## FEDERAL- STATE JURISDICTIONAL APPROACHES TO EMERGING ELECTRICITY TECHNOLOGIES AND GRID MODERNIZATION OPPORTUNITIES FOR STATE ACTION

DRAFT May 11, 2017

#### **OVERVIEW**

The National Council on Electricity Policy (National Council or NCEP) is exploring a number of issues regarding federal-state jurisdictional boundaries affected by new technology developments, services, and policies that are affecting efforts to modernize the electricity grid. These issues address tensions between federal and state regulatory bodies and their roles in implementing the *Federal Power Act's* "bright line" of authority.

NCEP has hosted two meetings on this topic, the first held in mid-2016 (in conjunction with the Council's Annual Meeting) and the second in late-2016, specifically for the Council's Executive Committee and invited members, and staff from the U.S. Department of Energy (DOE/OE) and the Federal Energy Regulatory Commission (FERC). The meetings have focused on specific jurisdictional issues related to five major work areas on which NCEP is focused: The Evolving Electricity Sector; Air and Energy Resources; Resource Adequacy and Diversity; Transmission Planning; and Reliability, Resilience, and Recovery.

NCEP also participated in a technical conference hosted by the FERC that explored the role of wholesale markets in accommodating state policy preferences. The Council's inputs to the technical conference are attached to this report.

This report provides an overview of why this blurring is occurring and in what work areas, how states are pushing the boundaries of regulatory authority, and the National Council's recommendations for further research, analysis, and technical assistance that could potentially help clarify jurisdiction across traditional generation, transmission, and generation boundaries.

#### ABOUT THE NATIONAL COUNCIL

The National Council on Electricity Policy (NCEP) is a U.S. DOE-funded informative and technical assistance project operated by the staff of the National Association of Regulatory Utility Commissioners. NCEP has been convening state officials and staff in 50 states since 1994, bringing together utility commissioners, legislators, air agency officials, consumer advocates and others, who gather to exchange views and improve understanding of power sector issues. Jurisdictional issues have been a central interest area to the participants in this project. This report summarizes its activities in this arena as supported by the US DOE under agreement DE-OE0000023, although the outcomes and conclusions are not those of the Department of Energy or the official positions of the agencies whose officials participate in the NCEP. For questions about this summary, please contact Jan Brinch, jbrinch@naruc.org, or Miles Keogh, mkeogh@naruc.org.

#### WHY JURISDICTIONAL SIMULTANEITY IS OCCURRING

As described most recently in the Department of Energy's *Transforming the Nation's Electricity System: The Second Installment of the QER (January 2017),* "Rapid changes in the electricity sector raise

questions about who should regulate new services and market entrants and the growth of long-distance transmission across state and RTO boundaries." Such changes include:

- the proliferation of new technologies that are creating a nation of "prosumers" rather than just consumers of electricity products and services;
- the increasingly 2-way power flows created by multiple behind-the meter distributed and renewable energy generating systems;
- the growth in third-party suppliers who are offering multiple products and services to all electricity consumers;
- the growing number of states that are encouraging or directing new policies, development and deployment of renewables, storage, micro-grids, and other new generation resources at the distribution level and selling surplus electricity back onto the grid; and
- new and growing attributes that states are applying to these and other new resources, including reliability, safety, security, sustainability, and consumer protection, among others.

These changes in the electricity marketplace, many of them at the transmission and distribution level, require better harmonization of wholesale and retail tariffs as well as more clarity in jurisdictional boundaries. Picking winners and losers through litigation is not a lasting answer to these problems, and thus the National Council set out to explore opportunities for better federal-state collaboration that might address win-win solutions over a longer time period.

#### BLURRED LINES - NCEP ANNUAL MEETING, APRIL 2016

The National Council's first effort to explore jurisdictional conflicts was held in April of 2016. NCEP members and speakers addressed "simultaneity," that is, ambiguous, overlapping, and sometimes uncoordinated actions related to state and federal jurisdictional boundaries in the generation, transmission, and distribution of electricity. The group discussed approaches to five current jurisdictional disputes (correlated to NCEP's five major work areas as identified above) including the FERC v. EPSA and Hughes v. Talen cases; the status of the Clean Power Plan; Federal land leasing; DOE's use of Section 1222 of *EPAct 2005* to participate in the Clean Line Transmission Project; and National Emergency Response Events.

Participants discussed simultaneity, or blurred jurisdictional lines, in terms of these four issues:

- **Distribution level technologies** support other products and services that impact FERC jurisdiction of the wholesale market, as seen in *FERC v. EPSA*. Such technologies include small- or commercial-scale storage technologies, distributed energy resources (DERs), on-site renewables, demand response, and electric vehicles.
- **Procurement, planning, and siting** are critical areas of jurisdictional debate, as seen in *Hughes v. FERC*, siting and paying for rooftop solar, integrating wind resources on the transmission grid, development of micro-grids, and development of storage systems that can be aggregated and used to sell electricity back on the grid;
- **Critical Infrastructure and Security** requirements require jurisdictional clarity, including federal, regional, state, and local responsibilities for protecting the grid against cyber and physical threats, improving resiliency and supporting recovery when needed, developing and deploying mutual assistance, and continuous training for "black sky events."
- **Clean air compliance** continues to be both a federal and state issue, as required by the *Clean Air Act*. Compliance with multiple regulations, sometimes competing ones and those both instate and between states, make jurisdiction more difficult as well.

