Nuclear Power: Otherwise Known as the Sex Pistols (No Future)
April 14, 2017 Webinar

Tyson Slocum, Energy Program Director, Public Citizen   Twitter @TysonSlocum
John Rowe—former CEO of Exelon and Chairman of Nuclear Energy Institute—on state subsidies for existing nuclear power plants:

"We can't help ourselves. We're America. If there's an expensive way to solve the problem, we try that first."

*Chicago Tribune, October 2, 2014*
All of the State Bailouts (except 1) for Existing Nukes Are in FERC-Jurisdictional Markets
All States (but one) Considering/Enacting Bailouts for Existing Nukes Are in RTOs

<table>
<thead>
<tr>
<th>STATE</th>
<th>EXISTING NUCLEAR PLANTS</th>
<th>ISO / RTO</th>
<th>PROGRAM TYPE</th>
<th>CURRENT STATUS AND NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>NY</td>
<td>Ginna, FitzPatrick, Nine Mile Point, and Indian Point (*)</td>
<td>NYISO</td>
<td>ZEC Program</td>
<td>ZEC Program finalized by New York PSC on August 1, 2016. Lawsuit challenging program pending. Program begins April 1.</td>
</tr>
<tr>
<td>IL</td>
<td>Braidwood, Byron, Clinton, Dresden, LaSalle, and Quad Cities</td>
<td>PJM</td>
<td>ZEC Program</td>
<td>ZEC Program finalized by Illinois lawmakers on December 7, 2016. Lawsuit challenging program pending. Program begins June 1.</td>
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<td>AZ</td>
<td>Palo Verde</td>
<td>N/JA</td>
<td>Broad Clean Power Standard</td>
<td>Arizona regulators opened a proceeding to consider revisions to the renewable mandate, including potentially qualifying nuclear. Workshop scheduled April 27.</td>
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<tr>
<td>NJ</td>
<td>Salem and Hope Creek</td>
<td>PJM</td>
<td>ZEC Program</td>
<td>A bill to study the feasibility and benefits of implementing a ZEC program was introduced on March 6.</td>
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<tr>
<td>OH</td>
<td>Davis-Besse and Perry</td>
<td>PJM</td>
<td>ZEN Credit Program</td>
<td>Bill to create ZEN credit program (like a ZEC program) proposed April 6.</td>
</tr>
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<td>PA</td>
<td>Beaver Valley, Limerick, Peach Bottom, Susquehanna and Three Mile Island</td>
<td>PJM</td>
<td>Unclear</td>
<td>Four Pennsylvania lawmakers announced on March 16 a bicameral and bipartisan caucus of the General Assembly to focus on nuclear energy issues. The caucus' goal is to educate about &quot;nuclear energy's economic and environmental value and other important discussions, including reliability, affordability and safety.&quot;</td>
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Notes: Indian Point (NY) is currently excluded from the ZEC program.

SOURCE: ClearView Energy Partners, LLC
Comparing Illinois/New York ZECs & Ohio ZEN

<table>
<thead>
<tr>
<th>SPECIFICS</th>
<th>OHIO ZEN CREDIT PROGRAM (AS PROPOSED ON 4/6/2017)</th>
<th>ILLINOIS ZEC PROGRAM (ENACTED 12/7/2016)</th>
<th>NEW YORK ZEC PROGRAM (ORDERED 8/1/2016)</th>
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<tbody>
<tr>
<td>Purpose</td>
<td>To enable the state to meet its policy goals, to provide long-term energy security and environmental and other benefits.</td>
<td>To reduce carbon and other emissions; to extend the success of the RPS to other resources; and to preserve and value the environmental benefits of zero emissions generation from nuclear power.</td>
<td>To set an appropriate and fair value of the environmental attributes of GHG-free nuclear generation for such a time until renewable power can backfill existing nuclear capacity.</td>
</tr>
<tr>
<td>How ZEC is Calculated</td>
<td>Declared by Ohio Legislature to be set initially at $17/MWh, adjusted for inflation with each subsequent program period.</td>
<td>The federal social cost of carbon subject to a price adjustment if market prices exceed a $31.40/MWh baseline (also subject to revision).</td>
<td>The net external cost of carbon dioxide per short ton by subtracting RGGI revenues from the federal social cost of carbon.</td>
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<tr>
<td>Program Value</td>
<td>TBD (preliminary analysis suggests an annual value in the range of $238 MM - $301 MM).</td>
<td>$135 MM for the first twelve months beginning June 1, 2017.</td>
<td>$483 MM annually beginning April 1, 2017, rising with each tranche.</td>
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</table>
| Qualifying Plants        | All Ohio nuclear plants interconnected with PJM. | All Illinois nuclear plants interconnected with PJM or MISO. | Nuclear plants that are deemed a "public necessity."

