

October 23, 2017

Federal Energy Regulatory Commission  
Secretary of the Commission  
888 First Street, NE  
Washington, DC 20426

Re: Grid Resiliency Pricing Rule  
FERC Docket No. RM18-1-000

**COMMENTS OF NINETY-ONE ORGANIZATIONS**

**IN OPPOSITION TO THE PROPOSED RELIABILITY AND RESILIENCY RULE**

The below-signed ninety-one (91) organizations submit these comments in opposition to the proposed market rules in the above captioned proceeding. On September 29, 2017, the U.S. Department of Energy (“DOE”) submitted a letter to the Federal Energy Regulatory Commission (“FERC”) demanding changes to pricing rules for certain generation units in competitive wholesale electricity markets. On October 2, 2017, FERC accepted DOE’s proposal and issued an accelerated schedule for public comments (October 23, 2017) and reply comments (November 7, 2017). Numerous parties filed motions for an extension of the public comment schedule, and FERC denied those requests on October 11. In the mean time, on October 10, 2017, DOE published a notice of the proposed rulemaking in the Federal Register, with a significant modification from the proposal submitted to FERC on September 29. FERC also issued a notice on October 11 of DOE’s Federal Register notice and the amended version of the proposed rule.

Specifically, DOE is proposing a new market rule to bail out coal and nuclear power plants in the nation’s competitive electricity markets and to insulate them from future market competition against natural gas and more modern, flexible, and cost-effective energy resources. As proposed, the rule would guarantee the profitability of about 100 power plants which are located in certain regional markets (i.e., those with competitive generation and capacity markets) and exhibit certain characteristics. The rule would do so by requiring regional markets to provide these nuclear and coal plants with cost-of-service ratemaking—that is, pricing the electricity they generate at rates that cover their full costs of operation and capital, as well as a rate of return

(profit) on investment. Most pertinent among the attributes qualifying for this extraordinary relief is that the facility stores sufficient fuel on-site to operate for at least 90 days. DOE coins a new and novel term for these power plants: “fuel-secure generation.”

It is widely understood that these criteria would apply almost exclusively to commercial nuclear reactors and coal-fired power plants in four regional markets covering thirty states and the District of Columbia: the Independent System Operator of New England (“ISO-NE”); the Midcontinent Independent System Operator (“MISO”); the New York Independent System Operator (“NYISO”); and PJM Interconnection (“PJM”). The nuclear power industry would receive an unprecedented level of industrial protection: 43 of the 99 reactors currently operating in the U.S. would be covered by the rule, totaling 43,601 MW of generation capacity. An even larger number of coal-fired power plants (68) and some natural gas- and biomass-fired plants could qualify.<sup>1</sup>

The proposed rule is too vague and future energy price forecasts are too speculative to divine a reliable estimate of the cost increase to consumers at this stage; however, the Sierra Club has estimated that such a rule would have cost over \$14 billion in 2016, alone, based on reported market prices and the operating costs of eligible power plants.<sup>2</sup> At that rate, if the rule were approved and implemented in 2018 as DOE demands, the total cost to customers in above-market rates could exceed \$180 billion (2016 USD) by 2030. However, the actual cost of the proposed would be much greater than that, due to the proposed rule’s provision for full cost-of-service ratemaking, including a “reasonable” rate of return on investment, which typically runs approximately 10% in the utility sector. This amounts to an extraordinary subsidy to incumbent owners of aging power plants, with no substantive cost-benefit justification, environmental analyses, or consideration of alternatives. For the following reasons, FERC must reject DOE’s proposal.

---

<sup>1</sup> Derived from data tables published by Sierra Club via press release.

Sierra Club. “New Analysis Finds Dramatic Costs of Perry's Directive to FERC.” October 16, 2017.

<http://www.sierraclub.org/press-releases/2017/10/new-analysis-finds-dramatic-costs-perrys-directive-ferc>

<sup>2</sup> Sierra Club. “New Analysis Finds Dramatic Costs of Perry's Directive to FERC.” October 16, 2017.

