I. Meeting Packet

State of Florida

Public Service Commission

INTERNAL AFFAIRS AGENDA

9:30 AM, Wednesday - October 05, 2011
Room 140 - Betty Easley Conference Center

1. Approve September 21, 2011, Internal Affairs Meeting Minutes. (Attachment 1).
2. PURC Annual Report by Mark Jamison (Attachment 2).
3. Request by Gulf Power Company and Progress Energy, Florida, Inc., for FPSC Letter to President Obama Regarding Postponement of EPA Air Toxics (Attachment 3).
4. Executive Director's Report.
5. Other matters.

CH/sc

OUTSIDE PERSONS WISHING TO ADDRESS THE COMMISSION ON ANY OF THE AGENDAED ITEMS SHOULD CONTACT THE OFFICE OF THE EXECUTIVE DIRECTOR AT (850) 413-6463 or (850) 413-6055.

Attachment 1

Attachment 1

State of Florida
Public Service Commission
INTERNAL AFFAIRS MINUTES
Wednesday, September 21, 2011
9:30 a.m. - 10:50 a.m.
Room 140 - Betty Easley Conference Center

COMMISSIONERS PRESENT:	Chairman Graham Commissioner Edgar Commissioner Brisé Commissioner Balbis Commissioner Brown
STAFF PARTICIPATING:	Hill, Kiser, Helton, Harlow, J. Crawford, Willis
OTHERS PARTICIPATING:	Richard Wolfe - Comcast Paul Lewis and Willette Morman - Progress Energy Karen Lewis and T. J. Szelistowski - TECO

1. Approve September 8, 2011, Internal Affairs Meeting Minutes.

   The minutes were approved.

   Commissioners participating: Graham, Edgar, Brisé, Balbis, Brown

2. Presentation by Richard Wolfe about Comcast Broadband.

   A Presentation by Richard Wolfe concerning Comcast's Internet Essentials program to help low income families get connected to the Internet.

   Commissioners participating: Graham, Edgar, Brisé, Balbis, Brown

3. Briefing of FPSC Activities to Monitor Electric Service, Summary of JD Power Electric Service Survey, and Presentations by Progress Energy, Florida, Inc. and Tampa Electric Company.

   Presentations by Willette Morman from Progress Energy, Florida, Inc., and Karen Lewis and T. J. Szelistowski from Tampa Electric Company.

   Commissioners participating: Graham, Edgar, Brisé, Balbis, Brown

4. Administrative Approval of Sales or Transfers of Water or Wastewater Facilities to Government Authorities.

   The Commissioners granted administrative approval of sales or transfers of water or wastewater facilities to government authorities to staff with advance notice of two weeks to the Commissioners. The Administrative Procedures Manual will be updated to reflect this change.

   Commissioners participating: Graham, Edgar, Brisé, Balbis, Brown

5. Executive Director's Report.

   There were no updates to report.

   Commissioners participating: Graham, Edgar, Brisé, Balbis, Brown

6. Other Matters.

   a. Chairman Graham noted that the three presentations were very well done and were informative, he appreciated the effort that was made to move the process along.

   b. Commissioners Edgar and Balbis advised the Commission that they will be attending the 2011 Natural Gas Summit held in Orlando at the end of the week.

   Commissioners participating: Graham, Edgar, Brisé, Balbis, Brown

Attachment 2

Public Utility Research Center

2011 Annual Report to the Florida Public Service Commission

UF | Public Utility Research Center
UNIVERSITY *of* FLORIDA

Leadership in Infrastructure Policy
P.O. Box 117142
Gainesville, FL 32611-7142
Phone 352-392-6148 | Fax 352-392-7796
www.purc.ufl.edu

From the Director

This update on PURC research and outreach is intended to serve as an overview for FPSC commissioners and professional staff. Below are highlights of a very active year. At the end of this summary is a list of recent research papers that are also available through the research papers search engine on the PURC Web site at www.purc.ufl.edu. We truly appreciate the support of the FPSC and welcome opportunities for continued collaboration.

Mark A. Jamison, Ph.D.
Director, Public Utility Research Center

Highlights

Environmental Research and Courses

PURC researchers have been engaged in research and outreach related to Florida's new energy and climate initiatives. Research areas include (1) the economic impacts of environmental policies, (2) drivers for utility-scale renewable energy deployment, and (3) the impacts of emissions prices on retail rate design and the consequences on policy implementation. Outreach activities include numerous presentations and recent annual conference topics.

Energy Policy Development and Regulation

PURC researchers have been active in programs and analyses supporting the development of effective energy policies for Florida and elsewhere, including:

- Presentations at the third annual Florida Energy Systems Consortium (FESC) Summit.
- Research on the impacts of Florida's energy incentive programs.
- The 39th Annual PURC Conference is scheduled February 15-16, 2012.

Modeling Support for U.S. Department of Energy's Clean Cities Coalitions

Clean Cities is the U.S. Department of Energy's (DOE) flagship alternative-transportation initiative. Clean Cities builds partnerships with local and statewide organizations in the public and private sectors to help consumers and vehicle fleets reduce their petroleum use and minimize emissions. PURC is offering Clean Cities coalitions a unique economic modeling service that assesses the impacts of replacing gas-powered personal and service vehicles with all-electric and electric hybrid cars and trucks. The modeling assists by estimating the number of vehicle replacements needed to bring an area into compliance with EPA limits.

Storm Hardening Research

PURC continues to assist Florida's electric utilities by coordinating a research effort in the area of hardening the electric infrastructure to better withstand and recover from hurricanes.

Strategic Planning for Florida Government Broadband Capabilities

This PURC report, written for the State of Florida's Department of Management Services, details ways Florida's governmental entities can be more efficient in obtaining and using broadband.

Strategy, governance, innovation, and delivery models are the keys. The study compares Florida's approach with the approaches of four other states, and finds that governments can learn a great deal from one another, including how to develop an overarching strategic plan for ICT. Analyses show that, while decentralized decision-making can lead to lost economies of collaboration, some of the economies can be made up through effective information-sharing and removal of barriers to collaboration. The study also finds that insourcing of broadband by the state would likely increase costs.

Body of Knowledge on Infrastructure Regulation (BoKIR) Web site

PURC is expanding this valuable online resource to include more information about clean energy and energy efficiency. New links to other databases will be integrated into the site, and 10 new Frequently Asked Questions and 20 new references pertaining to clean energy will be added. Currently, the web site provides tutorials, literature surveys, self-paced tests, and more than 500 downloadable references on utility regulation, as well as a regulatory glossary translated into several different languages.

International Outreach

2011 PURC Advanced International Practices Program

- PURC developed this new initiative to provide experienced utility professionals with a comprehensive understanding of the more complex and often technical matters of infrastructure policy. Forty-eight infrastructure professionals from around the world participated in this year's course offerings: Energy Pricing; Benchmarking Infrastructure Operations; and Measuring Telecom Provider Costs.

PURC/World Bank International Training Program on Utility Regulation and Strategy

- This June, 99 regulatory professionals from 39 countries participated in the 30th delivery of the PURC/World Bank International Training Program. An additional 94 participants representing 34 nations attended the January 2011 program. Since its inception in 1997, this program has educated more than 2,500 professionals representing 149 nations. Commissioner Ronald Brisé was a featured speaker in June.

Other

- We were invited to deliver presentations throughout Florida, as well as in Brazil, Curaçao, India, Peru, and the U.K. in the past 12 months.

Research

Emissions Trading and Renewable Energy

PURC Director of Energy Studies Ted Kury is working with researchers from Florida State University and NERA on policies for carbon pricing. One line of research examines how Florida's energy generation portfolio would be impacted by pricing carbon emissions. Another line of research studies rate design issues in light of restrictive carbon policies.

Mr. Kury worked with a team of researchers from UF and FSU to look at the impacts of Florida's energy incentive programs. This research resulted in a report to the Florida legislature.

With funding from FESC, PURC has launched four other research projects in this area. One examines the potential effectiveness of decoupling. Another project rigorously quantifies the actual job impacts of the renewable portfolio standards in the United States. A third project examines alternative means of financing energy infrastructure investments. The last examines how renewable energy policies impact utility infrastructure.

Regulatory Policies for Renewable Energy and Energy Efficiency

With funding from the Norwegian Trust Fund, PURC will expand the Body of Knowledge on Infrastructure Regulation web site, www.regulationbodyofknowledge.org to include Frequently Asked Questions and expand references on renewable energy and energy efficiency. The funding focuses on developing countries, but the methodologies utilized to compare alternative policies and the impacts on customers are also applicable to the United States and other developed nations.

Water Utility Benchmarking: Measurement, Methodologies, and Performance Incentives

PURC Director of Water Studies Dr. Sanford Berg continues to conduct benchmarking studies for water utilities. Applied research papers have been produced on Cape Verde's water systems and on benchmarking in the Caribbean. Several technical studies of Japanese water systems are currently under review at scholarly journals. The research laid the foundations for sessions delivered at the 2011 PURC Advanced International Practices Program.

Broadband Provision and Penetration

In May, PURC research associates Sangwon Lee, Justin Brown, and Seonmi Lee published a cross-country analysis of fixed broadband deployment. The authors also are publishing an empirical analysis of fix and mobile broadband diffusion.

Storm Hardening

PURC is assisting Florida's electric utilities by coordinating a research effort in the area of hardening the electric infrastructure to better withstand and recover from hurricanes. Projects in this effort have included (1) research on undergrounding existing electric distribution facilities by surveying the current literature, performing case analyses of Florida underground projects, and developing a model for projecting the benefits and costs of converting overhead facilities to underground; (2) data gathering and analysis of hurricane winds in Florida and the possible expansion of a hurricane simulator that can be used to test hardening approaches; and (3) an investigation of effective approaches for vegetation management. Reports are available on the Energy Initiatives page of the PURC Web site, www.purc.ufl.edu.

Universal Service High-Cost Assistance

PURC Associates Dr. Eric Chiang (Florida Atlantic University) and Dr. Janice Hauge (University of North Texas) published a study with Dr. Jamison on how high-cost assistance impacts telecommunications competition. Dr. Berg co-authored a study with two former PURC students on how some telecom operators appear to inflate their costs to qualify for additional high cost assistance subsidies.

Net Neutrality
PURC researchers have written three papers analyzing the net neutrality debate. The PURC research shows that providing premium transmission service benefits small Web site providers and stimulates innovation, contrary to the claims of many net neutrality proponents.

Competition in Telecommunications
We collaborated with Thammasat University in Thailand to examine best practices for assessing and facilitating competition in developing countries. The project involved a team of 10 experts from the United States. Papers by PURC researchers analyzed case studies of competitive market assessment, metrics that developed and developing countries can use for quantitative assessment of market competition, and best practices for removing barriers to competition.

