

FEDERAL ENERGY REGULATORY COMMISSION
WASHINGTON, DC 20426

OFFICE OF THE CHAIRMAN

October 7, 2011

The Honorable Lisa Murkowski
Ranking Member
Committee on Energy and Natural Resources
Dirksen 304
United States Senate
Washington, D.C. 20510

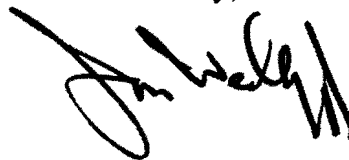
Dear Senator Murkowski:

Thank you for your October 4, 2011 letter regarding electric reliability impacts of Environmental Protection Agency (EPA) regulations. As you requested, attached are answers to the questions sent in your September 19, 2011 letter on the same topic. As described in more detail in the attached answers, and in my previous answers, I share your recognition of the fundamental importance of having a reliable supply of electricity. Also, as you note, ensuring reliability in this context requires more than an analysis at an aggregate level. I continue to hope that we can meet to discuss your concerns.

Also attached is contact information for several of the planning authorities mentioned in my earlier responses. The contacts listed herein represent the largest planning authorities, and we've attached the links for further points of contact.

Finally, I look forward to meeting with you on this very important topic so that we can discuss additional Commission actions that I am planning; including holding our third annual reliability conference that will discuss emerging issues, including processes used by planning authorities and other entities to identify reliability concerns that may arise in the course of compliance with Environmental Protection Agency regulations, and the tools and processes (including tariffs and market rules) available to address any identified reliability concerns.

Sincerely,

A handwritten signature in black ink, appearing to read "Jon Wellinghoff", written in a cursive style.

Jon Wellinghoff
Chairman

TRANSMISSION PLANNING REGIONS

I. RTOs/ISOs

ISO New England

Registered with NERC as: Balancing Authority; Interchange Authority; Planning Coordinator; Reliability Coordinator; Resource Planner; Transmission Operator; Transmission Planner; Transmission Service Provider

ISO-NE requests that all questions be directed to:

Ray Hepper, General Counsel for ISO-NE

(413)-540-4559

rhepper@iso-ne.com

Michael Henderson, Chair (requests that questions go through Ray Hepper)

Director of Regional Planning Coordination

413-535-4166

mhenderson@iso-ne.com

ISO-NE Transmission Owning Members

Transmission

Bangor Hydro-Electric Company

Central Maine Power Company

Central Vermont Public Service

Connecticut Light and Power Company

Green Mountain Power

New England Power Company

Northeast Utilities Service Co

Public Service Co. of New Hampshire

NSTAR Electric Gas Corp

United Illuminating Company

Vermont Electric Power Company, Inc.

Vermont Transco LLC

Western Massachusetts Electric Co.

Publicly owned entity sector

Braintree Electric Light Department

Conn. Municipal Electric Energy Coop.

Holyoke Gas & Electric Department

Mass. Municipal Wholesale Electric Co.

New Hampshire Electric Cooperative

Norwood Municipal Light Department

Reading Municipal Light Department

Taunton Municipal Lighting Plant

Vermont Electric Cooperative

Vermont Public Power Supply Authority

Supplier Sector

Unitil Energy Systems, Inc. and Fitchburg Gas and Electric Light Company

New York ISO

Registered with NERC as: Balancing Authority; Interchange Authority; Planning Coordinator; Reliability Coordinator; Resource Planner; Transmission Operator; Transmission Planner; Transmission Service Provider

Ray Stalter
Regulatory Affairs
Tel. (518)-356-8503
rstalter@nyiso.com

Henry Chao – Vice President of System & Resource Planning
Tel. (518) 356-6111
Fax (518) 356-7524
hchao@nyiso.com

Scott Leuthauser, Chair, Transmission Planning Advisory Subcommittee
Utility Consultant for HQUS
315-288-4201; 315-430-8626; 315-288-4201
sleuthau@twcny.rr.com

NYISO Transmission Owning Members

Central Hudson Gas & Electric Corp.
Consolidated Edison Co. of New York
Long Island Power Authority
National Grid

New York Power Authority
New York State Electric & Gas Corp.
Orange & Rockland Utilities, Inc.
Rochester Gas & Electric Corp.