<http://www.sierraclub.org/press-releases/2017/10/new-analysis-finds-dramatic-costs-perrys-directive-ferc>

### **DOE's Proposed Rule Specifically Favors Dirty, Dangerous, Destructive Energy Sources:**

FERC has long maintained that electricity markets should be regulated without regard to fuel source preferences, favoring instead attributes that meet identified system performance needs, such as lower cost, peaking capacity, frequency regulation, voltage support, etc. Yet, contrary to its stated intent, DOE's proposed rule would overturn FERC's "fuel-neutral" market paradigm by remaking markets to promote two favored fuel sources – specifically, nuclear and coal generation—which have massive environmental and public health impacts that cannot be ignored. Mining of coal and uranium lays waste to large areas and pollutes water resources. Uranium mining and reactor fuel production generate over 25,000 pounds of radioactive waste for every pound of fuel that is used in a reactor<sup>3</sup>—nearly all of which is deposited in open-air piles and ponds, disproportionately impacting indigenous communities in the U.S. and abroad.<sup>4</sup> Every year, reactors consume 2,000 tonnes of enriched uranium fuel, which itself becomes lethally radioactive and a public safety risk for hundreds of years, while posing threats to public health, drinking water, and nuclear proliferation for hundreds of thousands of years. The potential for catastrophic accidents puts whole regions of the country at risk, and could entail hundreds of billions in losses and damages. Coal plants produce solid and liquid wastes and air pollutants that threaten drinking water and public health, costing thousands of lives each year in the process, while generating more climate-disrupting carbon dioxide than any other energy source.

**Baseload Generation Is Not Needed for Reliability:** DOE fabricated the "fuel-secure generation" attribute which the rule would favor specifically for the purpose of justifying economic relief and regulatory preferences for coal and nuclear. This is a characteristic that, as defined, uniquely applies almost exclusively to coal and nuclear generation units, but it has no meaningful value for grid reliability. According to DOE's official data on system failures, based on mandatory reports of such events by utilities, "fuel-secure generation" has virtually nothing to do with grid reliability. Over the last five years (2012-16), Energy Information Administration data show that only 0.00007% of reported system failures were due to power plant fuel supply

---

<sup>3</sup> WISE-Uranium Project. *Nuclear Fuel Material Balance Calculator*. World Information Service on Energy. January 27, 2015 (updated). <http://www.wise-uranium.org/nfcm.html>

<sup>4</sup> Diehl, Peter. "Uranium Mining and Milling Wastes: An Introduction." WISE-Uranium Project. May 18, 2011. <http://www.wise-uranium.org/uwai.html>

disruptions; of that number, 98% of the outage megawatt-hours were due to the outage of a single coal-fired plant in northern Minnesota.<sup>5</sup> That is, less than one out of every million megawatt-hours of power outages might be remedied by DOE's proposed solution, while entirely failing to address the other 999,999 megawatt-hours.

Today's electricity system requires flexibility and responsiveness, not power plants that operate inflexibly at full generation capacity for weeks or months on end. Studies by several grid operators and regulators have demonstrated that reliability can be maintained or enhanced with very high levels of renewable energy generation. For instance, the Southwest Power Pool published a report in 2016 confirming that its transmission system can be operated reliably with 60% wind generation, and that it foresees being able to do so in the future with up to 75% wind.<sup>6</sup> Presently, Germany's electrical grid has nearly 10 times fewer system failures than the U.S., with 30% generation from renewables compared to 17% in the U.S. in 2016.<sup>7</sup> DOE's August 2017 grid reliability report acknowledges that the U.S. electrical grid remains reliable, with a growing share of renewable generation and the closures of significant numbers of coal-fired power plants and six nuclear reactors.<sup>8</sup>

In fact, baseload generation sources require greater resources to ensure reliability, and they can lead to or exacerbate reliability problems. FERC rules require grid operators to provide reserve capacity equivalent to the largest single generator on the system—most often a nuclear or coal power plant, where such units are available. The sudden loss of such large single generators