Business Separation in Telecommunications
Regulators and policymakers around the world are once again experimenting with business models that separate competitive and possibly non-competitive lines of business for telecommunications firms. PURC researchers examined the U.S. experiences and found that these policies are fundamentally flawed in that they, among other things, assume that business and technology are sufficiently stable to make it reasonable to encode business organization in regulatory rules.

Regulatory Tenure
What causes turnover of commissioners in regulatory agencies? PURC researchers found that increase in energy prices is one of the drivers. Increased prices both prompt sitting commissioners to leave and contribute to commissioners losing their seats, through failures in being re-elected or reappointment. Commissioners who replace those that were ousted tend to be more aggressive in keeping energy prices low.

Outreach

Plans for the 39th Annual PURC Conference
The 39th Annual PURC Conference, "Utility Policy Today: Do we have strategies, or just tactics?" February 15-16, 2012 will explore the difficult issues that regulators, policymakers, industry, and consumers must confront in today's turbulent environment. Conference details are available online at www.purc.ufl.edu.

Benchmarking: Performance Measurement-Economic and Service Quality Regulation
Yardstick comparisons are important tools for regulating utilities. In August, Dr. Berg served as the keynote speaker at a conference in Brazil organized for ARCE, the regulatory commission for water and electricity for the state of Ceará. Due to scheduling conflicts, he delivered his presentation on developing and using benchmarking indicators to improve water sector performance via video.

Regulating SOE's: A Leadership Approach
Is regulating a government-owned enterprise more complicated than a privately-owned company? It is, according to Dr. Jamison, as he explained in the July seminar for the national

water agency of Brazil. Dr. Jamison noted that this regulation is hard because of unclear objectives, unclear financial controls, unclear governance, and very clear politics.

PUCP/OSINERGMIN International Seminar: Measures to ensure the Autonomy of Regulatory Organisms

More than 120 infrastructure professionals listened as Dr. Berg served as keynote speaker and addressed water regulatory issues at this May seminar in Lima, Peru. José Távara Martín (PURC/WB June 1999 alumnus) and Cecilia Blume Cillóniz (PURC/WB January 1997 alumnus) were two other featured speakers from Peru.

Curaçao Utility Conference

Sometimes the things we hold onto most dearly are the things that hold us back. That was the message Dr. Jamison conveyed in his keynote address, Developing Regulatory Institutions: A Leadership Perspective, at a May utility conference in Curaçao. Describing the linkage between the purposes and problems of utility regulation, he described the key features of successful utility regulation.

PURC Benchmarking Workshops in Lima

In May, Dr. Berg met with 40 staff from SUNASS, the water/wastewater regulatory commission in Peru to discuss benchmarking water utilities, drawing from his International Water Association book on the topic. He also delivered a presentation on benchmarking to the group. Ana Vergara, a participant in the June 1998 PURC/World Bank International Training Program, translated his presentation into Spanish.

PUCP Conference on Regulation in Energy, Water, and Telecommunications

More than 90 university students and faculty attended this May conference to learn about regulation in energy, water, and telecommunications from specialists in infrastructure. Dr. Berg delivered the presentation, Fundamentals of Regulatory Systems: Lessons from the Global Experience. Roxana Barrantes (PUCP Professor and January 1997PURC/WB alumna) was another featured speaker from Peru.

Economic Regulatory Conference in India

Why does policy implementation seem to go the wrong way? How can we adapt regulation when circumstances change? These were the issues addressed by Dr. Jamison in April at the conference, Reviewing the Global Experience on Economic Regulation – A Forward Looking Perspective in New Delhi, India. He explained that stakeholder involvement changes between the steps of policy formulation and policy implementation, resulting in a change in perspectives and priorities. Once policies are written into laws, governmental agencies begin playing a bigger role, new interest groups form because of the new rent-seeking possibilities, and other stakeholders change their perspectives because of the new environment. As a result, sometimes policymakers have trouble recognizing the policies they wrote once the policies are implemented.

Regional Water Strategy Meeting in Orlando

What is the 'missing link' between water management districts in Florida and utility delivery systems? Dr. Berg spoke to members of the Regional Water Strategy Committee meeting in Orlando in March on the role of economics in water policy. His observations emphasized how the group might address different types of conflicts in the region.

Oil Supply and Demand Presentation at PIEC

Questions surrounding the role of oil in the economy of the United States and the state of Florida are rampant. Too frequently, questions regarding the supply and demand for oil are addressed with emotion or catchy slogans. In February, at a panel addressing the DeepWater Horizon accident at the 17th Annual Public Interest Environmental Conference at the UF's Levin College of Law, Ted Kury discussed the magnitude of the supply and demand for oil in his presentation, The Role of Oil and the Gulf of Mexico in the United States Economy. He talked about the relationship of the U.S. as a member of the 'big three' oil producers in the world, as well as its singular position as an oil consumer. He also described the relationship of the Gulf of Mexico to the rest of the U.S., and some of the expected impacts of increased drilling off the coast of Florida.

CCRP Winter Policy Workshop

How do we form the questions to be addressed as we assess the ways in which we can alter global energy policy? This question was addressed by participants at a Winter Workshop in Birmingham, UK, co-hosted by the Aston Centre for Critical Infrastructure and Services at the Aston Business School and the Centre for Competition and Regulatory Policy at City University London. The workshop featured paper submissions from 11 authors engaged in energy policy research. Ted Kury presented his paper, The Marginal Effects of the Price for Carbon Dioxide: Quantifying the Effects on Electric Generation, on the short and long term effects of CO2 pricing on the markets for electricity generation and stressed the understanding of the marginal effects. His paper addressed that little is known about policy alternatives and what really are the effects of relaxing or restricting carbon caps on costs. He presented a modeling approach that can help to address this question and improve the effectiveness of such policies.

PURC Presentation on Florida's Energy Future

Florida's energy future was the topic at a February breakfast sponsored by the Jacksonville Business Journal. Ted Kury participated in a panel discussion with Jim Dickenson, CEO of JEA, Barry Moline, Executive Director of the Florida Municipal Electric Association, and Todd Sack, Environment and Health Section chair for the Florida Medical Association. The panelists discussed prepared questions related to the future of natural gas, nuclear energy, renewable energy, and demand side programs in the state of Florida, as well as questions from the attendees. Mr. Kury noted that the trade-off between cleaner sources of energy and the higher cost of these resources has yet to be quantified, and that the lack of a clear signal on whether CO2 emissions should have a price associated with them leaves industry participants confused about the types of technologies they should be pursuing. He also pointed out the fact that Florida's new governor campaigned against a renewable portfolio standard, but supported clean energy and increased offshore drilling.

PURC seminar

Do higher electricity prices lead utility regulators to leave office? Maybe so, according to a study presented by Dr. Janice Hauge at an Economics seminar at UF arranged by PURC. Using data on commissioner turnover in the United States, the study finds that political pressures can lead to commissioner departure, but does not find support for the conventional wisdom that commissioners are subject to a revolving door with stakeholders in utility regulation. The paper that formed the basis for the seminar is a PURC working paper, Oust the Louse: Do Political Pressures Discipline Regulators?

FESC Annual Summit

More than 250 attendees learned about energy policy during a technical session chaired by PURC Post-doc in Energy Studies Dr. Colin Knapp at the 2011 FESC Summit.

PURC Visiting Scholars

In October, PURC will host two new interns from the National Broadcasting and Telecommunications Commission of Thailand (NBTC), Roswan Sangprasert and Natchaya Taweewitchakreeya. They will work on PURC outreach projects and broadband research. PURC established an internship program with the NBTC in 2010 and hosted its first two interns for a 10-month period until March 2011.

Results of the 38th Annual PURC Conference

More than 125 key leaders in industry and government attended the 38th Annual PURC Conference, Next Generation Regulation: Strengthening the Foundation While Adapting to Change in February. Speakers included NARUC President The Honorable Tony Clark, Andy Barrett, Paul Genoa, Dane Snowden, and Dan Aschenbach among others. Speakers explored policy imperatives for the energy, telecommunications, and water sectors in Florida. Conference details are available online at www.purc.ufl.edu.

Training and Development

29th and 30th PURC/World Bank International Training Programs on Utility Regulation and Strategy

One-hundred ninety-three infrastructure managers learned from each other and from leading experts during the January and June deliveries of this biannual, two-week program in Gainesville. The program is designed to enhance the economic, technical, and policy skills required to design and manage sustainable regulatory systems for infrastructure sectors. The participants studied ongoing infrastructure reform programs, networked with international speakers, and offered their own insights into regulatory policies.

2011 PURC Advanced International Practices Program

In August, PURC launched this new training program by delivering three new courses: Energy Pricing, Benchmarking Infrastructure Operations, and Measuring Telecom Provider Costs. In attendance were 48 participants from13 nations. Participants of the energy course performed price reviews and analyzed financial statements for rate setting. Benchmarking participants assessed how information on trends in key performance indicators helps decision-makers. Telecom participants designed cost models and identified their strengths and weaknesses. Dr. Jamison, Dr. Berg, and Mr. Kury designed and delivered the courses during the 10-day program.

Practicing Leadership in a Political Environment: A One-Day Intensive Training Workshop for Emerging Leaders in Utility Policy

In January and June, Dr. Jamison and Ms. Castañeda delivered leadership workshops for regulatory professionals, who examined the activities, behaviors, mindsets, and skills of a successful leader during this training workshop designed by PURC for emerging leaders in utility policy.

Appendix

2011 PURC Publications and Working Papers

Applied Publications

Allen, Doug, Ira Horowitz, Chi-Keung Woo. 2011. "How May a Customer Exploit the Bonneville Power Administration's New Pricing Scheme?" *International Journal of Applied Decision Sciences,* 4(1): 80 – 93.

Berg, Sanford V., Liangliang Jiang, and Chen Lin. 2011. "Universal Service Subsidies and Cost Overstatement: Evidence from the U.S. Telecommunications Sector." *Telecommunications Policy,* 35(7): 583-591.

Holt, Lynne, and Theodore J. Kury. 2011. "Florida's Storm Hardening Effort: A New Paradigm for State Utility Regulators." *The Electricity Journal,* 24(4):62-71.

Jamison, Mark A., and Araceli Castaneda. 2011. "Reset for Regulation and Utilities: Leadership for a Time of Constant Change." *The Electricity Journal,* 24(4): 86-93.

Marques, Rui Cunha, and Sanford V. Berg. Forthcoming. "Risks, Contracts and Private Sector Participation in Infrastructure." *Journal of Construction Engineering and Management*

Woo, Chi-Keung, Jay Zarnikau, Jack Moore, and Ira Horowitz. 2011. Wind Generation and Zonal-Market Price Divergence: Evidence from Texas. *Energy Policy,* 39(7): 3928-3938.

Woo, Chi-Keung, Ira Horowitz, Jack Moore, and Andres Pacheco. 2011. "The Impact of Wind Generation on the Electricity Spot-Market Price Level and Variance: The Texas Experience." *Energy Policy,* 39(7): 3939-3944.