Twelve, two-year tranches from April 2017 through March 2029.

Electricity consumers. Each load-serving entity will be required to purchase ZECs in proportion with its load served, and cost included in retail rates.

Electricity consumers. Each electric utility would be entitled to full cost recovery in retail rates associated with ZEC procurement.

Electricity consumers. Each electric utility would be entitled to full cost recovery in retail rates associated with ZEC procurement.

SOURCE: ClearView Energy Partners, LLC
Deregulated markets were designed to introduce competition into electricity, and that is (for the most part) what’s happening: older nuclear and coal cannot compete with cheaper renewables, and even natural gas (particularly in California) can’t compete with renewables (look for natural gas bailouts next).

Nuclear power companies receiving the bailouts continue to charge market-based rates in energy markets, meaning household consumers are subject to higher market-based prices at the same time they’re forced to pay for billions of dollars in capacity market subsidies.

A solution may be to end market-based rates for all markets that feature capacity market bailouts.
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Docket No. EC16-169-001

Entergy Nuclear FitzPatrick, LLC
Exelon Generation Company, LLC

ORDER GRANTING REHEARINGS FOR
FURTHER CONSIDERATION

(February 6, 2017)

Rehearsings have been timely requested of the Commission’s order issued on December 7, 2016, in this proceeding. Entergy Nuclear FitzPatrick, LLC and Exelon Generation Company, LLC, 157 FERC ¶ 61,183 (2016). In the absence of Commission action within 30 days from the date the rehearing requests were filed, the request for rehearing (and any timely requests for rehearing filed subsequently) would be deemed denied. 18 C.F.R. § 385.713 (2016).

In order to afford additional time for consideration of the matters raised or to be raised, rehearsing of the Commission’s order is hereby granted for the limited purpose of further consideration, and timely-filed rehearing requests will not be deemed denied by operation of law. Rehearing requests of the above-cited order filed in this proceeding will be addressed in a future order. As provided in 18 C.F.R. § 385.713(d), no answers to the rehearing requests will be entertained.

- Motion to dismiss hinges on whether FERC alone (rather than a private party like EPSA) can sue to defend its jurisdiction.
- EPSA legal challenge on two main grounds.
  - ZECs are unlawful because they are preempted by FERC’s exclusive jurisdiction over wholesale power markets.
  - ZECs conflict with FERC & RTO decisions to structure wholesale energy and capacity markets on market-based principles.
- Furthermore discriminates against other states since only New York nuclear facilities are eligible to receive ZECs.
  - Contrast between RECs (available to all, and price not set by state) vs ZECs (limited availability, price determined by state).

- Separate challenge filed January 9 by EPSA in FERC Docket EL13-62
- EPSA urges FERC to designate FitzPatrick, Ginna & Nine Mile Point as subsidized generation requiring the RTO to impose a Minimum Offer Price Rule (MOPR) to level the playing field for competing generation.
Illinois Challenges

  ▪ Status hearing on motion to dismiss scheduled for May 22, and parties are ordered to ask FERC for its position on the claims in this case.
  ▪ The lack of a FERC quorum may likely inhibit that.

▪ On January 9, EPSA filed a complaint at FERC in Docket No. EL16-49
Relevance of *Hughes v Talen*

- In April 2016, the *Supreme Court ruled in Hughes v Talen* that a Maryland program to provide financial support to build new in-state power plants was preempted by FERC’s jurisdiction. The SC determined that the state's requirement that the generator bid into and clear the PJM capacity auction in order to receive payments meant it was "tethered" to wholesale markets, making the state incentive program a "fatal defect":

  - “nothing in this opinion should be read to foreclose Maryland and other States from encouraging production of new or clean generation through measures ‘untethered to a generator’s wholesale market participation.’”
Both New York and Illinois ZEC programs provide challengeable evidence that the primary purpose is to address climate change. Rather, arguments can be made before FERC that the ZEC merely provides a climate change smokescreen to conceal other motives (economic, purported reliability, political) for the bailout. This, combined with the significant distorting effect the ZECs have in market operations make them vulnerable to FERC challenge, particularly in a Section 206 complaint pending the outcome of EPSAs existing FERC challenges.
FERC Ain’t Got No Quorum

- FERC is an independent regulatory agency, similar to NRC, SEC, FCC, CFTC, etc.
- Maximum 5 seats, and 3 sitting commissioners needed for quorum. President nominates, Senate must confirm.
- Only 2 sitting Commissioners, both Democrats.
  - Acting Chair Cheryl LaFleur, term expires June 30, 2019
  - Colette Honorable, term expires June 30, 2017.
- Trump has yet to nominate new Commissioners, but rumored Republican names are
  - Kevin McIntyre as Chair. Corporate energy attorney at Jones Day.
  - Neil Chatterjee, senior energy adviser to Senate Majority Leader Mitch McConnell.
  - Pennsylvania utility regulator Robert Powelson.
Integrating Markets and Public Policy ("IMAPP") is a focused NEPOOL stakeholder process to identify and explore potential changes to the wholesale power markets that could be implemented to advance state public policy objectives in New England. This page consolidates meeting materials and provides a reference library for additional resources related to this initiative.