PJM

Registered with NERC as: Balancing Authority; Interchange Authority; Planning Coordinator; Reliability Coordinator; Resource Planner; Transmission Operator; Transmission Planner; Transmission Service Provider

Steve Herling, Chair, Planning Committee
Vice President, Planning
PJM
Office (610) 666-8834
E-mail herling@pjm.com

Paul McGlynn, Chair, Transmission Expansion Advisory Committee
Manager
PJM
Office (610) 666-4227
E-mail mcglyp@pjm.com

PJM Transmission Owning Members

Mid-Atlantic Sub-region

Atlantic City Electric Company
Baltimore Gas and Electric
CED Rock Springs, LLC
Delmarva Power and Light Co
Jersey Central Power and Light Co
Metropolitan Edison Company
PECO Energy Co
Pennsylvania Electric Company
Potomac Electric Power Co
PPL Electric Utilities Corporation
Public Service Electric and Gas
Rockland Electric Co
UGI Utilities, Inc.
Neptune Regional Transmission System
Linden variable frequency transformer

Western Sub-Region

American Transmission Systems, Inc.
Allegheny Electric Cooperative, Inc.
Allegheny Power
American Electric Power Service Corp
City of Cleveland, Department of Public
Utilities, Division of Cleveland
Public Power Integration
Commonwealth Edison
Dayton Power and Light
Duquesne Light Company
Trans-Allegheny Interstate Line Co.
Southern Sub-Region
Virginia Electric and Power Co.
Old Dominion Electric Cooperative

Midwest Independent Transmission System Operator, Inc. (MISO)

Registered with NERC as: Balancing Authority; Interchange Authority; Planning Coordinator; Reliability Coordinator; Transmission Service Provider

John Lawhorn
Director, Regulatory & Economic Planning
1125 Energy Park Drive
St. Paul, MN 55108
jlawhorn@midwestiso.org
(651) 632-8479

MISO Transmission Owning Members

ALLETE, Inc. (Minnesota Power &
Superior Water, Light and Power
Co.)
AmerenCILCO
AmerenIP
AmerenUE and AmerenCIPS
American Transmission Company
Big Rivers Electric Corporation
Board of Water, Electric, and
Communications Trustees of the
City of Muscatine, Iowa
Central Minnesota Municipal Power
Agency
City of Columbia, MO
City Water, Light & Power

(Springfield, Illinois)
Dairyland Power Cooperative
Duke Energy Indiana, Inc.
Duke Energy Kentucky, Inc.
Duke Energy Ohio, Inc.
Duquesne Light Company
Great River Energy
Hoosier Energy Rural Electric Coop
Indiana Municipal Power Agency
Indianapolis Power & Light Co
International Transmission Co
ITC Midwest
Michigan Electric Transmission Co
Michigan Public Power Agency
Michigan South Central Power Agcy

MidAmerican Energy Company
Missouri River Energy Services
Montana-Dakota Utilities Co.
Municipal Electric Utility of the City
of Cedar Falls, Iowa
Northern Indiana Public Service Co
Northern States Power Co &
Northern States Power Co
(Wisconsin)

Northwestern Wisconsin Electric Co
Otter Tail Power Company
Southern Illinois Power Cooperative
Southern Indiana Gas & Electric Co
(Vectren)
Southern Minnesota Municipal
Power Agency
Wabash Valley Power Association
Wolverine Power Supply Coop

Southwest Power Pool (SPP)

Registered with NERC as: Registered with NERC as: Interchange Authority; Planning Coordinator; Reliability Coordinator; RSG; Transmission Planner; Transmission Service Provider

Norman Williams
V.P. Transmission Services & Engineering
Sunflower Electric Power Corporation
Box 1020
301 W. 13th Street
(785) 623-3332

SPP Transmission Owning Members

Cooperatives

Mid-Kansas Electric Company, LLC
Midwest Energy, Inc.