Technical Publications

Berg, Sanford V., and Rui Cunha Marques. Forthcoming. "Quantitative Studies of Water and Sanitation Utilities: A Literature Survey." *Water Policy.*

Corton, Maria Luisa. 2011. "Sector Fragmentation and Aggregation of Service Provision in the Water Industry." *Journal of Productivity Analysis,* 35(2):159-169.

Hauge, Janice A., Mark A. Jamison, and James E. Prieger. Forthcoming. "Oust the Louse: Does Political Pressure Discipline Regulators?" *Journal of Industrial Economics.*

Lee, Sangwon, Justin Brown, and Seonmi Lee. Forthcoming. "A Cross-Country Analysis of Fixed Broadband Deployment: Examination of Adoption Factors and Network Effect." *Journalism and Mass Communication Quarterly.*

Lee, Sangwon, Mircea I. Marcu, and Seonmi Lee. Forthcoming. "An Empirical Analysis of Fixed and Mobile Broadband Diffusion." *Information Economics and Policy.*

Marques, Rui Cunha, and Sanford V. Berg. Forthcoming. "Public-Private Partnership Contracts: A Tale of Two Cities with Different Contractual Arrangements." *Public Administration.*

Woo, Chi-Keung, Ira Horowitz, Arne Olson, Andrew DeBenedictis, David Miller, and Jack Moore. 2011. "Cross-Hedging and Forward-Contract Pricing of Electricity in the Pacific Northwest." *Managerial and Decision Economics*, 32(4): 265-279.

Books

Mugisha, Silver. 2011. *Utility Benchmarking and Regulation in Developing Countries: Practical Application of Performance Monitoring and Incentives.* London: International Water Association Publishing.

Book Chapters

Hauge, Janice A., Mark A. Jamison, and Mircea I. Marcu. 2011. "Consumer Usage of Broadband Internet Services: An Analysis of the Case of Portugal." In *Adoption, Usage, and Global Impact of Broadband Technologies: Diffusion, Practice and Policy*, ed. Yogesh K. Dwivedi, 198-213. Hershey, PA: IGI Global.

Jamison, Mark A. 2011. "Liberalization and Regulation of Telecoms, Electricity, and Gas in the United States." In *International Handbook of Network Industries: The Liberalization of Infrastructure*, eds. Matthias Finger and Rolf W. Künneke, 366-383. United Kingdom: Edward Elgar.

Working Papers

Berg, Sanford V., Liangliang Jiang, and Chen Lin. 2011. "Regulation and Corporate Corruption: New Evidence from the Telecom Sector." University of Florida, Department of Economics, PURC Working Paper.

Berg, Sanford V., Liangliang Jiang, and Chen Lin. 2011. "Universal Service Subsidies and Cost Overstatement: Evidence from the U.S. Telecommunications Sector." University of Florida, Department of Economics, PURC Working Paper.

Brevitz, David, Herb Cash, Mary Galligan, Lynne Holt, Theodore Kury, and Mark Jamison. 2011. "Strategic Planning for Florida Governmental Broadband Capabilities, Volumes 1 and 2." University of Florida, Department of Economics, PURC Working Paper.

Brown, David P. 2011. "Health Information Technology." University of Florida, Department of Economics, PURC Working Paper.

Carvalho, Pedro, Rui Cunha Marques, Sanford V. Berg. 2011. "A Meta-Regression Analysis of Benchmarking Studies on Water Utilities Market Structure." University of Florida, Department of Economics, PURC Working Paper.

Cruz, Nuno, Sanford V. Berg, and Rui Cunha Marques. 2011. "Managing Public Utilities: The American Way." University of Florida, Department of Economics, PURC Working Paper.

Jamison, Mark A., and Janice A. Hauge. 2011. "Innovation, Resource Constraints, and Mergers in Network Industries." University of Florida, Department of Economics, PURC Working Paper.

Kury, Theodore J. 2011. "Price Effects of Independent Transmission System Operators in the United States Electricity Market." University of Florida, Department of Economics, PURC Working Paper.

Marques, Rui Cunha, Pedro Simões, and Sanford V. Berg. 2011. "Water Sector Regulation in Small Island Developing States: An Application to Cape Verde." University of Florida, Department of Economics, PURC Working Paper.

Marques, Rui Cunha, Sanford V. Berg, and Shinji Yane. 2011. "Performance Benchmarking Analysis of Japanese Water Utilities." University of Florida, Department of Economics, PURC Working Paper.

Martin, Eric. 2011. "Economic and Environmental Sustainability through Adaptive Leadership." University of Florida, Department of Economics, PURC Working Paper.

Martin, Eric. 2011. "Adaptive Leadership in the U.S. Energy Sector." University of Florida, Department of Economics, PURC Working Paper.

Silbert, Megan E., and Pilar Useche. 2011. "Small Island Economic Vulnerability to Natural Disasters." University of Florida, Department of Economics, PURC Working Paper.

Silva, Hamilton. 2011. "Cost Efficiency in Periodic Tariff Reviews: The Reference Utility Approach and the Role of Interest Groups." University of Florida, Department of Economics, PURC Working Paper.

Yane, Shinji, and Sanford V. Berg. 2011. "Sensitivity Analysis of Efficiency Rankings to Distributional Assumptions: Applications to Japanese Water Utilities." University of Florida, Department of Economics, PURC Working Paper.

Attachment 3

State of Florida

Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD
TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: September 28, 2011

TO: Art Graham, Chairman
Lisa Polak Edgar, Commissioner
Ronald A. Brisé, Commissioner
Eduardo E. Balbis, Commissioner
Julie I. Brown, Commissioner

FROM: Judy G. Harlow, Senior Analyst, Division of Regulatory Analysis
Mark A. Futrell, Public Utilities Supervisor, Division of Regulatory Analysis
Cindy B. Miller, Senior Attorney, Office of the General Counsel

RE: Request by Gulf Power Company and Progress Energy, Florida, Inc., for FPSC Letter to President Obama Regarding Postponement of EPA Air Toxics Rule

Critical Dates: Please place on the October 5, 2011 Internal Affairs. EPA is expected to finalize the Air Toxics Rule by November 16, 2011. Commission guidance is sought.

On September 21, 2011, Gulf Power Company (Gulf) and Progress Energy, Florida, Inc. (PEF) sent a joint letter to Chairman Graham regarding the U.S. Environmental Protection Agency's (EPA) intent to finalize the Air Toxics Rule by November 16, 2011. Gulf and PEF are asking the FPSC to consider sending a letter to President Obama urging that he direct the EPA to seek an extension to the deadline established by the Court. Gulf and PEF copied Florida Power and Light Company (FPL) and Tampa Electric Company (TECO) on the letter. It is our understanding that, to date, FPL and TECO have decided not to join in with Gulf and PEF in their request. Gulf and PEF have also contacted the Governor's office, the Attorney General's office, and the Department of Environmental Protection (FDEP) with their concerns regarding the impending deadline for the EPA to finalize the rule. Gulf and PEF's joint letter is included as Attachment A.

The EPA proposed the Air Toxics, or Maximum Achievable Control Technology (MACT Rule), on March 16, 2011. The proposed rule sets national emission standards for mercury and air toxics for electric generators that burn coal or oil. The EPA accepted comments through August 4, 2011, and received over 19,600 comments and supporting documents. The FPSC sent comments to the EPA and letters to Florida's Congressional Delegation regarding the proposed rule. EPA is required by a Consent Decree before the D.C. District Court to finalize the rule by November 16, 2011.

Staff held a conference call with Gulf and PEF on Monday, September 26. To date, the utilities have not sent a letter to the President or the EPA to request a delay in finalizing the Air Toxics Rule. Both utilities sent comments to the EPA on the proposed rule. Staff has also contacted the staff of the National Association of Regulatory Utility Commissioners (NARUC). Robin Lunt, NARUC's Assistant General Counsel, is not aware of any state public utility commissions that have written a letter directly to the President requesting a delay in finalizing the rule.

The chief executive officers of Gulf and PEF were meeting Tuesday, September 27, on this issue. Also, the utilities have scheduled a meeting with the Secretary of the FDEP. Staff requested that Gulf and PEF provide an update following these meetings.

Alternatives to the FPSC sending a letter to the President include reaching out to the Florida Congressional Delegation, state officials, the FPSC's sister agencies, and/or the Federal Energy Regulatory Commission. The FPSC could also send a letter to the EPA in addition to, or in lieu of, sending a letter directly to the President.

Staff could also bring an item to the next Internal Affairs with more information on the actions other utilities and agencies have taken, if any, to contact the President or the EPA requesting a delay in finalizing the Air Toxics Rule. If the Commissioners wish to send a letter, the packet could also include a draft letter, revised per Commissioners' comments at the October 5, 2011 Internal Affairs meeting.

If the FPSC wishes to send a letter to President Obama, as requested by Gulf and PEF, staff has prepared a draft for your consideration (see Attachment B). While the draft letter does not request the President to intervene before the EPA, it does reiterate the FPSC's concerns with the proposed Air Toxics Rule, as expressed in the FPSC's letters to the Florida Congressional Delegation.

Progress Energy

GULF POWER
A SOUTHERN COMPANY

September 23, 2011

The Honorable Art Graham, Chairman
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Re: Environmental Protection Agency Rulemakings on Clean Air Act Toxics (EGU MACT)

Dear Chairman Graham:

As you know, the Environmental Protection Agency (EPA) is currently working to finalize regulations that will set strict emission standards for hazardous air pollutants emitted by electric generating units (EGU MACT). In order to meet a court imposed deadline, these regulations will be finalized by EPA no later than November 16, 2011. The purpose of this letter is to request the Commission's further support of efforts to persuade the EPA and President Obama to utilize all of the flexibility tools allowed by the Clean Air Act regarding proposed regulations for EGU MACT. Specifically, we request the Commission to consider sending a letter directly to President Obama asking that he direct his administration to take all available steps to improve the rule and thereby minimize the compliance costs for customers, reduce regulatory uncertainty, and help to protect electric reliability, while still achieving the desired emissions reductions.

The Commission's keen interest and concern over the impact of the EPA rulemakings with regard to Air Toxics has been reflected in written comments to EPA Administrator Lisa Jackson on July 15, 2011 and in letters to Senator Rubio and other members of Florida's congressional delegation. Since those comments and letters were submitted, additional information has come to light indicating that, despite earlier statements that the EPA was working with the Federal Energy Regulatory Commission (FERC) to ensure that the proposed MACT rule would not undermine electric system reliability, no such effort has been undertaken. In its August 1, 2011 response to an inquiry from Senator Lisa Murkowski, FERC stated that "[FERC] has not participated in any interagency task force or other working group to address the impact of EPA's proposed power sector rules." In a separate letter, also dated August 1, 2011, FERC Commissioner Phillip Moeller revealed that, in regards to consultations on the reliability impacts of the proposed rule, FERC "has not acted or studied or provided assistance to any agency, including EPA."