Participants posed questions and identified research and technical assistance that might be considered for effectively addressing simultaneity not only as related to these five jurisdictional disputes but across other topics being considered in the five groups. Participants discussed litigation, federal-state collaborative approaches, determination of federal "taking", and federal-regional-state information sharing. All approaches, other than litigation, give policy-makers some understanding of what they can/cannot do, but typically leave more questions unanswered than answered. Moreover, as new electricity resources and technologies increasingly support a smarter electricity grid, simultaneity will grow as well, further blurring federal-state jurisdictional lines.

#### Questions raised included:

- What authorities limit or enable federal or state involvement in large scale, multi-state transmission projects?
- What best practices separate generation priorities and present conflict of interest?
- Have we sufficiently articulated "national interest" when supporting new technologies, policies, and programs?
- What are the highest priority criteria for federal involvement in transmission projects?
- How can state resiliency and response data and information that sometimes includes micro-grids, DERs, storage, demand response, and other technologies and systems be shared when addressing cyber and physical security plans? Does this sharing create a rationale for state jurisdiction, since states are responsible for developing and carrying out security and resiliency/response efforts?

#### Among the research and technical assistance recommendations were:

- Establish institutional mechanisms for developing collaborative policy outcomes
- Create models of joint federal-state legislative oversight that would allow simultaneity but provide guidance
- Conduct research on the implementation of new technologies in the wholesale market
- Provide technical assistance on pricing alternatives that support state initiatives, allow distribution-level electricity sales, and address state energy goals, but are mindful of federal jurisdiction and pricing needs
- Consider moving demand response from the supply to the demand side of the wholesale auction

More details about this session are included as Attachment 1.

#### POLICY CHOICES FOR ADDRESSING JURISDICTIONAL ISSUES, DECEMBER 2016

At the second meeting in Washington DC on December 6 2016, the National Council Executive Committee members and staff, OE, and FERC met with DOE's Office of Energy and Policy Systems' consultants, Akin Gump and VanNess Feldman. This group further explored drivers that complicate jurisdiction, as well as approaches to address future jurisdictional conflicts.

Although there are few tools available today for addressing simultaneity, or shared regulation, six approaches and/or tools were identified by EPSA's consultants and are listed below. These six approaches could potentially address jurisdictional issues in the future, improving clarity and progress in meeting state objectives, supporting consumer demands, and also recognizing federal jurisdictional requirements. Although these approaches focus on FERC, they may also be applied to other federal agencies. The list includes:

- Case by case litigation, as conflicts arise; also termed "muddling through";
- Federal agency asserts or interprets its own jurisdiction; although FERC is constrained to doing so for cases that are ambiguous (theoretically the reasonableness must pass the *Chevron Analysis*), it cannot disclaim jurisdiction clearly granted, and its authority may not be used as a blunt instrument. Additionally, FERC may acknowledge state policy goals within this policy making, assertion, or interpretation;
- Joint proceedings, joint boards and/or joint hearings. Section 209 of *EPAct* authorizes this tool but it is rarely used;
- Regional Regulatory Boards require legislative change or Congressional action, both of which would displace state and federal authority;
- Collaborative approaches for developing mechanisms that resolve conflict (similar to the FERC/NARUC Collaborative on Demand Response and Competitive Procurement); and
- States seek jurisdiction proactively, although the mechanism for doing so is unclear.

There was general consensus that as electricity technologies grow and evolve, so will grid characteristics that may challenge the "bright line" of interstate commerce as described in the *Federal Power Act*. Similarly, industry competition is blurring jurisdictional lines while competitors are exploiting ambiguous jurisdiction as a way to gain market advantage.

These issue areas are not simple to address, nor are they singular in approach. A range of policy, partnership, collaboration, jointly held proceedings, and a myriad of consultative methods can and should be considered to improve federal-state jurisdictional conflicts. For example, jurisdictional responsibilities on critical infrastructure and cyber security are often described as being best addressed through partnership approaches. Distribution level technology development and deployment might be best addressed through a joint proceedings model. Siting, procurement and planning issues may require consultative methods. Alternatively, they may face conflict-driven decision-making (e.g., litigation), resulting in narrow outcomes and perpetuating uncertainty.

More details about this session and its outputs are included as Attachment 2.