### Meeting Materials

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<th>Date</th>
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<td>Aug 11</td>
<td>Composite</td>
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<td>Aug 30</td>
<td>Composite</td>
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**Final Agenda**
- Chairman’s Introductory Remarks
- Presentations:
  - Acadia
  - AR/End User
  - CLF
  - EDF
  - Excelon
  - FirstLight
  - High Liner
  - National Grid
  - NextEra
  - NRG
  - Public Power
  - RENEW

**Additional Materials:**
- PDF Add't Materials
- PDF Add't Materials

**Related Documents**

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<td>Stakeholder Process Schedule Update</td>
<td>(Nov 16, 2016)</td>
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<td>Revised Stakeholder Process Schedule</td>
<td>(Aug 24, 2016)</td>
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<td>FERC Notice Staff Attendance</td>
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<td>FERC Notice Staff Attendance</td>
<td>(Aug 4, 2016)</td>
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<td>Stakeholder Schedule Summary</td>
<td>(July 19, 2016)</td>
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<tr>
<td>Goal Posts</td>
<td>(June 21, 2016)</td>
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<td>Problem Statement (States)</td>
<td>(May 17, 2016)</td>
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Technical Conference

Docket No. AD17-11-000
May 1, 2017 and May 2, 2017

Agenda
Session I: The Interplay between State Policies and the Wholesale Markets Operated by ISO New England Inc.

9:20am – 10:20am   Panel 1: States’ Perspective in ISO-NE

Panellists:
- Eric Anne, Research Analyst, Connecticut Department of Energy and Environmental Protection, also speaking on behalf of the Connecticut Public Utilities Regulatory Authority
- Jeffrey Bentz, Director of Analysis, New England States Committee on Electricity
- Sarah Hofmann, Board Member, Vermont Public Service Board, speaking on behalf of the National Council on Electricity Policy
- Angela M. O’Connor, Chairman, Department of Public Utilities of Massachusetts
- Robert Scott, Commissioner, New Hampshire Public Utilities Commission

10:20am – 11:40am   Panel 2: Stakeholders’ Perspective in ISO-NE

Panellists:
- Matthew White, Chief Economist, ISO New England Inc.
- David B. Patton, President, Potomac Economics
- Peter Fuller, Vice President of Market and Regulatory Affairs, NRG Energy, Inc.
- Seth Kaplan, Senior Manager of Regional Government Affairs, EDP Renewables, also speaking on behalf of RENEW Northeast
- Tom Kaslow, Chairman, New England Power Pool
- Aleksandar Mitreski, Senior Director, Regulatory Affairs, Brookfield Renewable
- Bill Murray, Senior Policy Director, Dominion Resources

11:40am – 12:20pm  Panel 1: States’ Perspective in NYISO

Panelists:

- Susanne DesRoches, Deputy Director of Policy, Infrastructure, City of New York
- Scott Weiner, Deputy of Markets and Innovation, New York State Department of Public Service
- NY State Energy Research & Development Authority

1:30pm – 2:50pm  Panel 2: Stakeholders’ Perspective in NYISO

Panelists:

- Bradley C. Jones, CEO, NYISO
- David B. Patton, President, Potomac Economics
- Kathleen Barron, Senior Vice President of Competitive Market Policy, Exelon Corporation
- James Holodak, Vice President of Regulatory Strategy and Integrated Analytics, National Grid
- Mark Kresowik, Sierra Club
- John Reese, Senior Vice President, Eastern Generation
- John E. Shelk, President and Chief Executive Officer, Electric Power Supply Association
Session III: The Interplay between State Policies and the Wholesale Markets Operated by PJM Interconnection, L.L.C.