EPA is rushing to issue one of the most costly rules in its history to meet the "deadline" of November 16th that EPA's political leadership negotiated with environmental plaintiffs and then asked a Court to impose. This deadline requires the agency to review and digest

thousands of comments in a little over three months (comments were due by August 4) and prevents the EPA from addressing the many legitimate concerns that have been raised about the rule. The EPA has rejected calls to seek more time from the Court even though the Court has expressed its willingness, if so requested, to extend the deadline. Therefore, it is very important that state regulatory bodies like the Commission and other state authorities weigh in and urge the President to direct his administration to seek a reasonable extension of the deadline for the final rule in order to allow for adequate time to consider the issues identified during the public comment period, including those already submitted by the Commission.

We urge the Commission to follow up on its comments to the EPA and its letters to Florida's congressional delegation with a letter to President Obama as soon as possible to request adequate and appropriate time to ensure a well-constructed and thoroughly vetted final EGU MACT. This will avoid the threats to electric system reliability and unnecessary costs that will be imposed on our state's fragile economy that will result from the EPA's rush to judgment in order to meet an arbitrary and essentially self-imposed deadline of November 16, 2011. In order for the requested letter to have the greatest opportunity for success, we believe that it is important for the Commission to send the letter as soon as possible. Towards that end, we request that the Commission consider whether to send such a letter at its Internal Affairs Conference scheduled for October 5, 2011.

Sincerely,

R. Alexander Glenn
General Counsel
Progress Energy Florida, Inc.

Bentina C. Terry
Vice President of External Affairs
Gulf Power Company

Cc: Florida Public Service Commission

Hon. Lisa Polack Edgar, Commissioner
Hon. Ronald A. Brise', Commissioner
Hon. Eduardo E. Balbis, Commissioner
Hon. Julie Imanuel Brown, Commissioner
S. Curtis Kiser, General Counsel
Charles Hill, Deputy Executive Director

Office of Public Counsel

J. R. Kelly, Public Counsel

ATTACHMENT B

ART GRAHAM
CHAIRMAN

STATE OF FLORIDA

Capital Circle Office Center
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850
(850) 413-6040

Public Service Commission

September 28, 2011

President of the United States of America
The White House
1600 Pennsylvania Avenue NW
Washington, DC 20500

Re: EPA Electric Utility Air Toxics Rule

Dear Mr. President:

The Florida Public Service Commission (FPSC) is charged with ensuring that Florida's electric utilities provide safe, reliable energy for Florida's consumers in a cost-effective manner. We therefore believe it is critical to write regarding the Environmental Protection Agency's (EPA) proposed Electric Utility Air Toxics Rule. Given the impending deadline of November 16, 2011, when EPA intends to finalize this rule, we are reiterating our comments made to EPA and our Congressional Delegation. While we recognize the necessity to address the public health and environmental measures, we are concerned that the Air Toxics Rule has the potential for significant rate and reliability impacts for some Florida utilities and their consumers. To lessen this impact, we urge that EPA allow the maximum compliance flexibility provided under the Clean Air Act so that utilities may choose the most efficient, least-cost compliance options to meet the standards.

Pursuant to Florida law, investor-owned electric utilities may petition the FPSC for recovery from ratepayers for prudently incurred costs required to comply with new environmental requirements. Recovery of these compliance costs will have a near immediate rate impact on Florida's consumers. The FPSC is concerned about the impact of these substantial compliance costs on Florida's consumers, particularly in this time of economic distress and high unemployment.

Approximately 27 percent of Florida's electricity needs are currently met with coal- and oil-fired generation, the generation sources subject to the proposed rule. It appears that significant controls would be necessary at many of these units, and some units would be at risk of forced retirement. The FPSC is particularly concerned that there is a three year compliance time line, with a potential one year extension. Some of the control technologies that would allow utilities to comply would take two to four years for design and installation. With many utilities vying for the same equipment and specialized labor, it is to be expected that there will be price pressure, and potentially shortages, of these needed resources. This would cause significant cost impact on ratepayers and a

potential impact on reliability. We urge that EPA use the maximum flexibility set forth in the Clean Air Act in providing adequate time to attain compliance to minimize the impacts to ratepayers.

In conclusion, the FPSC has concerns that the Air Toxics Rule, as proposed, will have cost and potentially reliability impacts on Florida's consumers. We ask that EPA be encouraged to use the maximum flexibility and discretion under the Clean Air Act to allow adequate and reasonable time for regulated utilities to comply with the final rule.

Thank you for your time and for considering our concerns.

Respectfully yours,

Art Graham
Chairman, Florida Public Service Commission

II. Outside Persons Who Wish to Address the Commission at Internal Affairs

OUTSIDE PERSONS WHO WISH
TO ADDRESS THE COMMISSION AT

INTERNAL AFFAIRS
October 5, 2011

Speaker	**Representing**	**Item #**
Mark Jamison	PURC	2
Randy LaBaueve	FP&L	3
Bentina Terry	GULF	3
Mike Kennedy	PEF	3
Bill Willingham *	FECA	3

*Mr. Wellingham does not wish to address the Commission, but is available if there are questions regarding FECA's comments.

III. Supplemental Materials for Internal Affairs

A: Material pertaining to Item 2 of this agenda.
B: Material pertaining to Item 3 of this agenda.

A: The following material pertains to Item 2 of this agenda.

Addressing the Level of Florida's Electricity Prices

Theodore Kury[1]
Public Utility Research Center
Department of Economics
University of Florida

September 28, 2011

[1] Director of Energy Studies. I wish to thank Sandy Berg, Mary Galligan, Lynne Holt, Colin Knapp, and Mark Jamison for their helpful comments and suggestions. All errors are my own.

Introduction

During his campaign for Governor, Rick Scott outlined his plan for Florida titled *7 Steps. 700,000 Jobs. 7 Years*. The third step in the plan, addressing Regulatory Reform, states that "Reducing unnecessary costs that Tallahassee places on Florida businesses will result in creating 240,000 jobs." One tenet of this step of the plan is to "address Florida's relatively expensive electricity costs so businesses could save approximately $3.25 billion". This statement raises two questions: (1) Are Florida's electricity costs to customers relatively higher than those in neighboring states; and (2) If they are higher, what are the causes? Looking at this question in a historical context, the relative rank of electricity prices by state changes over time due to a number of factors:

- Investment decisions for capacity are made over a period of years, often many years before a plant begins to produce electricity;
- Electric utilities that make prudent investments are typically allowed to recover those investments from ratepayers;
- Electric utilities also buy on the spot market and prices can fluctuate quickly when such transactions occur;
- Florida, compared to other states in the region, relies greatly on natural gas which has been more prone to price fluctuations than coal, which is typically purchased under longer-term contracts, or nuclear, which has high capital (construction) costs but low operating costs;
- Once a plant is operating, if decisions are changed in midstream to lower rates on, say, industrial customers, other consumers will need to pay more.

Comparison of Electricity Costs

The answer to the first question depends on what is meant by "costs." One way of answering that question would be to directly compare prices that utilities charge across the states. Such a comparison would be simple to read, but it would provide confusing information because each customer pays several prices and so no one price tells very much of the story.

Another way of answering the question about costs is to compare customers' bills. The Edison Electric Institute's (EEI's) well-known bill comparison study provides such a comparison.[2] This study computes total costs for hypothetical customers, such as a residential customer consuming 750 kilowatt hours (kWh) per month, a small business consuming 1000 kWh per month, or a large business consuming 180,000 kWh per month. EEI's study indicates for example that customers of some Florida utilities have bills that are lower than bills for comparable customers in neighboring states. This comparison calls into question the validity of the governor's concerns at least for these utilities.

But a bill comparison does not aggregate costs across utilities in a state, which is the level of aggregation the governor seems to consider. Indeed, even though the EEI bill comparison shows some Florida utilities with price levels that compare favorably with major utilities in neighboring states, rates for

[2] Edison Electric Institute, "Typical Bills and Average Rates Report." The report is reproduced on a regular basis.

Florida's 56 electric utilities vary greatly. According to Florida Public Service Commission data[3], the monthly bill for a residential customer consuming 1000 kWh per month ranged from $81.48 to $205.00 in 2010, depending upon the utility.

In this study we compare Florida as a whole to other states in terms of the total cost of electricity to the customer. Our approach is similar to the bill comparison approach in that we include all of the prices that customers pay, but different in that we consider the state as a whole and not individual utilities. As such our approach considers averages: Some utilities would have lower costs for customers than our results and some utilities will have higher costs for customers.

In this study, we focus on the total amounts that different types of customers in Florida pay for electricity as reported by the U.S. Department of Energy.[4] We divide these total payments by the number of kWhs consumed so that we can compare across states.[5] Figure 1 shows the average residential electricity cost expressed per kWh for the state of Florida and six other southeastern states for 1990 through 2008. From 1990 through 2002, Florida's electricity costs were comparable to the other states' costs. Beginning in 2003, the residential cost of electricity in Florida grew faster than costs in the other states and is now about 10% higher than the next highest state, Alabama. Figure 2 shows the average cost to commercial customers, while Figure 3 shows the costs to industrial customers. From 1990-2000, commercial customers in Florida enjoyed costs at the lower end of the range of the region, but now even though they experience costs at the higher end of the region, the costs for commercial customers do not stand out in the same way as the residential costs do. Industrial costs, for Florida customers have always been high relative to other southeastern states and show similar disparities to the residential rates over the last 5 years.

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[3] "Comparative Rate Statistics", Florida Public Service Commission, December 2010.

[4] "State Energy Data System", U.S. Department of Energy's Energy Information Administration. Accessed September 2011.

[5] We could use other denominators, such as numbers of customers, which would give us an average customer bill. We choose kWhs because this is a standard practice and is easily understood. Any denominator we would use would give results that are affected by variations in customers across states.