### PARTICIPATION IN THE MAY 2017 FEDERAL ENERGY REGULATORY COMMISSION TECHNICAL CONFERENCE

On May 1-2, 2017 the Federal Energy Regulatory Commission (FERC) hosted a technical conference on State Policies and Wholesale Markets Operated by ISO New England Inc., New York Independent System Operator, Inc., and PJM Interconnection, L.L.C. (Docket No. AD17-11-000). Drawing from the experience of its conversations, the National Council participated and provided input to the debate. The NCEP offered examples of institutional paths to contend with areas where jurisdictions overlap, such as collaborative activities, technical conferences, joint boards, and other paths. Noting the lack of clarity raised by litigated pathways and the reversibility of jurisdictional shifts imposed by legislation, the National Council offered that efforts building on coordination between states, and with federal entities, yield less ambiguity, better common effort, and the development of tools that bridge and improve policymaking in the public interest.

Attachment 3 includes the complete FERC comments, arrived at by consensus among National Council members.

#### RECOMMENDATIONS AND NEXT STEPS

The National Council will continue to discuss federal-state jurisdictional conflicts and opportunities for addressing them, particularly through its five work groups. Because NCEP represents energy and air regulators, consumer advocates, state energy offices, and state legislators, it is in a unique position to invite broad input into the manner in which specific electricity policies, technologies, products, and systems can best be deployed while minimizing jurisdictional conflict.

As a result of the two meetings described above, NCEP's state policy-makers offer the following recommendations and next steps on the topic of federal-state jurisdiction.

#### RECOMMENDATIONS:

- As electricity technologies and policies continue to evolve, there is a need for durable, but flexible, jurisdictional changes.
- There is value in developing a structure for continuing conversation on these issues, such that states and federal policy-makers are provided with clarity.
- There is a need for clarity on what constitutes the "public interest", including topics, processes, and results.

#### **NEXT STEPS:**

- Develop collaborative planning tools for bridging cross-state and agency deliberations, both in terms of jurisdiction and pricing
- Design a set of interactive trading scenarios that would address market and policy interactions
- Develop guidance for state regulators and other NCEP decision-makers on the new technologies and characteristics of the power system that are pushing the "bright line" of federal-state jurisdiction, such as storage, micro-grids, demand response, DERs, etc., how jurisdictional disputes are being dealt with, and alternative ways to deal with the blurring of jurisdictional lines in a more collaborative manner.
- Develop a "manual" for state regulators on this topic, using the examples from research conducted for DOE/EPSA, the results of the National Council meetings, and including draft collaborative agreements between federal and state regulators (and others as needed), processes that others have found useful, and issues common to selected states across reflecting various technologies, policy perspectives, and program offerings.

#### **Attachment 1:**

## National Council on Electricity Policy Annual Meeting Blurred Lines: State and Federal Jurisdiction in the Power Sector April 25 - 26, 2016; Dupont Circle Hotel, Washington, DC Jurisdiction take – away notes

Miles Keogh, NARUC Research Lab Director, <a href="mkeogh@naruc.org">mkeogh@naruc.org</a>

June 2016

Fifty members of the National Council on Electricity Policy met in Washington DC to explore changes in where state and federal authority exists. Technology, policy, and markets are "blurring the lines" and in a world where simultaneity of oversight is encouraged and perhaps inevitable, these officials met to explore ways where power sector decision makers can use technical assistance, convening, and research to make more informed choices.

The agenda, presentations, and recordings of the meetings are online at <a href="http://www.naruc.org/naruc-research-lab/lab-past-meetings/">http://www.naruc.org/naruc-research-lab/lab-past-meetings/</a>. NARUC provided participants with a "thinksheet" before the meeting that they could use to gather their own thoughts. As such the structure of the meeting was highly interactive and yielded multi-state views and a lot of perspectives provided by the participants.

To structure the session and explore the topic of jurisdictional shifting, the National Council leveraged its five workgroups to host a discussion on a key issue that raises jurisdictional questions. Each workgroup convened a session for the full group to explore a jurisdictional issue affecting their area of interest.

Session one: Evolving Electricity Sector workgroup

#### EPSA v FERC - Federal and State Simultaneity

The session discussed the three recent Supreme Court rulings since January 2015 that establish roles for REC and the States. Miles Keogh (NARUC), Max Minzner (FERC), Jeff Dennis (Akin Gump) and Chairman Ed Finley (North Carolina Utilities Commission) explored this topic.

The outcomes of the main discussed cases, (Oneok v. Learjet, FERC v. EPSA, and Hughes v. Talen Energy) showed that there are many areas where states can have an impact on wholesale markets that are appropriate – not pre-emptive – and vice versa for federal activity.

When taken together, what do three cases tell us? What doesn't it tell us? What does it mean? One central result is that the "Bright Shining Line" of jurisdictional boundaries has been blurred in the eyes of the court. Open debate continues on how comfortable the courts are with a sharing or overlapping of

jurisdiction, but there seems to be an appetite for simultaneity, provided one clear distinction is made. In the past, it was easier because of how utilities were structured and how infrastructure was rolled out. Impact alone is not of consequence. Intent is important. What you're aiming at (as expressed in written orders) affects whether you're in your jurisdictional sphere or not. Few things are taken off limits by the Hughes case's narrow ruling. Nothing in this opinion should preclude MD, as long as their actions are not linked to a requirement that a generator clear as capacity.