---

<sup>5</sup> Houser, Trevor, John Larsen and Peter Marsters. "The Real Electricity Reliability Crisis." R Street Institute. October 3, 2017. <http://rhg.com/notes/the-real-electricity-reliability-crisis>

<sup>6</sup> Kleckner, Tom. "SPP Eyes 75% Wind Penetration Levels." *RTO Insider*. February 20, 2017. <https://www.rtoinsider.com/spp-wind-penetration-39074/>

<sup>7</sup> Lott, Melissa C. "Data show that Germany's grid is one of the world's most reliable." *Scientific American.com*. September 16, 2014. <https://blogs.scientificamerican.com/plugged-in/data-show-that-germany-s-grid-is-one-of-the-world-s-most-reliable/>

Amelang, Sören, Jakob Schlandt. "Germany's electricity grid stable amid energy transition." *Clean Energy Wire*. October 20, 2016. <https://www.cleanenergywire.org/factsheets/germanys-electricity-grid-stable-amid-energy-transition>

Lacey, Stephen. "Countries With the Most Wind and Solar Have 10 Times Fewer Outages Than America." *Greentech Media*. June 19, 2017. <https://www.greentechmedia.com/articles/read/the-countries-with-the-most-wind-and-solar-have-far-fewer-outages#gs.SvhG=Uc>

<sup>8</sup> U.S. Department of Energy. "Staff Report to the Secretary on Electricity Markets and Reliability." August 2017.

creates both reliability risks and increases the cost to consumers. Reliability problems and market price increases in PJM during the January 2014 Polar Vortex were exacerbated by the emergency shutdown of the Calvert Cliffs 1 and 2 nuclear reactors (1,750 MW)<sup>9</sup> due to electrical malfunctions caused by ice intrusion and inadequate maintenance.<sup>10</sup> Nuclear reactors frequently have to reduce power or shut down under severe weather conditions, precisely when grid reliability is at a premium. High winds and/or flooding have led to reactors being offline for days to months at a time at peak load periods.<sup>11</sup> Warming water temperatures have forced reactors to reduce power output or shut down in summer months, both in the U.S. and abroad<sup>12</sup>—effectively making the “security” of the generator’s fuel supply during peak periods less relevant than the condition of its cooling water source.<sup>13</sup> Furthermore, nuclear reactors in particular pose a unique and significant risk to system reliability that has never been evaluated. As the Fukushima and Chernobyl disasters have demonstrated, a single reactor disaster can create long-term disruptions in electricity supplies,<sup>14</sup> and/or economic and political instability.<sup>15</sup>

**DOE’s Proposed Rule Would Not Improve Grid Resiliency:** DOE’s proposed rule change would actually run counter to at least one of its ostensible rationales: enhancing system

---

<sup>9</sup> Northey, Hannah, and Rod Kuckro. “Deep freeze exposes challenges for gas-dependent grid operator.” *E&E News*. January 23, 2014. <https://www.eenews.net/stories/1059993365>

<sup>10</sup> Smith Hopkins, Jamie. “Nuclear regulators send inspectors to Calvert Cliffs” *Baltimore Sun*. January 27, 2014. <http://www.baltimoresun.com/business/bs-bz-calvert-cliffs-reactors-running-20140127-story.html>

<sup>11</sup> World Nuclear News. “Fort Calhoun restarts after extended outage.” December 19, 2013. <http://www.world-nuclear-news.org/RS-Fort-Calhoun-restarts-after-extended-outage-1912134.html>

<sup>12</sup> Dell'Amore, Christine. “Nuclear ‘Reactors, Dams at Risk Due to Global Warming.’” *National Geographic News*. February 27, 2010. <https://news.nationalgeographic.com/news/2010/02/100226-water-energy-climate-change-dams-nuclear/>

<sup>13</sup> Lyderson, Kari. “Amid climate concerns, nuclear plants feel the heat of warming water.” *Midwest Energy News*. September 9, 2016. <http://midwestenergynews.com/2016/09/09/nuclear-plants-feel-the-heat-of-warming-water/>