Sunflower Electric Power Corporation
Western Farmers Electric Cooperative

Investor-Owned

Empire District Electric Company
Kansas City Power & Light Company
Kansas Gas and Electric Co (Westar)
KCP&L Greater Missouri Operations Co

Oklahoma Gas and Electric Company
Public Service Co of Oklahoma (AEP)
Southwestern Public Service Co (Xcel)
Southwestern Electric Power Co (AEP)

State Agencies

Grand River Dam Authority
Louisiana Energy and Power Authority
Nebraska Public Power District

Omaha Public Power District

California Independent System Operator Corporation (CAISO)

Registered with NERC as: Balancing Authority; Planning Coordinator; Transmission Operator; Transmission Service Provider

Neil Millar, Executive Director of Infrastructure Development
CAISO

Office (916) 608-1113
E-mail: nmillar@caiso.com

CAISO Participating Transmission Owners

Atlantic Path 15
City of Anaheim
City of Azusa
City of Banning
City of Pasadena

City of Riverside
City of Vernon
Pacific Gas and Electric
Southern California Edison
San Diego Gas & Electric

California Transmission Planning Group (CTPG)

(A subregional planning group formed after the issuance of Order No. 890 to address state-wide planning for California, including non-jurisdictional entities.)

Jim Avery – SDG&E
Chair, CTPG Exec. Committee
Tel: 858-650-6102
Email: javery@semprautilites.com

CTPG Participating Transmission Owners

California Independent System
Operator
Imperial Irrigation District
Los Angeles Department of Water
and Power
Pacific Gas and Electric
Southern California Edison
Southern California Public Power

Authority
San Diego Gas and Electric
Transmission Agency of Northern
California
Turlock Irrigation District
Western Area Power Administration

II. Non-RTOs/ISOs

South Carolina Regional Transmission Planning (SCRTP)

Not registered as a NERC Functional Entity

email: comments@scrtp.com

Mr. Hubert “Clay” Young (Primary)
South Carolina Electric & Gas
Manager of Transmission Planning
Business: 803-217-2030
COUNG@scana.com

Mr. Tom Abrams (Secondary)

Santee Cooper
VP of Planning & Power Supply
Business: 843-761-8000

Note: Mr. Young sends out all of the e-mails announcing meeting dates as well as providing the studies.

<http://www.scrtp.com/en/>

Members

South Carolina Electric & Gas Company
South Carolina Public Service Authority (Santee Cooper)

Southeastern Regional Transmission Planning (SERTP)

Not registered as a NERC Functional Entity

Note: Meetings are run by Southern Company
(the Commission did not consider this a “region” for purposes of Southern’s
compliance with the Order No. 890 Regional Participation Principle)

Jeremy Bennett
205-257-3755
jbennett@southernco.com

Matt Piper
205-257-7470
LMPIPER@southernco.com

Website: <http://www.southeasternrtp.com>

Sponsors

PowerSouth Energy Cooperative
Dalton Utilities
Georgia Transmission
MeagPower

South Mississippi Electric Power
Association
Southern Company

Southeast Interregional Participation Process (SIRPP)

Not registered as a NERC Functional Entity

Calvin Daniels, Chair
cdaniels@ecg-llc.com
Energy Consulting Group, LLC
3625 Cumberland Blvd, Ste 1525

Atlanta, GA 30080
770-763-4927
Cell 864-354-5103

Website: <http://www.southeastirpp.com/>

Sponsors

PowerSouth
Dalton Utilities
Georgia Transmission Corporation
(GTC)
Duke Energy Carolinas
Entergy Companies
Louisville Gas and Electric
Company/Kentucky Utilities
Company

Municipal Electric Authority of Georgia
(MEAG)
Progress Energy Carolinas
Santee Cooper
South Carolina Electric & Gas
South Mississippi Electric Power
Association (SMEPA)
Southern Companies
Tennessee Valley Authority (TVA)

Mid-Continent Area Power Pool (MAPP)

Registered with NERC as Planning Coordinator

Tami Anderson
Manager, Transmission Planning
ta.anderson@mappcor.org
(651) 294-7086

Members

Ames Municipal Electric System
Basin Electric Power Cooperative
Cargill Power Markets, LLC
Central Iowa Power Cooperative Cinergy
Services, Inc. (merged with Duke Energy
April 3, 2006)
Constellation Energy Commodities
Group
Corn Belt Power Cooperative
Hastings Utilities
Heartland Consumers Power District
Iberdrola Renewables
Integrus Energy Services, Inc.
Manitoba Hydro
Minnesota Municipal Power Agency
Minnesota Municipal Utilities Assn.