Speakers agreed that the implications become more unclear when you get into new technologies and an expansion of a wholesale market. The wholesale market is growing and getting more competitive, and technology is blurring what kind of tech fits into wholesale and what remains at retail. What other technologies might complicate this discussion? Microgrids? Storage? If market boundary-setting policy misses the benefits of modular sitable technologies, those benefits be left on the table.

In short, the cases do much to blur jurisdiction lines but perhaps reduce each side's jurisdiction less than might have been expected. However, some of the key questions that have a technical assistance component include:

- Litigative paths for policymaking lead to narrow results and strict boundaries, and parties may not like the outcomes. What structures exist for states and FERC (and other federal agencies) to determine collaborative policy outcomes, rather than combative positioning through the courts?
- What models may exist of joint state and federal oversight that allow for simultaneity? Has work been done to translate the lessons of those models to the power sector?
- What are the implications of specific new technologies storage, DERs, electric vehicles, and demand response as capacity – for the market behavior of the wholesale market? Can this be modeled?
- Can modeling help determine the impact of resources added to the distribution system on retail and on wholesale markets?
- What pricing alternatives to capacity markets are possible for new technologies like demand response?
- Can we move DR from the supply side of the auction to the demand side of the auction to avoid legal "solutions" that complicate activity in the power sector?
- Is there research that links the deployment of (especially ARRA-funded and –supported) smart grid technology with the implementation of variable pricing models?
- Storage is a prime place for a collaborative discussion. How to we determine and model the benefits of that technology, and identify who receives those benefits? (Such as, that it is scalable, modular, sitable, etc.)
- The same is true for microgrids. What other challenges? If we miss the benefits they'll be left on the table. It goes for a lot of other distributed technologies beyond storage.

#### Session 2: Air and Energy Resources Workgroup

#### States' Status' on EPA's Clean Power Plan

Kerry Worthington (NARUC) led a roundtable discussion with the Environmental Council of the States (ECOS) Executive Director, Alexandra Dunn, and Chairman Betty Ann Kane of the DC PSC on if and how states are proceeding during this time of uncertainty.

The overarching shadow of the Supreme Court stay of the Clean Power Plan (CPP) colors the activity of the states in this area. While states determine how to balance the risks of proceeding with planning or waiting for legal clarity, about half are continuing planning while others are pausing or discontinuing work in this area. Rather than meaning a period of rest, Alex Dunn provided a set of implementation directions that remain even without the CPP. These include National Ambient Air Quality Standard (NAAQS) revisions for SO2, NOx, regional haze, and other emission and pollution regulations which happen between 2017-2022. The scope for interaction remains broad in spite of the halt in implementing the most high profile regulation.

Only 4 states decided to sit out litigation of the CPP, in favor or against. A number of states, 50 cities and a number of companies filed amicus briefs in favor of the CPP, and noted they want to move forward. Lots of discussions are not stayed by a legal stay. EPA cannot review plans without essentially implementing the rule, so they will issue technical direction on areas that are not mandatory and provide technical assistance to the States carrying on with planning.

Arguments before the DC circuit are scheduled for June and Spring 2017 is the earliest a decision will be reached by the Supreme Court. By 2022 the other air regulations (NAAQS etc.), the disposition of the coal companies, and the prices of lower carbon fuels may have the country in a different place. Speakers also raised backup generators, facing a rule change from 100 hours to 15 hours of allowable operation which may affect demand response programs and other distributed energy questions. All of these will affect infrastructure decisions.

Key unanswered jurisdictional questions warranting further exploration include:

- What institutional mechanisms enable collaboration in-state and between states? What structures can help us overcome silos?
- Can modeling help determine where the cumulative effect of complying with multiple environmental regulations will get us? Might we be in a different place by 2022 as a result of the cumulative results of various air quality regulations? Has this been modeled?
- A recent rule on backup generators changes allowable operating hours from 100 hours a year to 15 hours. How does that affect demand response programs? What implications exist for decisions about other reliability questions like infrastructure (generators, transmission, substations) and reliability standards (like interruption indices?)
- What are the implications of early action for programs like the CEIP? Is early action actually penalized under the CPP without the CEIP offset?
- Can models show us how far market momentum towards lower carbon fuels will take us in the absence of CPP?

• Is there any analysis of the implications of ozone exceedance exemptions? Is there any information about how those are triggered and may interact with the rest of the CPP or with other air quality programs?

#### Additional potential research areas:

- A roadmap of the implications of utility decisions, environmental regulations across multiple
  pollutants, forecasted fuel and technology (i.e. renewables) prices, applicable to multiple
  jurisdictions to predict market, technology and program interactions;
- Collaborative planning tools for bridging agencies doing planning across agencies and states;
- Exploration of link between depreciation and carbon pricing (are there patterns?)
- An interactive to explore various trading scenarios so we can figure out market and policy interactions;
- Modeling on the implications of solution-driven emissions leakage EVs, backup gens in DR, storage;
- Info about how grid modernization can inform, predict, help measure costs and inform "who pays" decisions;
- Info about program links to methane programs, manufacturing conservation / regulation issues.