Krier, Robert. “Extreme Heat, Drought Show Vulnerability of Nuclear Power Plants.” *InsideClimateNews*. August 5, 2012. <https://insideclimatenews.org/news/20120815/nuclear-power-plants-energy-nrc-drought-weather-heat-water>

<sup>14</sup> Lavelle, Marianne. “One Year After Fukushima, Japan Faces Shortages of Energy, Trust.” *National Geographic News*. March 10, 2012. <https://news.nationalgeographic.com/news/energy/2012/03/120309-japan-fukushima-anniversary-energy-shortage/>

<sup>15</sup> Stern, Mark Joseph. “Did Chernobyl Cause the Soviet Union To Explode? The nuclear theory of the fall of the USSR.” *Slate.com*. January 25, 2013. [http://www.slate.com/articles/health\\_and\\_science/nuclear\\_power/2013/01/chernobyl\\_and\\_the\\_fall\\_of\\_the\\_soviet\\_union\\_gorbachev\\_s\\_glasnost\\_allowed.html](http://www.slate.com/articles/health_and_science/nuclear_power/2013/01/chernobyl_and_the_fall_of_the_soviet_union_gorbachev_s_glasnost_allowed.html)

*The Economist*. “A nuclear disaster that brought down an empire: Chernobyl led to thousands of deaths, including that of the Soviet Union.” April 26, 2016. <https://www.economist.com/news/europe/21697741-chernobyl-led-thousands-deaths-including-soviet-union-nuclear-disaster>

resiliency. While resiliency has not been formally defined and requires substantially more study in order to do so, it is widely accepted that grid resiliency is served by the ability to restore electricity service quickly when it has been lost—for instance, by being able to isolate system failures to as small an area as possible and to locate electricity sources (generation and/or storage) close to points of consumption. Thus, new grid architectures (such as islandable microgrids) and distributed energy resources (DER, such as rooftop solar and energy storage) may very well be found to have greater value for reliability and resiliency than large, centralized generation sources like nuclear and coal plants that must be connected to load centers by long transmission systems. Nuclear power plants take several days to restart after being taken offline, and they lack key resiliency attributes, such as “black start” capability to repower the grid after an outage.

**The Nuclear-and-Coal Bailout Rule Has Far-Reaching Implications:** By arbitrarily privileging and dramatically over-valuing one characteristic of nuclear and coal power plants as a supposed reliability attribute—i.e., 90 days of on-site fuel supplies, or what DOE coins “fuel secure generation”—the rule could lead to further energy market reforms to guarantee commensurate compensation for natural gas generation, based on an obsolete and unnecessarily rigid paradigm for reliability. Such a grid and market design would be technologically and economically incompatible with renewable energy, energy storage, and other new technologies that have far greater potential in providing for the nation’s energy security, reliability, and resiliency. In short, market rules to bail out nuclear and coal generation would turn back the clock on our energy system by 30 years, allocating billions of ratepayer dollars every year to sustaining aging power plants that are already reaching the ends of their technical lives. Such a policy would prevent investment in infrastructure and technology upgrades necessary for a reliable, resilient, efficient energy system. FERC must not allow this to happen.

**FERC Should Prioritize Grid Modernization and Integration of Renewables:** At its core, the fundamental failure represented by DOE’s proposed bailout rule is not one of markets and reliability, and it cannot simply be “fixed” by returning aging coal and nuclear plants to the all-but-bygone era of cost-of-service ratemaking under which those machines were built decades ago. Cuba has kept 1950s-era American automobiles on the roads for over a half-century out of

basic necessity. But DOE's proposed rule would have the U.S. do the same in our electricity sector with no vision or innovation, simply out of political capture by powerful corporate interests with too much avarice and too little principle and vision to embrace change.