Minnkota Power Cooperative, Inc.
Missouri River Energy Services
Montana-Dakota Utilities Co.
Morgan Stanley Capital Group Inc.
Nebraska Public Power District
NorthWestern Energy
Rainbow Energy Marketing Corp
Rochester Public Utilities
Shell Energy North America (US), LP
Sunflower Electric Power Corp.
Tenaska Power Services Co
The Energy Authority, Inc.
TransAlta Energy Marketing (U.S.) Inc.
TransCanada Power
Western Area Power Administration

Central Region Public Power Partners (a/k/a Central Public Power Participants)
Not registered as a NERC Functional Entity

Ian Grant
Planning Coordinator
isgrant@tva.gov
(423) 751-8721

Kevin Hopper
khopper@aeci.org
(417)-885-9361

No web site – information distributed on member OASIS pages

Members:

Tennessee Valley Authority
East Kentucky Power Coop.
Associated Electric Coop, Inc.

Black River Electric Coop, Inc.
(BREC is in MISO; however, has
not withdrawn from CPPP)

Electric Reliability Council of Texas (ERCOT)

Warren Lasher
Manager of Long-term Planning, ERCOT
2705 West Lake Dr.
Taylor, TX 76574
Email: wlasher@ercot.com

**Draft Responses to Sept. 19, 2011
Questions from Sen. Murkowski**

1. Will EPA's rulemaking agenda, as described in my previous correspondence, degrade reliability in any region, sub-region or electric control area of the United States? In addition to answering this question, please state or explain:
- a. the basis for this determination;
 - b. your degree of confidence in this determination;
 - c. the regions, sub-regions, or electric control areas that will be affected, with a particular focus on transmission "pockets" and cities where generating capacity is at risk;
 - d. the impacts on system stability or system recovery in the aftermath of wide scale forced outages (e.g., the recent regional outage in Arizona, Southern California, and Northern Mexico);
 - e. the impact on reliability of any change in the balance among different types of generation, particularly during and in the aftermath of forced outages and periods of peak demands; and
 - f. the actions that the Commission is undertaking to understand and address these effects.

Answer: At this time, I have no basis on which to formulate an accurate answer to your question. The Commission is not equipped or staffed to perform the comprehensive resource analyses and plans to assess and address the potential local and regional electric reliability impacts of the proposed EPA regulations. Instead, those comprehensive and detailed analyses are more appropriately done in the existing planning processes used by utilities and regional planning authorities (including Regional Transmission Organizations and Independent System Operators) to identify and plan for the infrastructure and resources they will need to meet future needs. These planning authorities have or can get all the detailed data and tools for such analyses, and can identify specific resources that may be affected by new regulations, and many planning authorities, such as the PJM Regional Transmission Organization, are already taking steps in that direction.

Planning authorities have the staffing, modeling capabilities and data needed to evaluate potential generator retirements, to assess the reliability impacts of those retirements, and to analyze the alternatives needed to address identified reliability impact, including through the addition of new, generation, new transmission, redispatch of generation, or demand response. I believe that given enough time and information, the electric industry can plan for and develop an adequate response to the EPA regulations that ensures reliability.

With respect to the Commission's actions to understand and address these effects, the Commission currently does, and will continue to, review certain studies to determine the changes that occur due to changes in the mix and location of resources in a region, as well as planning-related proposals that account for implementation of these EPA regulations. Among other tools, the Commission can approve use of reliability must-run contracts for units that may no longer be economically viable under stricter environmental regulations, and can provide technical support regarding the need for environmental waivers for specific plants needed for reliability.

With respect to subpart (d), the Commission has already initiated an inquiry, jointly with NERC,

into the causes of the outages in Arizona, Southern California and Northern Mexico, but it is not expected to include a detailed review of the potential impact of EPA regulations on system stability or system recovery in that part of the country as part of the inquiry because this inquiry is focused on the causes of the outages.