#### Session 3: Resource Adequacy and Diversity Workgroup

#### Federal Land Leasing

In this session, Miles Keogh from NARUC led a discussion to explore impacts on the power sector of leasing energy development areas, specifically for coal, on federal lands. Alfred Elser, Bureau of Land Management, Department of the Interior, described developments at his agency and Ed McNamara, Vermont DPS, explored the implications for states of constraints on coal (and potentially gas in the future).

BLM described its program to discontinue issuing leases on the federal lands. In January 2016, Secretary Jewell released her intent to perform a programmatic EIS on Interior-managed land for coal leasing, and the pausing of new leasing pending the new PEIS, due in 2019. BLM conducted several listening session and received over 94,000 written comments. This affects western coal most significantly, constraining supply of western low-sulfur stocks, but also affects other production areas in all three interconnections, and the fact that many states depend on interstate shipments of coal means that importing states (especially of Western coal) may find their choices constrained and prices affected.

For states that are in the east and think this isn't their problem, this also creates new, and reflects existing, resource diversity and capacity resource challenges. For example, increasing the price of imported power means the math has changed for projects like Canadian hydro that have a transmission cost allocation barrier, for intermittent resources that are intermittent, and for the requirements on dual-fuel firing for natural gas units or coal units that blend biofuels.

Areas for ongoing jurisdictional exploration include:

- What are the implications for the federal pause in leasing for Eastern coal? Will replacement gas
  cut into existing gas market supplies and raise prices for those already using gas fired power?
   Are federal pauses for other resources (especially gas) possible and with what implications for
  states?
- How can collaborative policy structures turn the activities of federally-jurisdictional organized markets towards helping states meet their fuel diversity goals?
- Can we develop a map with the strategic pathways of coal that overlays with state/fed jurisdiction i.e. BLM leases production, DOE researches it as a fuel, EPA constrains it, State legislators provide tax incentives, state PUCs plan for and pay for it. A federal policy pathway and commodity pathway analysis would be useful.
- What are the existing federal and state roles for adaptation to market chance? Workforce support, job impacts / skills / retraining?
- Another silo are we tracking money spent on targeted economic development Appalachia and other regions and understanding implications of inputs to offset losses?

#### Session 4: Transmission Workgroup

#### U.S. DOE Section 1222 and the Plains & Eastern Clean Line Transmission Line

The DOE has announced it will participate in one segment of the proposed Clean Line transmission project. Jennifer Murphy (NARUC) and Kim Jones (North Carolina) led a conversation including Sam Walsh and Christopher Lawrence of the US DOE to understand the implications ad the federal authorities behind the planning, siting, and construction phases.

This discussion explored the authorities under which Federal agencies may determine that there is a national interest in their involvement. States like Missouri and Arkansas have previously indicated opposition to the line and a potential litigative response to DOE involvement and other states that are affected by ideas that exist in the pre-permitting planning stage (such as Iowa) are likely to view federal insertion negatively. Speakers agreed that streamlined permitting is useful when it is useful, but is not a virtue in its own sake if misapplied to fast-track projects that are not in the public interest.

One question raised was whether, since DOE prepared the project's environmental impact statement pursuant to NEPA, is there a conflict between DOE's role as a transmission developer and its role as an environmental regulator? The group engaged in a vigorous discussion of the ways in which collaborative processes are helpful, and are not helpful, in finding common ground when interests diverge. Overarchingly, the group trended towards more consultation, improved infrastructure deployment, and smarter policymaking that was determined through design and collaboration rather than legal firepower.

Areas for further exploration developed in this session:

What authorities would enable or limit federal or state involvement in a project like Clean Line?

- What are the best practices for preserving a separation between an agency's public interest
  authorities and its project participant interests? Should policy lines be articulated that keep
  agencies from having a policy conflict of interest?
- If a federal agency can take actions on a project that is described as being in the national interest, have we adequately articulated what constitutes "national interest" as a criteria?
- What is the trigger for sufficiency for federal involvement in a transmission line project?
- Is there adequate training on siting for states and for feds as it relates to characteristics of the power system, particularly transmission? Are new programs needed for federal and state agencies relating to siting issues that affect them both, and that are evolving due to new markets and technologies?

#### Session 5: Reliability, Resilience, and Recovery workgroup

#### National Response Events Program Briefing by the Edison Electric Institute

The United States has some of the most sophisticated response programs for regional and national outages and disasters. Sharon Thomas, NARUC, led a discussion including inputs by Wallace Mealiea, EEI, and Commissioner Lib Fleming, South Carolina. How can states work together, with federal agencies, and with industry to resolve national level outages?