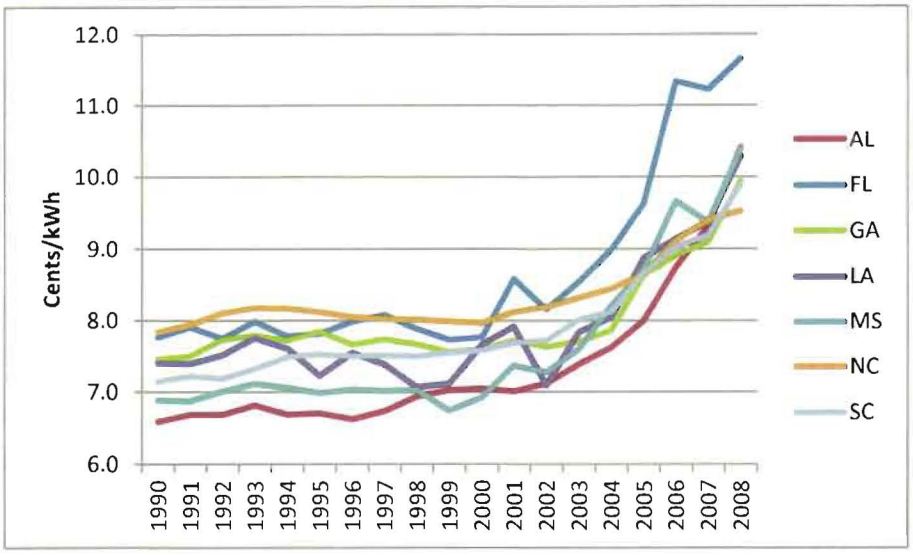


Figure 1. Nominal residential electricity costs per kWh 1990-2008

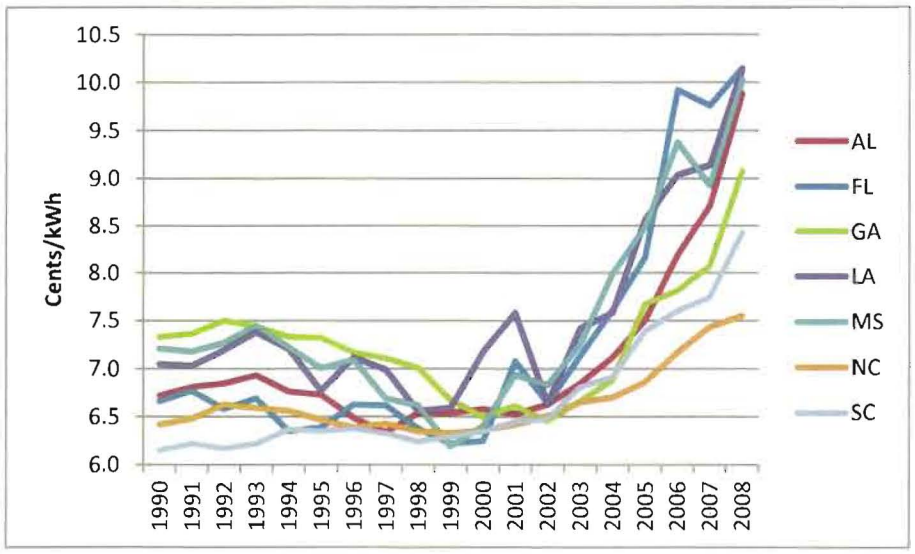


Figure 2. Nominal commercial electricity costs per kWh 1990-2008

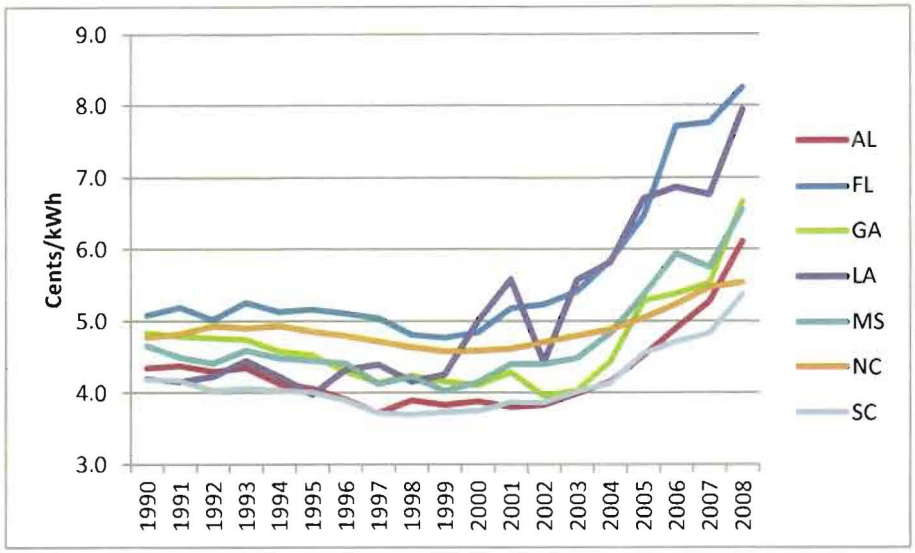


Figure 3. Nominal industrial electricity costs per kWh 1990-2008

Based on Figures 1-3, it appears that Florida's electricity costs are higher on average than those n neighboring states. But for clarity it is important to repeat that this does not compare customers' bills, nor compare individual utilities. But the finding that costs on average appear higher in Florida and have risen in recent years raises our second question: Why are Florida's costs higher? Or more directly, is it reasonable that Florida's costs are higher?

Costs for Producing Electricity

Determining the source of the cost differences for customers is important and complicated. Because utilities are regulated so that their revenues are based on their costs, analyzing differences in costs for customers is really about analyzing differences in utility. Which utility costs are most important? Figure 4 shows the percentage of the operating expenses of U.S. investor-owned electric utilities in 2009 by broad expense categories.[6, 7] This shows that 55% of operating expenses are related to production of electricity, and 9% are related to depreciation. While not all of the depreciation expenses are related to electricity generating plants, it is clear that a significant portion of the utility's costs are related to the costs of the electric generators themselves and the fuels used.

[6] The investor-owned electric utilities in Florida include FPL, Gulf Power, TECO, Progress Energy, and Florida Public Utilities Company.

[7] Florida has a large number of municipally-owned utilities and electric cooperatives, but comparable data is not available for those utilities.

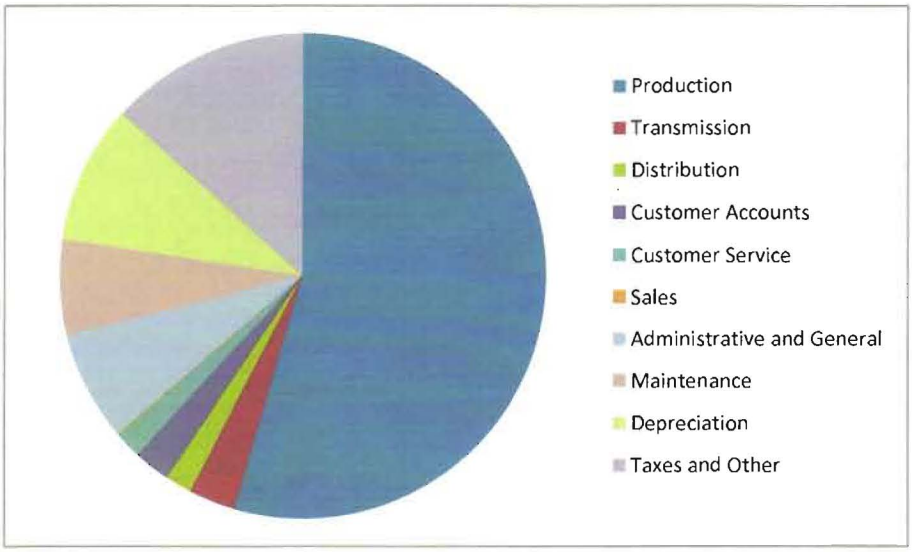
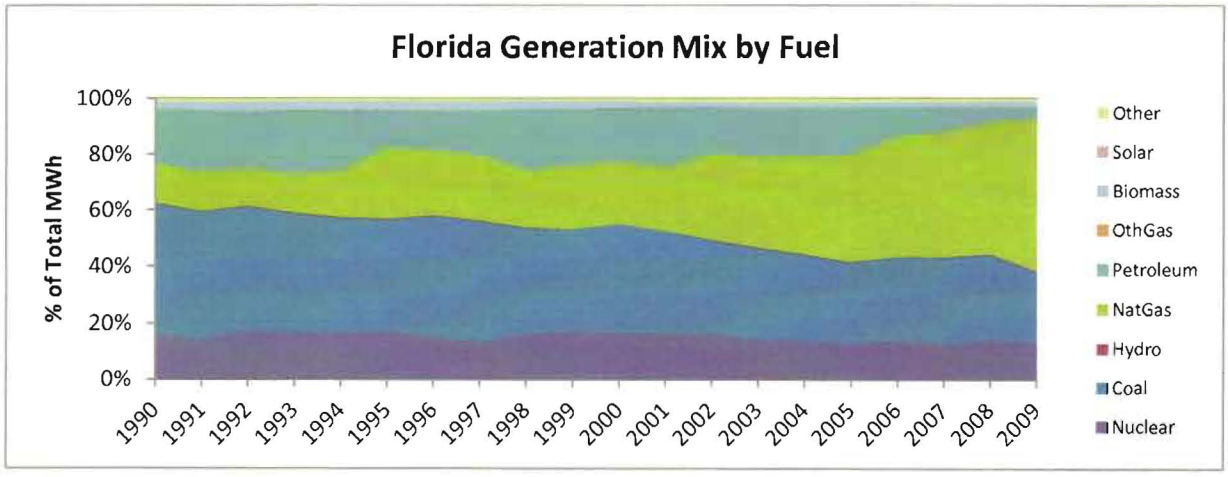


Figure 4. Electric utility operating expenses by function for major U.S. investor-owned utilities

Figure 5 shows the percentage of electricity generated by various fuels for the states of Florida, Georgia, and Alabama since 1990. In 1990, Florida generated approximately 60% of its electricity with uranium and coal. That percentage has since fallen to about 40%, with this decline offset by an increased reliance on natural gas. In contrast, the neighboring states of Alabama and Georgia generated 66% and 78%, respectively, from coal and nuclear energy. By 2009, Florida generated over 50% of its electricity from natural gas. This shift to natural gas has diversified the generation portfolio of the state of Florida, but also occurred at a time when natural gas prices in the region began to increase.