2. In your view, what is the extent of the Commission's responsibility to ensure the reliability and security of the nation's bulk power system? In this regard, please describe that responsibility and what actions by the Commission it may entail.

Under section 215 of the FPA, the Commission is responsible for overseeing the establishment and enforcement of mandatory and enforceable standards that protect the reliability of the Bulk-Power System, through its certification and oversight of an Electric Reliability Organization, currently the North American Electric Reliability Corporation (NERC). The Commission's authority to order a specific remedy to a reliability concern is limited under section 215(i)(2) of the Federal Power Act, which provides that FPA section 215 "does not authorize the ERO or the Commission to order the construction of additional generation or transmission capacity or to set and enforce compliance with standards for adequacy or safety of electric facilities or services." Moreover, unlike in its traditional regulatory jurisdiction, the Commission cannot itself write or modify the reliability standards, and instead is limited to approving or remanding standards proposed by NERC, and directing NERC to develop standards or modifications addressing certain matters.

Under section 207 of the Federal Power Act, if the Commission finds that any interstate service of a public utility is inadequate or insufficient, it has the authority to "determine the proper, adequate, or sufficient service to be furnished." The Commission has used Section 207 to order two public utilities to file a long-term plan for transmission upgrades to address reliability concerns here in the nation's capital. District of Columbia Public Service Commission, 114 FERC ¶ 61, 017 (2006).

The Commission also evaluates certain power flow studies to determine if there will be any violations of reliability standards established under section 215 of the FPA and will review any planning-related proposals developed in response to reliability matters that may occur due to EPA regulations. The Commission has and will continue to share our staff's expertise with EPA when appropriate.

3. What process will the Commission undertake to assess the impact on reliability of EPA's rulemaking agenda? With respect to this process, please describe:
 - a. the scope of the process;
 - b. the projected timeline for any contemplated activities;
 - c. the division of responsibility between the Commission, NERC and any other entity;
 - d. any contemplated studies and projections;
 - e. the agencies and officials participating.

Answer: The Commission expects to monitor the planning authorities' reliability studies and resource adequacy analyses, including reviewing studies that identify any violations of reliability standards due to changes in the mix and location of resources in a region, as well as planning-related proposals that account for implementation of EPA regulations. These planning authorities have the staffing, tools, modeling capabilities, and detailed data necessary to identify

future reliability concerns, and can best identify and evaluate the various alternatives for addressing those concerns.

The Commission and various state agencies also have a role in evaluating new resources that may be identified as needed to resolve reliability concerns. For example, new generation resources generally must obtain a certificate of public convenience and necessity from the relevant state regulatory agency, and new transmission generally requires state siting approvals and may often require FERC approval for recovery of the associated costs.

With respect to timing, many planning authorities have already begun the process of analyzing the potential reliability effects of the EPA regulations, although those entities may have to update such studies as decisions to retire individual units are made by members of the industry.

4. As a matter of public policy, do you believe that federal regulations should be generally applicable?

Answer: With regard to FERC's regulations, waivers or exemptions are allowed in appropriate circumstances. In setting rates for jurisdictional services under FPA 205, the Commission can only approve a rate that it finds "just and reasonable" and "not unduly discriminatory." Likewise, under FPA section 215, the Commission cannot approve a reliability standard unless it is found to be "just, reasonable, not unduly discriminatory or preferential, and in the public interest." However, the Commission has often found no preference or discrimination where entities that are not similarly situated are treated differently, including approving cost-based reliability must-run contract payments for generators that are required for local reliability requirements when other generators are limited to recovery of a market-based price. See also Mandatory Reliability Standards for Critical Infrastructure Protection, 122 FERC ¶ 61,040 (2008) (authorizing a technical feasibility exception to certain Critical Infrastructure Protection Reliability Standards); Black Creek Hydro, Inc. et al., 77 FERC P61,232 (1996) (granting waiver of the Commission's requirement under Order 888 to provide open access to transmission services for public utilities that can show that they own, operate, or control only limited and discrete transmission facilities that do not form an integrated part of the transmission grid).

5. Do you intend to involve the Commission in the EPA's rulemaking process sufficiently to ensure that EPA's rules, in fact, can be generally applicable without a threat to reliability?