Electric utilities across the country have been providing mutual aid to each other during emergencies for decades. One strategy for communicating and coordinating information as well as tangible resources needed on a wider scale is to use regional mutual assistance groups (RMAGs). Although RMAGs operate on a multistate basis, there has historically been excellent interstate cooperation on this issue. However, this session explored what new challenges are raised when a national response event (NRE) is triggered that supersedes the capabilities of an RMAG or regional solution. Utilities have worked with states and federal agencies to develop programs that may be useful in this context. An NRE is an event that is expected to or has impacted two or more RMAGs; or requires resource requirements are greater than what the impacted RMAGs can provide or create a resource constraint or competition between RMAGs. When an NRE is activated, all available EEI member emergency restoration resources (including contractors) will be pooled and allocated to participating utilities in a safe, efficient, and equitable manner. This creates cost allocation and jurisdictional questions that it may be worthwhile for a collaborative approach to address prior to the need arising.

#### Areas for further exploration included:

- How do national level events change the Governors' roles in support? In addition to large-scale national level emergencies, how do non-geographically limited events, particularly cyber stacks, shift this role?
- Have we delineated the level at which a reliability issue, a law enforcement issue, and a national security event each trigger different activities and responses?

- What are potential roles for the National Guard in natural, man-made, and cyber events of a large scale?
- What are the capabilities required for cyber mutual assistance? How can this be piloted and eventually deployed at scale? What authorities would enable or limit federal or state involvement?
- Given the disproportionate response requirements physical and cyber for distribution systems, what authorities enable or limit federal support when they're affected by a larger scale event?
- Federal-jurisdictional entities like RTOs have information critical to state response. For example, PJM and other planning authorities have information on the location and amounts of backup generation, on who can respond with DR, who operates a microgrid, who can island all these are invisible to PSC and ultimately to states. Similar situations exist in vertically integrated states (like Wisconsin) where information is known to states and not to RTOs. Can these be shared? What authorities enable or limit this sharing?
- Funding streams support essential state response activities, for example, Emergency
  Management Agencies get federal mitigation money that doesn't come through PSCs, so
  Commissions may not be aware of a utility's full portfolio of resilience funding. Can these be
  identified and mechanisms developed to facilitate information about these programs being
  available?
- Related: can clearance processes be streamlined for state agencies?

#### Participant List

First	Last	Organization/State	First	Last	Organization/State
Nick	Abraham	Michigan	Betty Ann	Kane	District of Columbia
		National Council of			
Glen	Anderson	State Legislatures	Darren	Kearney	South Dakota
	Baumgartne	U.S. Department of			
Jeffrey	r	Energy	Miles	Keogh	NARUC
Denis	Bergeron	Maine	Sheree	Kernizan	Georgia
		U.S. Department of			U.S. Department of
James	Bradbury	Energy	Joyce	Kim	Energy
					Argonne National
Jan	Brinch	EISPC	Vladimir	Koritarov	Laboratory
		U.S. Department of	Christophe		U.S. Department of
Caitlin	Callaghan	Energy	r	Lawrence	Energy
5	D.I.	M	1,,,,,	Da. J.	U.S. Department of
Dan	Delurey	Wedgemere Group	Kate	Marks McGuinnes	Energy
Jeff	Denis	Akin Cumn	Maghan		Pinartican Policy Contor
Matthe	Denis	Akin Gump U.S. Department of	Meghan	S	Bipartisan Policy Center
W	Duncan	Energy	Ed	McNamara	Vermont
VV	Darican	The Environmental		Wicivamara	U.S. Department of
Alex	Dunn	Council of States	David	Meyer	Energy
707.					U.S. Environmental
Bill	Edge	Georgia	Julia	Miller	Protection Agency
		U.S. Department of			Federal Energy
Aurora	Edington	Energy	Max	Minzner	Regulatory Commission
		Edison Electric			
Chris	Eisenbrey	Institute	Jennifer	Murphy	NARUC
		Bureau of Land			American Public Power
Alfred	Elser	Management	Joe	Nipper	Association
John	Farber	Delaware	Karen	Onaran	Edison Electric Institute
					U.S. Department of
Ed	Finley	North Carolina	Jeanette	Pablo	Energy
					U.S. Department of
Joseph	Fiordaliso	New Jersey	Matthew	Rosenbaum	Energy
		Edison Electric			Federal Energy
Emily	Fisher	Institute	Cameron	Schilling	Regulatory Commission
Elizabet					
h B. "Lib"	Elomina	South Carolina	Morris	Schroim	Maryland
	Fleming	South Carolina	Morris	Schreim	Maryland
Peggy	Force	North Carolina	Thomas	Simchak	British Embassy
Al	Freeman	Michigan	Greg	Singleton	U.S. Department of

					Energy
		Oak Ridge National			
Stan	Hadley	Laboratory	Tom	Sloan	Kansas
					U.S. Department of
Erik	Hanser	Michigan	Ben	Steinberg	Energy
		National Council of			
Kristy	Hartman	State Legislatures	Sharon	Thomas	NARUC
					U.S. Department of
Marcus	Hawkins	Wisconsin	Sam	Walsh	Energy
		U.S. Department of			National Insitute of
Bill	Hederman	Energy	David	Wollman	Science and Technology
		American Public		Worthingto	
Alex	Hofmann	Power Association	Kerry	n	NARUC
Sarah	Hofmann	Vermont	Grace	Hu	DC PSC
Mary-					
Anna	Holden	New Jersey	Matthew	McGovern	U.S. DOE
David	Johnston	Indiana	Tinsaye	Zewdie	NARUC
Kim	Jones	North Carolina			
		National Governors			
Andrew	Kambour	Association			