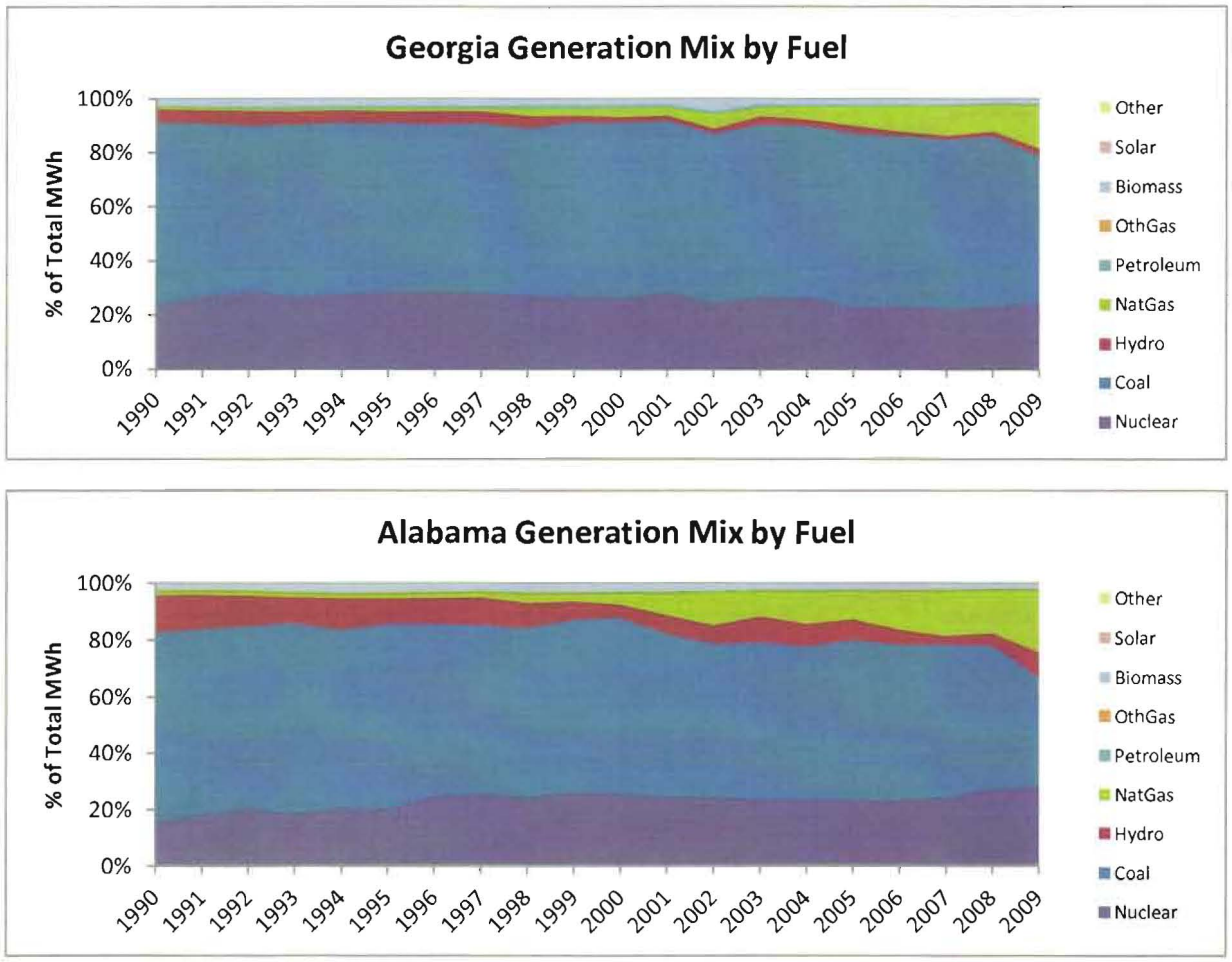


Figure 5. Electric generation by Fuel since 1990 for Florida, Georgia, and Alabama

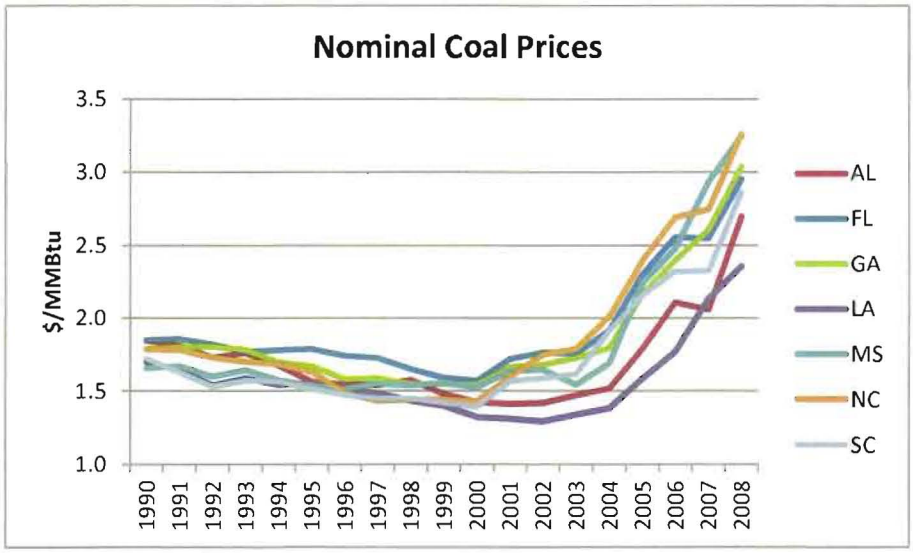
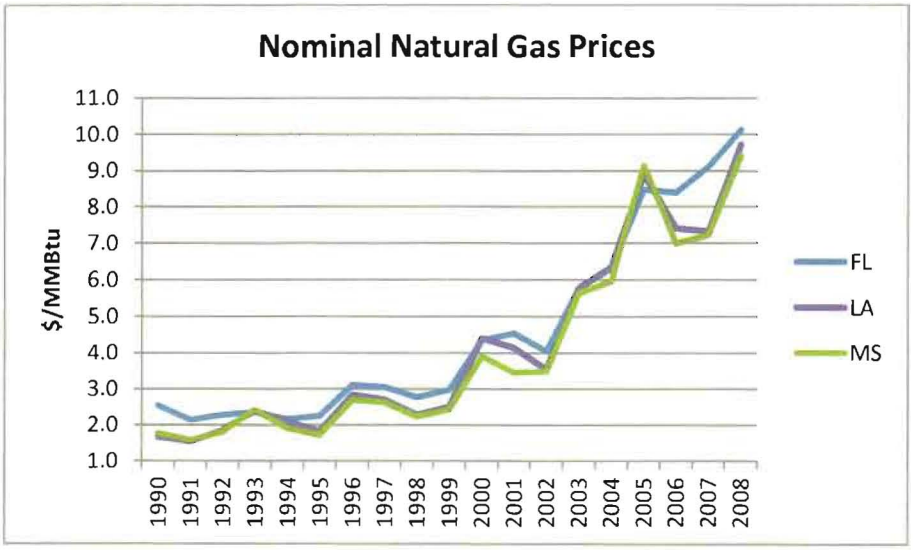


Figure 6. Nominal delivered coal prices since 1990

Figure 6 shows the average nominal coal prices for the southeastern states since 1990. Florida had the highest coal prices in the region from 1993 through 2002, but the state's prices have fallen relative to the rest of the region since, and Florida's prices are closer to the regional average, despite the fact that Florida is on the end of the rail lines used for coal transportation. Figure 7 shows natural gas prices for the three states that are the most significant consumers of natural gas. Florida's prices seem to correspond to the prices in Louisiana and Mississippi, despite the fact that Louisiana and Mississippi are producers of natural gas. The only significant deviation is the period from 2006 through 2008 which followed the rapid increase in natural gas prices from 2002 through 2005.



Overall, it appears that Florida's electricity costs appear high relative to those of neighboring states because Florida uses more natural gas to generate electricity than do the other states. Electricity costs in

the state of Florida are a reflection of the mix of fuels used to generate it. The path of costs for Florida's electric customers since 2002 follow closely costs for customers in Louisiana, another state that relies on natural gas to produce electricity, rather than in Georgia and Alabama, states that rely primarily on nuclear and coal. However, to keep this result in context it is important to realize that the relative standing of a particular state is likely to change over a much shorter period of time than the composition of its generating fleet is able to do. So while it is always important to ask what can be done to provide reliable electric service at reasonable rates to consumers, it is equally important to make sure that those decisions incorporate the uncertainty in the future, recognizing the long-lived nature of the generating assets.

Risks in Choosing Generating Technologies

Concluding that Florida's relatively higher costs results in large part from the choice of using natural gas to generate power begs the question of why Florida uses more natural gas than do other states. Choosing how to generate electricity is complicated and subject to great uncertainty. The generation plants are long-lived, lasting several decades, including the time it takes to construct them. This implies risk because the economic and political landscapes in which utilities operate these assets continually change. Also, a power plant may have the technical capability to produce electricity for thirty years or more, but the period of time that it can produce electricity economically can vary greatly. The price and availability of fuel for the power plants has become more volatile over the past ten years, and the future outlook for fuels is always uncertain. Further, national energy policy regarding a price on the emission of greenhouse gases, if implemented, would change the economics of power production by imposing additional costs on plants fueled by coal and to a lesser extent, natural gas.[8] Finally, the cost and availability of generation technology will change over time as construction and environmental standards change, regulatory standards evolve, and new technologies are discovered. As a result, the decision regarding a specific type of asset may be prudent at the time the decision is made to construct it, but as realizations of the future differ from the assumptions made at the time, that decision may have an outcome that is not what was expected.

The likelihood that future predictions of the evolution of prices and technologies will not turn out as expected can be characterized by operational risk. There are many practices that can be used to mitigate operational risk such as fuel hedging and the diversification of assets. But these practices don't actually reduce risk, they simply shift risk from one type to another. For example, fuel price hedging may reduce risk in the spot markets in which the fuel is purchased for operational purposes, but they increase the risk from fuel price movements in the futures markets where financial contracts are implemented. As a result, risk mitigation strategies tend to reduce costs when external factors are adversely impacting the utility (i.e. when spot fuel costs are high or when infrastructure is damaged by

[8] Indeed a study at MIT concluded that a price-based climate policy could make coal uneconomical and drive it from the country's generation base by 2035. See "The Future of Natural Gas: An Interdisciplinary MIT Study," http://web.mit.edu/mitei/research/studies/natural-gas-2011.shtml (accessed September 27, 2011).

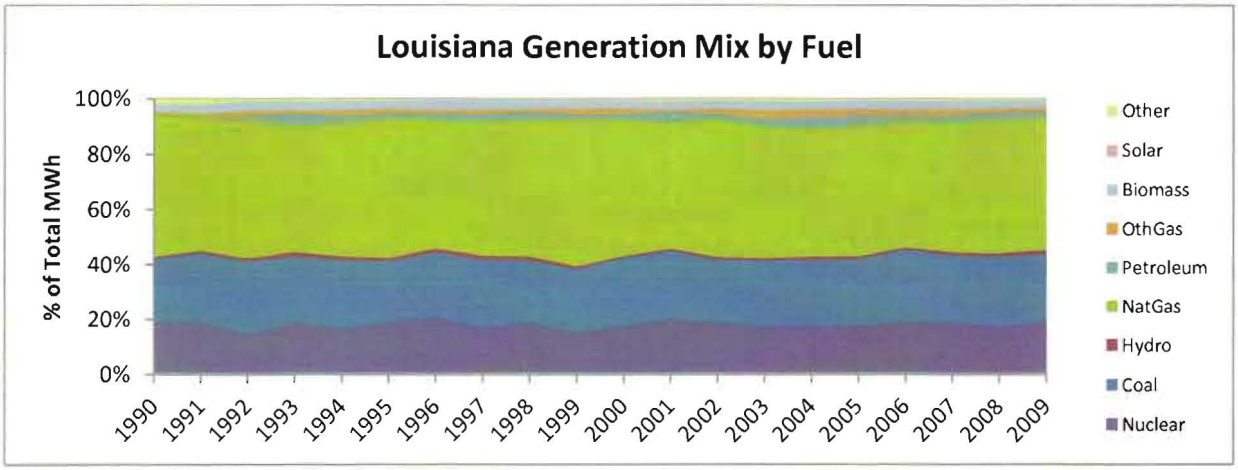
storms), but increase costs when they are not. This increase must be accepted as the cost of insuring against adverse events.