It is obvious that the electricity system is on the cusp of a fundamental, generational transition in technology and design. Indeed, the same is true of the energy industry as a whole, stretching far beyond the traditional electric sector, to transportation, heating, and industrial energy uses. In fact, it is possible that most if not all energy uses could eventually shift to electricity, replacing the direct consumption of fossil fuels and biomass in cars, furnaces, boilers, etc., with electricity-driven systems. Numerous studies have demonstrated that there is abundant, economically feasible renewable energy potential in the United States to meet the requirements of such a transition, with multiple collateral economic, environmental, and public health benefits. The issue that must be addressed is modernizing electric transmission and distribution systems to integrate renewable energy supplies with storage, demand management, and transportation systems. Our energy infrastructure and the economic rules by which electricity and energy services are priced and transacted can and must evolve to support this transition. But they must not regress or relapse, as DOE's proposed rule would do.

FERC should prioritize investments and regulations that facilitate the modernization of the grid and the integration of renewables, storage, demand response, and distributed energy resources. The \$180 billion that consumers in 30 states would pay to subsidize old power plants could be greatly reduced and spent far more cost-effectively and beneficially.

**FERC Should Create a Community and Worker Transition Program:** One of the repeated themes in comments filed in this proceeding, as well as similar ones at the state level, is the economic impacts of power plant closures on vulnerable stakeholders: workers, communities, and related local businesses, who have no control over market dynamics and corporate decisions about power plant closures. The needs of workers and local communities are important, but it would be far more beneficial and cost-effective for FERC to develop rules to mitigate the impacts of power plant closures and smooth the impacts of transitions in the energy markets than to kick the can down the road by indefinitely subsidizing them. Without proactive measures,

communities and workers will be no better prepared for the eventual closures of power plants years from now, and federal, state, and local governments will have failed to take the opportunity to prepare for the transition years in advance.

Community and worker transition programs could be created to provide tax revenue, economic development, and re-employment assistance when power plants retire. The costs of such programs would be far less than the cost of bailing out coal and nuclear power plants,<sup>16</sup> and enable the electricity markets to evolve without creating long-term harm to innocent stakeholders in the process. FERC could play a vital role by authorizing tariffs to finance such programs as an investment in reliability and resiliency and the efficient functioning of markets.

Respectfully submitted this October 23, 2017,

Timothy L. Judson  
Executive Director  
Nuclear Information and Resource Service  
6930 Carroll Ave., Suite 340  
Takoma Park, MD 20912

---

<sup>16</sup> Azulay, Jessica, and Tim Judson. "Replacing FitzPatrick: How the Closure of a Nuclear Reactor Can Reduce Greenhouse Gasses and Radioactive Waste, while Creating Jobs and Supporting the Local Community." Alliance for a Green Economy and Nuclear Information and Resource Service. October 22, 2015.  
<https://www.nirs.org/fitzpatrick-reactor-can-be-replaced-with-clean-renewable-energy-at-a-lower-cost/>



## **National Organizations**

Kevin Kamps  
Radioactive Waste Specialist  
Beyond Nuclear  
6930 Carroll Avenue, Suite 400  
Takoma Park, Maryland 20912

Lynn Thorp  
Campaigns Director  
Clean Water Action  
1444 Eye Street, NW, Suite 400  
Washington 20005

Michael J. Keegan  
Chair  
Coalition for a Nuclear Free Great Lakes  
P.O. Box 453  
Monroe, Michigan 48161

Elizabeth Schuster  
Energy Policy Manager  
Food & Water Watch  
1616 P Street, NW, Suite 300  
Washington, DC 20036

Todd Larsen  
Executive Co-Director  
Green America  
1612 K Street NW, Suite 600  
Washington, DC 20006

Diane Brandli  
President  
GreeningUSA  
P.O. Box 464  
Liverpool, New York 13088

Basav Sen  
Climate Justice Director  
Institute for Policy Studies  
1301 Connecticut Ave. NW Suite 600  
Washington, DC 20036

Alice Slater  
NY Director  
Nuclear Age Peace Foundation  
446 E. 86 Street  
New York, New York 10028