Answer: The Commission staff has consulted with EPA and has provided input on the EPA's own efforts to model the effects of its regulations on generation retirements, including modeling transfer limits, placement and timing of capacity additions and the cumulative impact of the upcoming EPA regulations. The planning authorities responsible for ensuring system adequacy are in a better position to provide more detailed information about prospective impacts of EPA regulations on local or regional reliability.

6. If, de facto, EPA's rules are less than generally applicable because they require significant exceptions and waivers to meet reliability requirements, please explain the process you believe should apply. Please describe any proposals for such waiver or exception process that might serve as a "safety valve" that you may have under review, or that you believe may be under review by EPA or any other Executive Agency, for permitting certain power plants to operate under the EPA rules until mitigation measures are put in place to safeguard reliability

considerations. Please detail the elements of such a process for providing flexibility or targeted and discrete exceptions or waivers. If such a process would include the use of consent decrees entered in judicial proceedings, please explain how such a process might operate.

Answer: Because I do not know what EPA's future processes will look like for these rules, it is impossible for me to describe how these processes might affect FERC's interactions with EPA. However, one possibility to consider is the process suggested by the RTOs and ISOs in comments to the EPA, suggesting that it consider including a reliability "safety valve" in rules that could result in the retirement of generation. This safety valve would allow the retiring generating plant to seek an extension of time for compliance with a new environmental requirement, and allow the plant to continue to operate for the time needed to implement reliability solutions for replacement of the plant. But to qualify for such an extension of time, the plant would be required to provide early notice to the planning authority to allow it sufficient time to mitigate any reliability impacts.

7. Please provide any estimate that you or any Commissioner or Commission employee may have developed with respect to the number of generating units that could qualify for such flexibility or targeted and discrete exceptions or waivers.

Answer: Neither the Commission nor its Staff have developed an estimate of the number of generating units that could qualify for such flexibility. The informal assessment generated by the Commission staff in October 2010 was not designed to determine whether the retirement of a given generation unit would result in local or other reliability concerns, or whether adequate resources could be deployed before any such plant retirements, rather it was simply an informal assessment of potential plant retirements. Accordingly, that informal assessment cannot provide an estimate of the number of generating units that could need a targeted waiver or exception.

8. If you expect that completing a reliability assessment of the cumulative impact of EPA's rulemaking agenda in general – or of the Utility MACT or Cross State Air Pollution rules in particular – will require more than six months, please explain in detail the objectives of the assessment, its methodology, and the time necessary to complete each step. In addition, please explain why it would be infeasible to release an assessment within six months' time.

Answer: As stated previously, the Commission does not have the tools or data to undertake a comprehensive reliability assessment of the cumulative local and regional impact of EPA's rulemaking agenda, but can assist EPA in evaluating any requests for waivers/exemptions sought as needed for reliability reasons.

As FERC does not do centralized planning, any analysis performed by Commission staff would need to be based on publicly available information and make many assumptions regarding the potential EPA rules. Decisions about whether to retire or retrofit units are proprietary business decisions for each generator, and are not available to Commission staff. In addition, utilities have been resistant to provide this type of information in the past because of FERC's potential inability to protect its further release under the Freedom of Information Act. Further, any assessment performed by Commission staff would necessarily have to choose certain factors to consider, such as SO₂ controls, age of the plant, and whether the plant owner had already announced plans to retire the plant and how to weight each factor. Any analysis done

using assumptions and weight factors in the selection process would be inadequate as compared to one based on actual data and business decisions.

9. If the Commission is not undertaking such a process, and has no plans to do so, please either:

- affirm that EPA's rulemaking agenda will not materially degrade reliability in any location within the United States; or,
- explain how the Commission will carry out its statutory obligations with respect to reliability and security in the absence of information regarding expected material degradations to reliability.

Answer: I believe that given enough information and time, the electric industry can plan to meet the requirements of the EPA regulations without sacrificing reliability. As I have noted, the planning authorities already are or will be studying the impacts of EPA's regulations, and have a number of tools to ensure that any reliability concerns they identify will be addressed, including use of reliability must-run contracts, use of waivers or exemptions from EPA rules for specific plants, redispatch of resources, and deployment of new resources (including new transmission facilities and demand side resources).