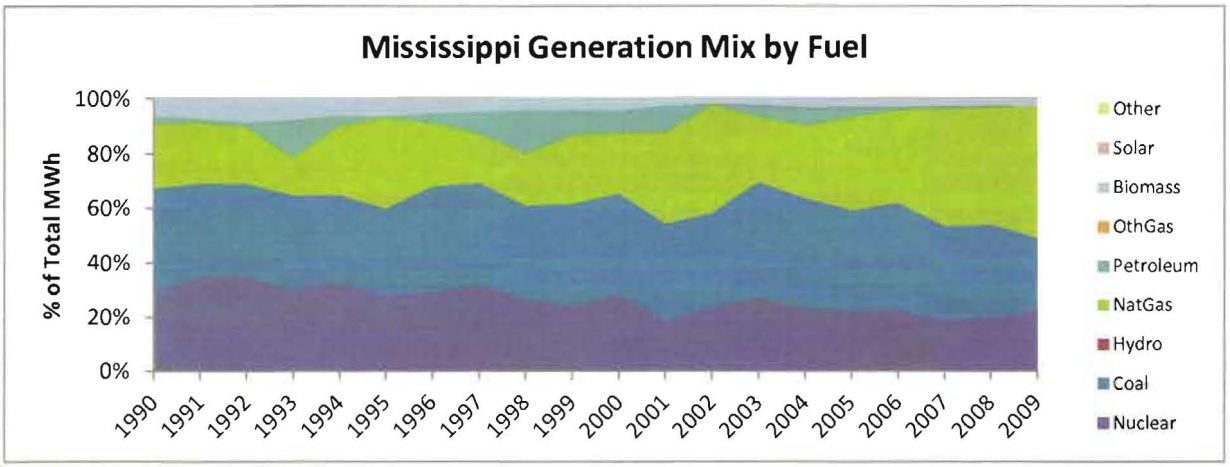
Conclusion

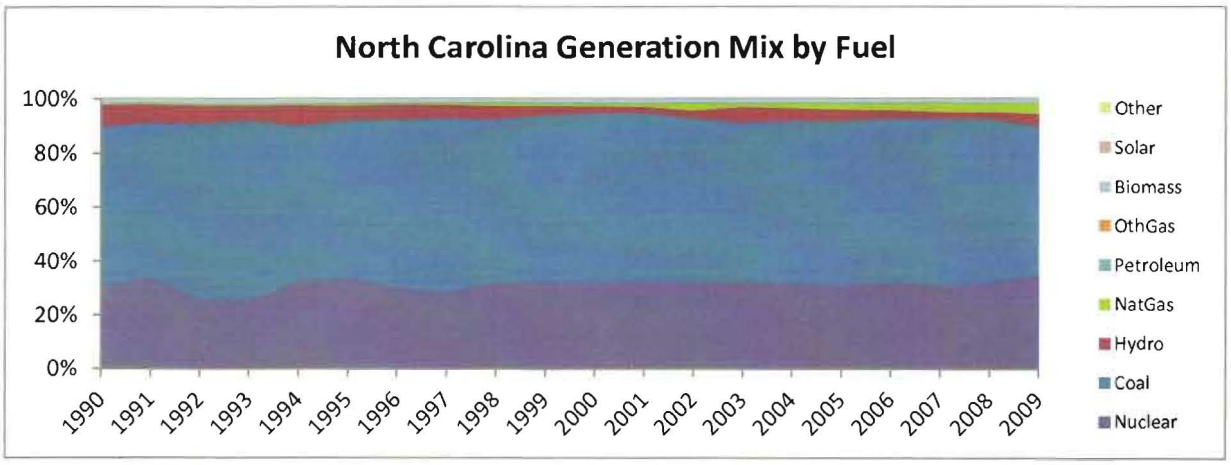
Florida's customers' costs for electricity appear to be higher on average than costs in neighboring states. The difference is most pronounced for residential consumers, but the general pattern holds for business customers as well. This is not to say that all Florida utilities' prices are high relative to their neighbors: Individual utility prices vary greatly in Florida and bill comparison studies highlight that some Florida utilities' rates compare favorably with rates of major utilities in neighboring states.

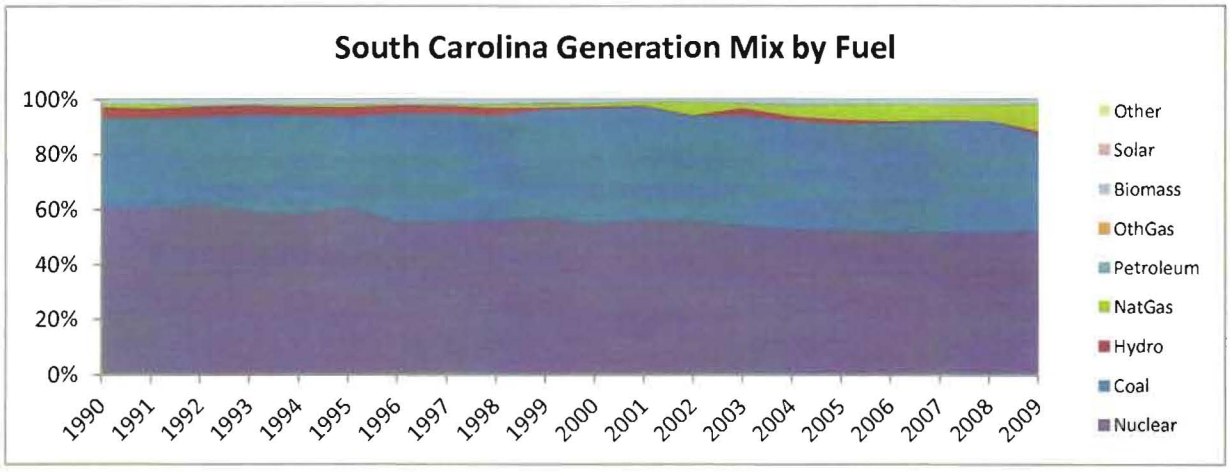
This relationship between costs in Florida and those in other states began around 2003 when Florida began using relatively more natural gas than neighboring states to generate electricity. That is not to say that the move to natural gas was based on faulty decisions: decisions about how to generate electricity are long term decisions and so have to take into consideration many variables. For example, regulation aimed at assigning a market price to CO_2 emissions would have a greater impact on states that use more coal. Indeed decisions that appeared poor a few years ago may now look brilliant. But utilities cannot change their technology decisions as economic and political conditions change, so they and their customers will sometimes like the outcomes of their decisions and sometimes not.

Appendix


Louisiana Generation Mix by Fuel
% of Total MWh
100%
80%
60%
40%
20%
0%
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Other
Solar
Biomass
OthGas
Petroleum
NatGas
Hydro
Coal
Nuclear


Mississippi Generation Mix by Fuel
% of Total MWh
100%
80%
60%
40%
20%
0%
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Other
Solar
Biomass
OthGas
Petroleum
NatGas
Hydro
Coal
Nuclear


North Carolina Generation Mix by Fuel
100%
80%
60%
40%
20%
0%
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009
Other
Solar
Biomass
OthGas
Petroleum
NatGas
Hydro
Coal
Nuclear


South Carolina Generation Mix by Fuel
100%
80%
60%
40%
20%
0%
1990
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2001
2002
2003
2004
2005
2006
2007
2008
2009
Other
Solar
Biomass
OthGas
Petroleum
NatGas
Hydro
Coal
Nuclear

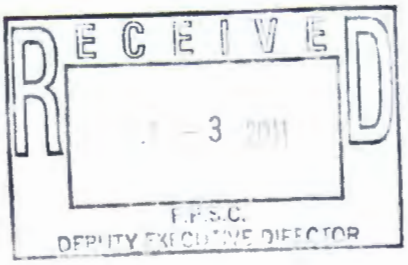
B: The following material pertains to Item 3 of this agenda.

FECA

Florida Electric Cooperatives Association, Inc.

2916 Apalachee Parkway
Tallahassee, Florida 32301
(850) 877-6166
FAX: (850) 656-5485

October 3, 2011



Charles Hill, Acting Executive Director
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

RE: Item 3 October 5 Internal Affairs

Dear Mr. Hill:

Please find enclosed a letter from the Florida Electric Cooperatives Association joining and supporting PEF's and Gulf Power's request to the Commission to urge the EPA and the President to take all available steps to improve EPA's proposed EGU MACT rule. Please include this letter in Item 3 of the October 5 Internal Affairs meeting.

Thank you for your assistance.

Sincerely,

Michelle Hershel
Director of Regulatory Affairs

Parties/Staff Handout
Internal Affairs Agenda
on 10/5/11
Item No. 3

FECA
Florida Electric Cooperatives Association, Inc.
2916 Apalachee Parkway
Tallahassee, Florida 32301
(850) 877-6166
FAX: (850) 656-5485

October 3, 2011

The Honorable Art Graham, Chairman
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: EPA Rulemakings on Clean Air Act Toxics and Coal Combustion Residuals

Dear Chairman Graham:

The Florida Electric Cooperatives Association ("FECA") joins in and supports Progress Energy's and Gulf Power's requests to the Commission to urge the EPA and the President to take all available steps to improve EPA's proposed Clean Air Act Toxics Rule ("EGU MACT") by lowering compliance costs and reducing regulatory uncertainty while still achieving emission reductions. In addition, FECA requests that the Commission urge the EPA and the President to maintain the nonhazardous classification for coal combustion residuals ("CCRs") under the Resource Conservation and Recovery Act ("RCRA") and to consider supporting HR 2273.

EGU MACT Proposed Rule

FECA encourages the Commission to seek an extension to the deadline for finalization of the EGU MACT proposed rule. The proposed rule has significant impacts for PowerSouth Energy Cooperative, the four distribution cooperatives that PowerSouth serves in Florida, and the rate increases that the members of those cooperatives will have to endure under the proposed rule.[1] PowerSouth's

[1] Escambia River EC, CHELCO, Gulf Coast EC and West Florida EC.

concerns are aligned with those raised by Progress Energy and Gulf Power, and PowerSouth's specific concerns are set forth in comments that have been filed with EPA, which are attached.

Coal Combustion Residuals/Coal Ash Proposed Rule

FECA also encourages the Commission to encourage the EPA and the President to maintain the nonhazardous classification for CCRs under the RCRA and to support HR 2273, which is bipartisan legislation that would prevent EPA from regulating CCRs as hazardous waste. A classification of hazardous waste would substantially increase the cost of operating Seminole's coal units and would result in dramatic rate increases for the members of the 10 distribution cooperatives that Seminole serves. The cost to Seminole would be more than $45 million per year in transportation and disposal costs and more than $6 million per year in lost revenue that they presently receive from the sale of synthetic gypsum for wall board, bottom ash for concrete block, and fly ash that is an alternative for Portland cement.