Janet Redman  
U.S. Policy Director  
Oil Change International  
714 G Street, SE  
Washington, DC, 20001

Laura Haight  
Senior Policy Director  
Partnership for Policy Integrity

## **State and Local Organizations**

### **Arizona**

Tommy Rock  
Technical Person  
Dine No Nukes  
1239 East Stone Ridge Drive  
Flagstaff, Arizona 86001

Julia Collier  
Producer  
Radioactive Nation  
1507 N San Francisco St.  
Flagstaff, Arizona 86001

### **California**

Linda Seeley  
Spokesperson  
San Luis Obispo Mothers for Peace  
P.O. Box 3806  
San Luis Obispo, California 93402

Marylia Kelley  
Executive Director  
Tri-Valley CAREs  
4049 First Street, Suite 139A  
Livermore, California 94551

Jean Merrigan  
Policy Advocate  
Women's Energy Matters  
P. O. Box 548  
Fairfax , California 94978

## **Florida**

Farid Khavari, Ph.D.  
President  
Zero Cost Economics Institute  
P.O. BOX 570502  
Miami, Florida 33257-0502

## **Georgia**

Becky Rafter  
Executive Director  
Georgia Women's Action for New  
Directions  
250 Georgia Ave SE, Suite 202  
Atlanta, Georgia 30312

## **Illinois**

David Kraft  
Director  
Nuclear Energy Information Service  
3411 W. Diversey, Ste. 13  
Chicago, Illinois 60647

Steven Sondheim  
Director  
Public Issues Forum  
462 W. Briar  
Chicago, Illinois 60657

## **Iowa**

Mike Carberry  
Director  
Green State Solutions  
2029 Friendship St  
Iowa City, Iowa 52245

## **Massachusetts**

Diane Turco  
Director  
Cape Downwinders  
P.O. Box 303  
South Harwich, Massachusetts 02646

Deborah Katz  
Executive Director  
Citizens Awareness Network  
P.O. Box 83  
Shelburne Falls, Massachusetts 01370

Cynthia Luppi  
New England Director  
Clean Water Action-New England  
88 Broad St.  
Lower Level  
Boston, Massachusetts 02110

Adele Franks  
Steering Committee Member  
Climate Action Now, Western  
Massachusetts  
123 Black Birch Trail  
Florence, Massachusetts 01062

Rebecca Chin  
Co-Chair  
Duxbury Nuclear Advisory Committee  
31 Deerpath Trail North  
Duxbury, Massachusetts 02332

Cole Harrison  
Executive Director  
Massachusetts Peace Action  
11 Garden St  
Cambridge, Massachusetts 02138

Angela Wilcox  
Co-Coordinator  
No Norfolk MA Gas Pipeline  
22 Fleetwood Drive  
Norfolk, Massachusetts 02056

Dorothy Anderson  
Member  
Occupy Hingham  
Hull Street  
Hingham, Massachusetts 02043

Sheila Parks, Ed.D.  
Founder  
On Behalf of Planet Earth  
319 Arlington Street  
Watertown, Massachusetts 02472

Janet Azarovitz  
Co ordinating Committee member  
Pilgrim Legislative Advisory Coalition,  
PLAC  
20 Shapquit Bars Circle  
West Falmouth, Massachusetts 02574

Mary Lampert  
Director  
Pilgrim Watch  
148 Washington Street  
Duxbury, Massachusetts 02332

Laura kelley  
President  
Pocca Cape Cod  
P.O. Box 17  
North Eastham, Massachusetts 02651

James Michel  
Co-founder  
Resist the Pipeline  
11 Riverside Square  
Hyde Park, Massachusetts 02136

### **Michigan**

Jessie Collins  
Co-Chair  
Citizens' Resistance at Fermi 2 (CRAFT)  
17397 Five Points Street  
Redford, Michigan 48240

Alice Hirt  
Co-Chair  
Don't Waste Michigan  
6677 Summitview  
Holland, Michigan 49422

### **Montana**

Anne Hedges  
Deputy Director  
Montana Environmental Information Center  
1620 Ohio Ave  
Helena, Montana 59601