#### Attachment 2:

# Emerging Electricity Technologies and a Smart Grid Federal – State Jurisdictional Issues Opportunities for State Action December 6, 2016 ● 1:00 – 4:00 pm EST

National Association of State Utility Regulators (NARUC)

1101 Vermont Avenue, NW, Suite 200, Washington, D.C. 20005

**Purpose of Meeting:** To explore and answer the following three questions:

- What are the "flash points" of federal-state jurisdiction on emerging electricity technologies:
- What does the National Council (states) want to do about them? Should NCEP actually do something about them?
- Assuming the answer is yes, how do we do that? What do we do, who does so, and when?

#### Attendees:

National Council on Electricity Policy: Commissioner Lib Fleming (SC), Chairman Betty Ann Kane (DC), Commissioner Sarah Hofmann (VT), Commissioner Nick Wagner (IA), Commissioner Elena Wills (MO), Chairman Paul Kjellander (ID), Chairman Dave Danner (WA), Chairman Ed Finley (NC), Michael Dowd (VA), Tanya McCloskey (PA), Paul Chapburn (ID), Representative Tom Sloan (KS), Kim Jones (NC), Darren Kearney (SD), Al Freeman (MI), Denis Bergeron (ME), Ed McNamara (VT), Commissioner Ellen Nowak (WI), Jim Melia (PA), Commissioner Joseph Fiordaliso (NJ), Commissioner Mary-Ann Holden (NJ), Scott Morris (AL)

#### US DOE, FERC, US EPA, NARUC, Akin Gump

#### Agenda

1:00 pm	Introductions
1:10 pm	The Quadrennial Energy Review (QER) – Roles for Federal and State Collaboration
	Speaker: Karen Wayland, DOE EPSA
	Attendee Groups: States, US DOE, FERC, Akin Gump, NARUC
1:20 pm	Summary of Findings – NCEP Blurred Lines Meeting, April 2016

Miles Keogh, NARUC

1:35 pm Findings and Recommendations - Federal/State Jurisdictional Split: Implications for

**Emerging Electricity Technologies** 

Speaker: Sudeen Kelly, Akin Gump

Attendee Groups: States, US DOE, FERC, Akin Gump, NARUC

2:15 pm Break and Re-Group

2:30 pm Discussion: Comparison of Findings

Aiken Gump Report and NCEP April 2016 Summary

Public Policy Changes on the Horizon

2:35 pm Overlapping Federal-State Authorities in the Electricity Sector - What do States Want?

Facilitator: Jan Brinch, NCEP

Attendee Groups: States, US DOE, NARUC

3:15 pm State Recommendations – How do We Get There?

Facilitator: Jan Brinch, NCEP

Attendee Groups: States, US DOE, NARUC

4:30 pm Adjourn

#### Attachment 3: NCEP Comments to FERC Technical Conference

### UNITED STATES OF AMERICA FEDERAL ENERGY REGLATORY COMMISSION

Docket No. AD17-11-000

State Policies and Wholesale Markets
Operated by ISO New England Inc., New York
Independent System Operator, Inc., and

PJM Interconnection, L.L.C.

Statement of Commissioner Sarah Hofmann, Vermont Public Service Board Member, Executive Committee, National Council on Electricity Policy (NCEP)

Submitted on April 25, 2017 for Technical Conference on May 1, 2017

Thank you for the opportunity to participate in today's Technical Conference on state policies and wholesale markets in ISO New England Inc., New York Independent System Operator, Inc. and the PJM Interconnection. I appreciate the opportunity to address the interface between state and federal jurisdictional alignment in the electricity sector. Although jurisdictional conflicts can and do exist, such conflicts are best resolved through collaborative conversation, identification of problems, and development of solutions that best serve the public interest mission of state and federal regulators. Today's conference illustrates FERC's commitment to collaboration and I applaud your efforts. Please note that

while I serve as a Commissioner with the Vermont Public Service Board, I am speaking today on behalf of the National Council on Electricity Policy (NCEP).

The National Council on Electricity Policy (NCEP) serves as a national marketplace of ideas on electricity issues in the U.S. NCEP convenes state decision-makers, including utility regulators, legislators, energy and air officials, consumer advocates, and Governor's advisors to serve as a forum for electricity discussions. Consistent with NCEP's *Guiding Principles*, NCEP convenes broad discussion of specific electricity policies, technologies, products, and systems that can best be deployed while being attentive to harmonizing various jurisdictional issues that can come into play. NCEP engages in the sharing of best practices and educational opportunities for state officials, rather than in advocacy or policy-making. Among NCEP's focus areas are the intersection of air and energy policies and regulations; transmission policies and practices at the regional and sub-regional level; the evolving electricity marketplace; resource adequacy, diversity, and flexibility; and reliability, resilience, and recovery.

