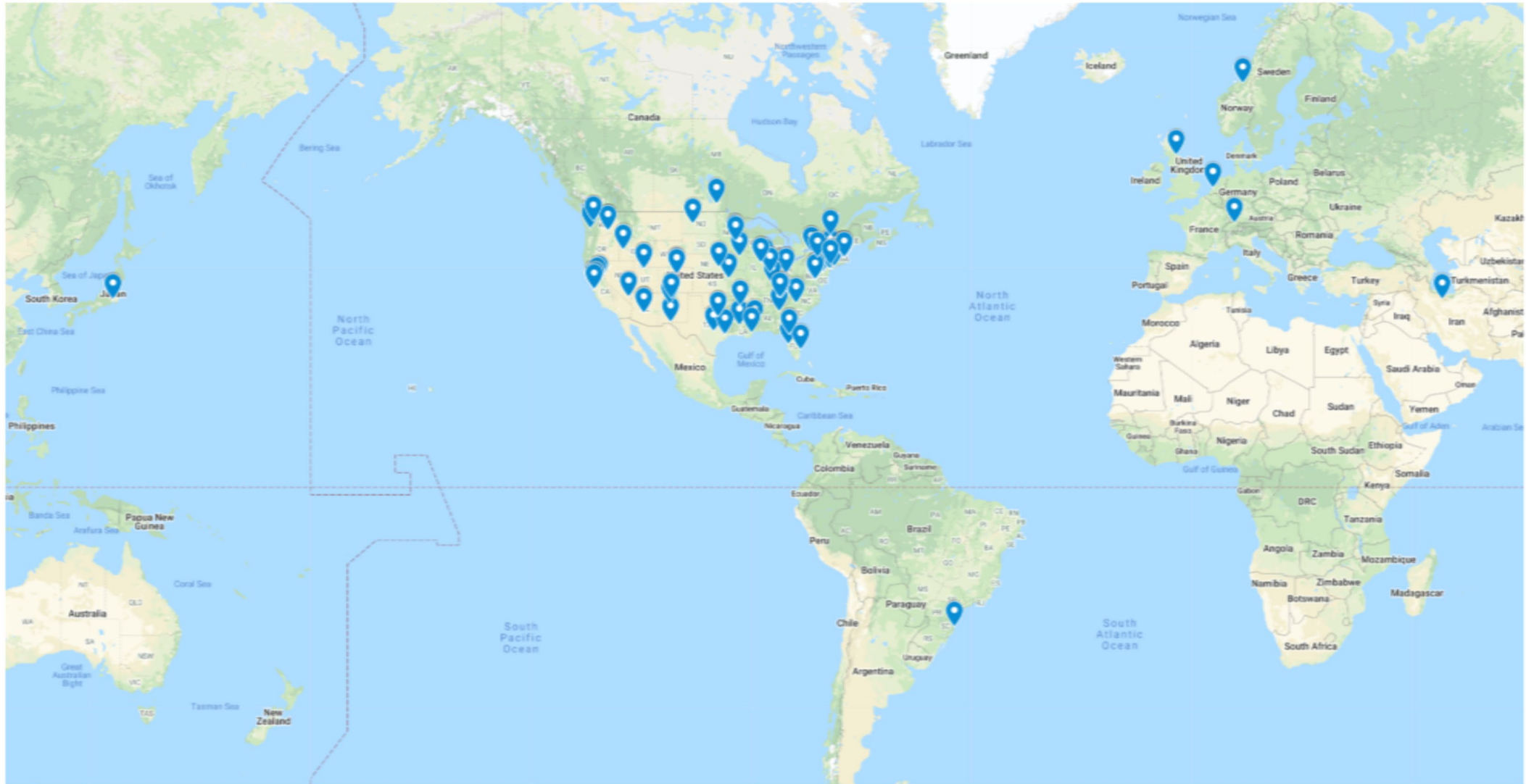- Representatives from ISOs, national labs, universities, private industry, and government

Conference Facts

Serving Size 3 days (72h)
Servings per Conference 1

Amount Per 2020 Conference

Calories 0	Calories from Fat 0

% Daily Value

Presentations 32	300 %
Count by lead presenter organization:	
ISOs/RTOs 8	
National Labs 7	75 %
Academic 11	66 %
Industry/Consulting 4	103 %
Research Organiations 1	38 %
Gov Agencies 1	9 %

Organizations participating as authors 32

ISOs/RTOs 4
National Labs 6
Academic 14
Industry/Consulting 6
Research Organizations 1
Gov Agencies 1