### **New Jersey**

David Pringle  
NJ Campaign Director  
Clean Water Action-New Jersey  
333 Walnut Ave.  
Cranford, New Jersey 07016

Sally Jane Gellert  
Member  
Occupy Bergen County  
Teaneck, New Jersey

William deCamp, Jr.  
President  
Save Barnegat Bay  
725-B Mantoloking Road  
Brick, New Jersey 8723

### **New York**

Andra Leimanis  
Communications & Outreach Coordinator  
Alliance for a Green Economy  
2013 E. Genesee St.  
Syracuse, New York 13210

George Povall  
All Our Energy  
P.O. Box 381  
Point Lookout, New York 11569

Adam Flint  
Southern Tier Solar Works Program  
Manager  
Binghamton Regional Sustainability  
Coalition  
P.O. Box 907  
Binghamton, New York 13902

Charlotte Phillips  
Chairperson  
Brooklyn For Peace  
PMB 106  
41 Schermerhorn Street  
Brooklyn, New York 11201

Katherine Nadeau  
Deputy Director  
Catskill Mountainkeeper  
P.O. Box 1000  
Livingston Manor, New York 12758

Barbara Warren  
Executive Director  
Citizens' Environmental Coalition  
422 Oakland Valley Rd.  
Cuddebackville, New York 12729

Jennifer Metzger  
Director  
Citizens for Local Power  
P.O. Box 415  
Rosendale, New York 12472

Peter Wirth  
Founder  
Climate Change Awareness & Action  
113 Cammot Lane  
Fayetteville, New York 13066

Katherine Burns  
Facilitator  
Climate Justice Subcommittee, CNYSC  
Syracuse, New York 13210

Katherine Burns  
Sub-committee facilitator  
CNY Solidarity Coalition  
Syracuse, New York 13210

Judith K. Canepa  
Coordinator  
Coalition Against the Rockaway Pipeline  
716 East 11th Street, #2P  
New York, New York 10009

Michel Lee  
Chairman  
Council on Intelligent Energy &  
Conservation Policy  
265 Madison Road  
Scarsdale, New York 10583

Marie McRae  
Spokesperson  
Dryden Resource Awareness Coalition  
710 Irish Settlement Rd  
Freeville, New York 13068

Charley Bowman  
Co-Chair  
Environmental Justice Task Force  
1272 Delaware Ave  
Buffalo, New York 14209

Irene Weiser  
Coordinator  
Fossil Free Tompkins  
Ithaca, New York 14850

Susan Hito  
President  
Goshen Green Farms  
3301 Route 207  
Goshen, New York 10924

Gary Shaw  
Member of the Leadership Council  
Indian Point Safe Energy Coalition (IPSEC)  
P.O. Box 131  
Ossining, New York 10562

Mari Inoue  
Member  
Manhattan Project for a Nuclear-Free World  
New York, New York 10016

Judith K Canepa  
Co-Founding Member  
New York Climate Action Group  
716 East 11th Street #2P  
New York, New York 10009

Jerry Rivers  
North American Climate, Conservation and  
Environment  
8-Gombert Place  
Roosevelt, New York 11575

Diane R. Swords  
Committee Chair  
Nuclear Free World Committee of Syracuse  
Peace Council  
2013 E. Genesee St., Syracuse 13210

Blair Horner  
Executive Director  
NYPIRG  
107 Washington Avenue  
Albany, New York 12210

Kate Alexander  
Policy Director  
Peace Action New York State  
64 Fulton Street, #403  
New York, New York 10038

Diana Wright  
Facilitator  
People of Albany United for Safe Energy  
36 Summit Ave  
Albany, New York 12209

Susan Hito Shapiro  
Authorized Representative  
Public Health and Sustainable Energy  
(PHASE)  
75 North Middletown Road  
Nanuet, New York 10954

Gordian Raacke  
Executive Director  
Renewable Energy Long Island (reLI)  
P.O. Box 4103  
East Hampton, New York 11937