2:50pm – 3:50pm Panel 1: States’ Perspective in PJM

Panelists:
- Robert Irwin, General Counsel, Maryland PSC
- Richard Mroz, President, NJ Board of Public Utilities
- Andrew Place, Vice Chairman, Pennsylvania PUC
- Brian Sheahan, Chairman, Illinois Commerce Commission

3:50pm – 5:30pm Panel 2: Stakeholders’ Perspective in PJM

Panelists:
- Andrew Ott, President and Chief Executive Officer, PJM
- Joseph Bowring, President, Monitoring Analytics, LLC
- Paul Bailey, President and Chief Executive Officer, American Coalition for Clean Coal Electricity
- Michael Cocco, Senior Director of RTO and Regulatory Affairs, Old Dominion Electric Cooperative, also speaking on behalf of National Rural Electric Cooperative Association
- Lathrop Craig, Vice President of ISO Operations, PSEG Energy Resources & Trade LLC
- Robert Flexon, President and CEO, Dynegy Inc.
- John Moore, Director of Sustainable FERC Project, Natural Resources Defense Council
- Gregory Poulos, Executive Director, Consumer Advocates of the PJM States
- Raja Sundararajan, Vice President of Regulatory Services, American Electric Power Company
May 2, 2017

9:00am – 12:00pm  
Session IV: The Implications of State Policies for Wholesale Energy and Capacity Markets and Resource Adequacy

Panelists:

- Kathleen Barrón, Exelon Corporation
- New England state representative
- Thad Hill, President and CEO, Calpine Corporation
- John Hughes, President and Chief Executive Officer, Electricity Consumers Resource Council
- Lisa McAlister, General Counsel for Regulatory Affairs, American Municipal Power, Inc.
- Richard Mroz, President, NJ Board of Public Utilities
- Andrew Place, Vice Chairman, Pennsylvania PUC
- Michael Polsky, Founder and CEO, Invenergy
- Brien Sheahan, Chairman, Illinois Commerce Commission
- Abraham Silverman, NRG Energy, Inc.
Session V: Reconciling Wholesale Competitive Markets with State Policies

1:00pm – 3:15pm  Panel 1: Industry Experts

Panelists:
- Cliff Hamal, Managing Director, Navigant
- William Hogan, Harvard Electricity Policy Group
- Lawrence Makovich, IHS Markit
- Samuel Newell, Principal, The Brattle Group
- Roy Shanker, Independent Consultant
- Robert Stoddard, Senior Consultant, Charles River Associates, speaking on behalf of Conservation Law Foundation
- Susan Tierney, Senior Advisor, Analysis Group

3:15pm – 4:15pm  Panel 2: Opportunity for Response

Panelists:
- Jeffrey Bentz, Director of Analysis, New England States Committee on Electricity
- Stu Bresler, Senior Vice President, PJM
- Rana Mukerji, NYISO
- Scott Weiner, New York State Department of Public Service
- Matthew White, Chief Economist, ISO New England Inc.
- PJM state representative
FERC Docket No. RM16-9 Would Create Intervenor Funding For the Public Interest

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

Petition To Initiate A Rulemaking To Establish The Office Of Public Participation As Established By Congress And To Fund Its Work

Pursuant to Rule 207 of the Commission’s Rules of Practice and Procedure, the undersigned organizations hereby petition FERC to implement 16 USC § 825q-1 by initiating a rulemaking to carry out the instructions from Congress to establish the Office of Public Participation and fund its work.

In 1978 Congress initiated sweeping changes to the Federal Power Act when it passed Public Law 95-617, the “Public Utility Regulatory Policies Act of 1978” (PURPA). Title II (“Certain Federal Energy Regulatory Commission and Department of Energy Authorities”), Section 212 (“Public participation before Federal Energy Regulatory Commission”) of PURPA ordered the creation of an Office of Public Participation at FERC. The full text follows:
SENATE BILL No. 520

Introduced by Senator Mitchell

February 16, 2017

An act to add Part 1.5 (commencing with Section 2600) to Division 1 of the Public Utilities Code, relating to electricity.

LEGISLATIVE COUNSEL'S DIGEST

SB 520, as introduced, Mitchell. Electricity: intervenor funding. Under existing law, the Public Utilities Commission (PUC) has regulatory authority over public utilities. Existing law requires the PUC to award reasonable advocate's fees, reasonable expert witness fees, and other reasonable costs of preparation for and participation in a hearing or proceeding of the PUC involving an electrical, gas, water, or telephone corporation to a customer who complies with specified procedures when the customer's presentation makes a substantial contribution to the adoption, in whole or in part, of the PUC's order or decision and where participation or intervention without an award of fees or costs imposes a significant financial hardship.

This bill would establish a mechanism to provide compensation for reasonable advocate's fees, reasonable expert witness fees, and other reasonable costs of participation in processes of the Independent System Operator (ISO), proceedings of the Federal Energy Regulatory Commission (FERC) that affect California's environment and consumers, and certain proceedings at the State Energy Resources Conservation and Development Commission (Energy Commission). The bill would require an organization intending to seek compensation to submit an annual notice of intent and eligibility to the Energy Commission containing specified information. The Energy Commission would be required to timely issue a finding as to whether the organization is an eligible group, as defined, that may file for...