In convening today's technical workshop, FERC has asked speakers to address six questions, broadly exploring how federally regulated markets can best address state policy preferences. These are six excellent questions and I look forward to hearing the ideas offered today in response to them. Preceding these six, however, are more fundamental questions when exploring areas where state and federal regulatory activities interface: "Does the activity require a federal action to resolve it? Are states and regions already

<sup>1</sup> GUIDING PRINCIPLES OF THE NATIONAL COUNCIL ON ELECTRICITY POLICY Adopted at the NCEP Annual Meeting on April 1, 2016 www.electricitypolicy.org equipped to resolve – to their own satisfaction and within the structure of the law – the situation?"

Many of the benefits of multi-state electric markets and power flows come with inevitable disputes that need resolution. Participants in the National Council on Electricity Policy have always acknowledged the obvious interstate nature of the electricity grid and the interdependence of regional markets. States have built national institutions such as the NCEP and NARUC, and regional organizations such as NECPUC and NESCOE, to address them. Market participants have taken similar steps by creating stakeholder groups such as the New England Power Pool ("NEPOOL") to weigh in on all matters affecting the New England wholesale markets. These institutions and organizations regularly demonstrate our ability to resolve interstate aspects of complex policy issues and preferences. There are numerous examples of solutions in the institutions and markets today that acknowledge the interstate nature of the electricity grid and interdependence of regional markets that have come from the collaboration between states, market participants, and Independent System Operators.

States' priorities align in many ways. We want sustainable, reliable, and affordable service. Across state lines, our policies regarding energy efficiency and demand response, support for renewables and utility-scale wind and solar projects, are similar although clearly not identical. Solutions to problems should always reflect state and regional differences. We participate in the regional marketplace so that our customers receive the benefit of resources that bid into the wholesale capacity market, including the output of renewable resources, nuclear, coal, and natural gas plants. When conflict arises, our states

work together within multi-state organizations like NARUC, NECPUC, NESCOE NCEP, NEPOOL and others. States *have* to work together to find collaborative solutions when conflicts arise.

Therefore, a second question to add to the questions posed at today's FERC

Technical Conference is: "What other institutions and collaborations provide resources and solutions that avoid conflict between state policies and wholesale markets?"

Our work with the National Council supports the idea that states are well suited to collaboratively working out answers to the policy questions addressed by this Technical Conference. The National Council on Electricity Policy has sponsored two recent meetings that explore and demonstrate states' ability to collaborate on multi- and inter-state solutions:

- Blurred Lines: State and Federal Jurisdiction in the Power Sector meeting
  [April 2016], at which NCEP members and speakers addressed
  "simultaneity," or ambiguous, overlapping, and sometimes uncoordinated
  actions related to state and federal jurisdictional boundaries in the
  generation, transmission, and distribution of electricity; and
- Experts Roundtable on Valuing Baseload Electricity Resources [January 2017],
  to explore the impacts of our nation's changing generation fleet on how we
  price electricity, and the options for state officials to create just and
  reasonable rates given these changes.

These dialogues have led to the conclusion that where overlaps and conflict between state and federal action exists, the path to resolution that leads through the courts

should not be our first and only path. Examples like the *Hughes v Talen Energy Marketing*, Oneok *v. Learjet*, and *FERC v EPSA* cases highlight how narrow a court-derived decision can be, leaving unresolved ambiguity in areas not considered by the courts. Additionally, reading the briefs submitted on these cases show a significant difference of opinion on the appropriate scope of authority between FERC and the states.

Therefore, if a clear federal role exists in these arenas, the National Council on Electricity Policy recommends that FERC, working with states, develop collaborative approaches that resolve conflict, including joint explorations, collaborative efforts similar to the FERC/NARUC Collaborative on Demand Response and Competitive Procurement, regional processes such as New England's efforts through the Integrating Markets and Public Policies (IMAPP) initiative and even today's Technical Conference. These types of processes may yield less ambiguity, better common effort, and the development of tools that bridge and improve policymaking in the public interest.

State officials understand that market designs may evolve to both accommodate state public policies and state resources, and that at the same time maintain the integrity of well-functioning markets. Developing the characteristics of such market designs rests not only with energy regulators, but with other state policy-makers, including air regulators, consumer advocates, both public and private utilities, and others. The National Council on Electricity Policy relies on collaborative input from all state policy-makers to efficiently and effectively make these market decisions, and it also provides educational opportunities for members who may not participate regularly in this arena. NCEP stands ready to assist in regional collaborative efforts currently underway.

In summary, there is no question that state lawmakers will continue passing legislation that sets public policy. It is now our challenge to continue to work together to find effective ways to carry out those policies while also continuing to benefit from competitive wholesale markets. Thank you for holding this technical conference to further collaborative efforts and for the opportunity to participate in today's conversation.