Linda Isaacson Fedele  
Leadership Team member  
Rochester People's Climate Coalition  
26 Cypress St.  
Rochester, New York 14620

Linda DeStefano  
Core Member  
ShaleshockCNY  
5031 Onondaga Rd.  
Syracuse, New York 13215-1403

Larysa Dyrszka  
Co-founder  
Sullivan Area Citizens for Responsible  
Energy Development  
P.O. Box 355  
White Lake, New York 12786

Gay Nicholson  
President  
Sustainable Tompkins  
309 N Aurora  
Ithaca, New York 14850

Carol Baum  
Staff Organizer  
Syracuse Peace Council  
2013 E Genesee St.  
Syracuse, New York 13210

Ling Tsou  
Co-founder  
United for Action  
80 Beekman Street  
New York, New York 10038

Charley Bowman  
Co-Chair  
Western NY Drilling Defense  
48 Sandelwood Dr  
Getzville, New York 14068

Charley Bowman  
Co-Chair, Environmental Justice Task Force  
Western NY Peace Center  
1272 Delaware Ave  
Buffalo, New York 14209

### **North Carolina**

Tana Hartman Thorn  
Treasurer  
Balance & Accuracy in Journalism  
3010 Butler Glen Dr  
Chapel Hill, North Carolina 27516

Tana Hartman Thorn  
Member  
Citizens Climate Collaborative  
3010 Butler Glen Dr  
Chapel Hill, North Carolina 27516

John Runkle  
Counsel  
NC WARN  
2121 Damascus Church Rd  
Chapel Hill, North Carolina 27516

### **Ohio**

Terry Lodge  
Convenor  
Toledo Coalition for Safe Energy  
316 N. Michigan St., Ste. 520  
Toledo, Ohio 43604-5627

### **Pennsylvania**

David Hughes  
President  
Citizen Power, Inc.  
4353 Murray Avenue  
Pittsburgh, Pennsylvania 15217

Eric Epstein  
Chairman  
Three Mile Island Alert, Inc.  
4100 Hillsdale Road  
Harrisburg, Pennsylvania 17112

### **Tennessee**

Steven Sondheim  
Director  
Citizens for Transportation Reform  
271 Rose  
Memphis, Tennessee 38117

Ralph Hutchison  
Coordinator  
Oak Ridge Environmental Peace Alliance  
P.O. Box 5743  
Oak Ridge, Tennessee 37920

### **Utah**

Sarah Fields  
Program Director  
Uranium Watch  
P.O. Box 344  
Moab, Utah 84532

### **Vermont**

Dr. Zoe Kopp  
President  
GRACE Cares  
773 Guilford St  
Brattleboro, Vermont 05301

L. Sternberg  
Trustee  
Greater Bennington Peace & Justice Center  
P.O. Box 1437 Bennington Vt 05201  
Bennington, Vermont 05201

Schuyler Gould  
President  
New England Coalition on Nuclear  
Pollution  
139 Main Street  
Brattleboro, Vermont 05301

Debra Stoleroff  
Vermont Yankee Decommissioning Alliance  
158 New Hamburger Rd  
Plainfield, Vermont 05667

Chris Williams  
President  
Vermont Citizens Action Network  
P.O. Box 16  
Hancock, VT 05748

## **Virginia**

Jim Schulman  
President  
A Thousand Friends of Virginia's Future  
5761 Rexford Ct., Unit C  
Springfield, Virginia 22152

## **Washington**

Steven Gilbert  
Executive Director  
Institute of Neurotoxicology & Neurological  
Disorders  
3711 47th PL NE  
Seattle, Washington 98105

Nancy Morris  
Co-Director  
Safe Utility Meters Alliance - NW  
P.O. Box 77295  
Seattle, Washington 98177

## **Ontario, Canada**

Siegfried (Ziggy) Kleinau  
Co-Founder and Outreach Director  
Bruce Peninsula Environment Group  
P.O.Box 364  
Binbrook, Ontario L0R1C0