2020 FERC Software Conference Speakers/Authors

2020 FERC Software Conference Attendees

Federal Energy Regulatory Commission

FERC Regulation of Electric Markets

FERC Does

- Regulates wholesale sales of electricity (market design, rates)
- Regulates interstate transmission of electricity
- Protect reliability of transmission system through mandatory reliability standards
- Monitor electricity markets and enforces rules/regulations
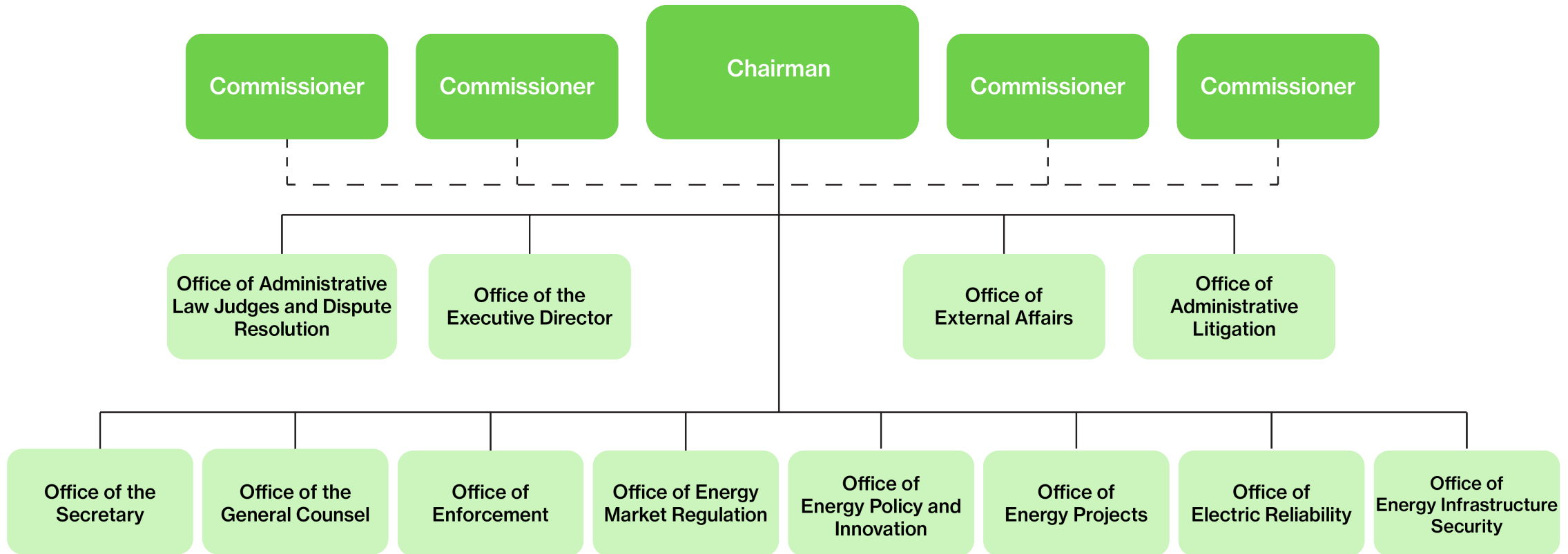
FERC Does Not

- Regulate retail electricity sales
- Regulate local distribution of electricity
- Approve siting or physical construction of electric generation or (most) transmission
- Regulate the safety or construction of nuclear power plants

FERC Structure

- Independent agency within Department of Energy

- Five Commissioners (Presidential appointment, Senate confirmation)

- One Commissioner designated by President to be Chairman

- Commission orders decided by vote of Commission members

- Chairman leads agency's agenda and heads-up a multi-disciplinary professional staff
  - Economists
  - Engineers
  - Operations research analysts
  - Industry/scientific specialists (e.g., fisheries biologists)
  - Lawyers
  - Accountants
  - Support staff

FERC Structure


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           Commissioner   Commissioner   Chairman   Commissioner   Commissioner
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- Office of Administrative Law Judges and Dispute Resolution
- Office of the Executive Director
- Office of External Affairs
- Office of Administrative Litigation

- Office of the Secretary
- Office of the General Counsel
- Office of Enforcement
- Office of Energy Market Regulation
- Office of Energy Policy and Innovation
- Office of Energy Projects
- Office of Electric Reliability
- Office of Energy Infrastructure Security

Some FERC/OEPI Electricity Market Initiatives

- Market design/incentives
  - Price formation whitepapers (AD14-14)
  - Offer caps (Order 831)
  - Uplift and Transparency (Order 844)
  - Shortage pricing/settlement intervals (Order 825)
  - Fast-start pricing (Dec 2017 show-cause orders)
  - Transmission incentives (Mar 20, 2020 NOPR, RM20-10)

- Other efficiency and/or removing barriers to entry
  - Storage (Order 841)
  - Demand response (Order 745, EPSA v. FERC Supreme Court decision)
  - Variable energy resources (Order 764)
  - Merchant transmission (Jan 17, 2013 policy statement, AD12-9)
  - Transmission line ratings/grid-enhancing technologies (2019 conferences, AD19-15, AD19-19)

- Transmission open access, et al.
  - Transmission open access (Orders 888/889/890)
  - Interconnection (Orders 2003/2006/792/845)
  - Transmission planning (Order 1000)

- Industry/stakeholder information, communication
  - Annual software conference (AD10-12)
  - Market data analysis (Order 760)
  - Summer/Winter Assessment reports (go.usa.gov/xwVtE)
  - Industry outreach
  - Annual demand response/advanced metering report (go.usa.gov/xwVME)
  - RTO-scale test problems (AD10-12-002, go.usa.gov/xwy9h)
  - OPF staff papers (go.usa.gov/xwyX4)

FERC/OEPI Hires Analysts Just Like You!

- In last ranking (2019), FERC ranked by Partnership for Public Service:
  - #1 mid-sized Federal agency to work for
  - #1 in work-life balance (six years in a row)
  - bestplacestowork.org/rankings/detail/DR00
- FERC/OEPI positions include (among others):
  - Operations research analysts
  - Engineers
  - Economists
  - Energy industry analysts (math, science, policy, business, etc.)
- OEPI analysts work on research, rulemakings, docketed cases
- Internships periodically available
- All jobs/internships posted at usajobs.gov and ferc.gov

I WANT YOU FOR U.S. FERC
VISIT USAJOBS.GOV OR FERC.GOV FOR JOB POSTINGS

Enjoy the Conference!