The issue of whether CCRs should be treated as hazardous under federal law has been thoroughly researched and evaluated by industry, academia and government for nearly three decades. Overwhelmingly, the conclusion is that CCRs should be treated as a non-hazardous substance. In two reports to Congress and two related "Final Regulatory Determinations", EPA has consistently affirmed that regulating CCRs as a hazardous waste is not necessary to protect public health and the environment. In fact, EPA found that such regulation would be environmentally counter-productive, because the stigma and related liability concerns of regulating CCRs as hazardous waste would understandably have a significant, adverse impact on the important objective of increasing beneficial use. For example, if EPA classifies CCRs as hazardous materials, many industries, in order to obtain essential building materials, would use new natural resources and additional energy for processing them, rather than recycling CCRs. Nevertheless, on June 21, 2010, EPA proposed regulations governing the disposal of CCRs under the RCRA. EPA proposed a range of options for CCR management under RCRA, including a hazardous approach which creates a comprehensive program of federally enforceable requirements for waste management and disposal, and a non-hazardous approach, which gives EPA authority to set

performance standards for waste management facilities. In its proposed rule EPA has expressly left the door open for regulation of CCRs as a nonhazardous waste.

Thank you for consideration of our request to send a letter to EPA and to President Obama requesting a delay in the finalization of the EGU MACT rule and requesting that EPA continue to regulate CCRs as nonhazardous. In addition, we request that the Commission consider supporting HR 2273, which is scheduled to be considered by the House of Representatives this month.

Sincerely,

William B. Willingham
V.P. & General Manager
Florida Electric Cooperatives Association

Cc: Hon. Lisa Polack Edgar, Commissioner
Hon. Ronald A. Brise, Commissioner
Hon. Eduard E. Balbis, Commissioner
Hon. Julie Imanuel Brown, Commissioner
Curt Kiser, General Counsel
Charles Hill, Deputy Executive Director

Attachment

PowerSouth Energy Cooperative

Comments

On

National Emission Standards for Hazardous Air Pollutants From Coal and Oil–Fired Electric Utility Steam Generating Units.

Submitted Electronically to:

The Environmental Protection Agency

Air Docket

Attention Docket ID NO. EPA-HQ-OAR-2009-0234

August 4, 2011

Keith M. Stephens, Ph.D.

Manager, Environmental Services Department

2027 East Three Notch Street

Andalusia, Alabama 36420

(334) 427-3000/keith.stephens@powersouth.com

Introduction

PowerSouth Energy Cooperative (PowerSouth) respectfully submits the following comments on the Environmental Protection Agency's (EPA's) May 3, 2011 proposal for National Emission Standards for Hazardous Air Pollutants for Coal and Oil-Fired Steam Generating Units (HAPs) and New Source Performance Standards (NSPS) for Fossil-Fuel-Fired Electric Utility Units published in the *Federal Register*, at 76 Fed. Reg. 24,976 ("Proposed Rule").

PowerSouth Energy Cooperative is a nonprofit, electric generation and transmission cooperative serving sixteen nonprofit electric distribution cooperatives and four municipal electric distribution systems in Alabama and northwest Florida. Through those member-owners, PowerSouth provides electric service to more than one million consumers in the mostly rural areas of 39 counties in Alabama and 10 counties in Florida.

PowerSouth owns and operates the Charles R. Lowman Power Plant in Leroy, AL, and is a minority owner in the James H. Miller Power Plant located near West Jefferson, AL. Both Lowman and Miller are baseload, coal-fired plants that have already made enormous capital commitments to clean air by retrofitting with Flue Gas Desulfurization (FGD) and Selective Catalytic Reduction (SCR) equipment. PowerSouth also owns and operates several natural gas-fired units in Alabama. We appreciate this opportunity to comment since PowerSouth and its one million consumers will be directly affected by the proposed rules.

General Comments

- PowerSouth is a member of the National Rural Electric Cooperative Association (NRECA). PowerSouth supports and echoes the comments of NRECA on the UMACT proposal outlined in Docket ID NO. EPA-HQ-OAR-2009-0234.
- PowerSouth is also a member of the Class of 85 Regulatory Response Group ("Class of 85" or "Group") and supports and echoes their comments on the UMACT proposal outlined in Docket ID NO. EPA-HQ-OAR-2009-0234.
- PowerSouth commends EPA for not setting numeric limits for organic HAPs in the Proposed Rule. We agree with the explanation given for not setting standards for Dioxins and Furans and urge EPA to refrain from setting organic HAP numeric standards in the final rule.
- PowerSouth supports proposed affirmative defense provisions. EPA should provide detailed guidance on how the provisions will be applied, rather than relying upon case-by-case review.
- PowerSouth disagrees with and objects to a number of statements made in the preamble regarding the impacts of the Proposed Rule. On p. 24978-24979, EPA makes several statements that are ill-advised, unsubstantiated, and inappropriate. PowerSouth disagrees with EPA's "belief" that the Proposed Rule will not significantly affect the availability and cost of electricity. PowerSouth, unlike EPA, is very concerned about the Proposed Rule's effect on our employees

and the people of the communities who rely on our generation facilities. PowerSouth believes that leveling of the national price of electricity and a modernization of the generating fleet is simply outside the scope of EPA's regulatory authority and mission. Environmental regulation should not be used to formulate energy policy.

- The Proposed Rule is complex, convoluted, and appears to contradict itself. The docket includes voluminous data and documentation that PowerSouth had no way to adequately review in the time allotted. The Proposed Rule is hard to follow, with provisions for many different kinds of electric generating units (EGUs) presented together and references to exceptions and qualifying considerations intermingled. Footnotes are placed in the tables with no corresponding notes given. The preamble seems to contradict the language in the rule and tabulated requirements. For example, on p. 25029 of the preamble, SO_2 is given as an example of a regulated pollutant directly measured by continuous emissions monitoring systems (CEMS), which contradicts the text of the rule, on p. 25104 where the same SO_2 CEMS is used as an example of one that measures a surrogate. While some errors and inconsistencies are to be expected in any document, the Proposed Rule has too many and is very difficult to review and comment on as a result. In fact, PowerSouth has very serious, fundamental questions about details of the Proposed Rule and how it will be applied at our units that remain unanswered despite a concerted effort to understand it.
- EPA should allow the states to seek delegation of the Section 112 program. States are in the best position to ensure final EGU MACT requirements are integrated into the existing environmental compliance program.

Appropriate and Necessary Determination

For the reasons detailed below, PowerSouth believes EPA has not yet shown that regulating EGUs under Section 112 of the Clean Air Act is justified. EPA must either abandon the Proposed Rule or slow down, show valid appropriate and necessary rationale for pollutants it proposes to regulate, and allow sufficient time for review and comment.

PowerSouth, as a member of the Class of 85 Regulatory Response Group ("Class of 85" or "Group"), concurs with and emphasizes comments made by the Group regarding the fundamental question of whether the Proposed Rule is Appropriate and Necessary under the Clean Air Act.

- The Proposed Rule does not remedy EPA's failure to provide adequate notice and comment on its decision to regulate EGUs under Section 112 of the Clean Air Act. It is clear that EPA failed to meet its statutory obligations under Section 307(d)(1)(c) in issuing the December 2000 Regulatory Determination which found that it was "appropriate and necessary" to regulate EGUs under Section 112. The current proposal to confirm the 2000 Regulatory Determination does not remedy EPA's failure to provide the public an opportunity to comment on it and the underlying data and methodology.

  In contrast, the EPA's 2005 regulatory work seems more reasoned and proper. In 2005, EPA revised the 2000 Regulatory Determination ("The 2005 Finding"). The 2005 Finding

included definitions of the terms "appropriate" and "necessary" and applied them to the scientific record and thousands of substantive comments. EPA concluded that it was not "appropriate" to regulate EGUs under Section 112 because (1) the level of emissions of hazardous air pollutants from EGUs remaining after imposition of other requirements of the Act were not reasonably anticipated to cause hazards to public health; and (2) if EPA were to regulate mercury emissions from EGUs under Section 112, the costs would be extreme and the health benefits would be minimal, as domestic EGU emissions are responsible for only a very small fraction of overall mercury levels. The 2005 Finding also concluded that it was not "necessary to regulate power plants under Section 112 because there are other available authorities under the Act that, if implemented would administratively- and cost-effectively address hazardous air pollutant emissions from power plants." The 2005 Finding is the only determination that has been subject to notice and comment. Unfortunately, the Proposed Rule wholeheartedly rejects the determinations and interpretations of the 2005 Finding, and reverts back to the 2000 Regulatory Determination without adequate explanation or support. PowerSouth does not understand why EPA has rejected the findings it made in 2005 and therefore sees no compelling reasons in the current Proposed Rule to take regulatory action under Section 112 of the Clean Air Act.

- The Proposed Rule ignores potential HAP reductions based on compliance with other regulatory requirements. EPA proposed a narrow look at the effects of other rulemakings. PowerSouth urges EPA to take a more reasoned approach to the impacts of air quality controls installed for other rules, such as the Cross-States Air Pollution Rule (CSAPR). The co-benefit reduction of mercury emissions as a result of the addition of selective catalytic reduction (SCR) and flue gas desulfurization (FGD) in response to rulemakings leading up to CSAPR are very evident at PowerSouth units. Significant reductions in mercury emissions are being achieved with no need for further regulation. Furthermore, FGD technology installed at our plant may be very effective at particulate and HCl control. Future regulation on a number of fronts such as NAAQS and visibility will likely result in further reductions. EPA needs to take into consideration all of these regulatory drivers and their effects on HAPs emissions.

Comments on the Proposed Rule

If EPA proceeds with regulation of EGUs under Section 112 of the Clean Air Act, it must address shortcomings in its methodologies in developing the Proposed Rule and amend the underlying requirements to address concerns as detailed below.

Compliance Deadlines

- PowerSouth concurs with and supports comments made by the Alabama Department of Environmental Management (ADEM), the National Rural Electric Cooperative Association (NRECA) and the Class of 85 regarding the need to allow all EGUs time to comply. As noted in ADEM's letter to this docket, EGUs must be allotted sufficient time to comply. ADEM suggests EPA should grant five years to comply from the date of final rule promulgation or allow states to

do so. NRECA comments detail our concerns regarding the industry's ability to permit, procure and install required emissions control and monitoring equipment in just 36 months. NRECA suggests a six-year deadline for compliance. Class of 85 comments also point out the potential of some units being unable to meet compliance deadlines and the need for flexibility and guidance from the EPA.

- PowerSouth believes EPA must acknowledge the need to additional time to comply. PowerSouth knows, from experience, just how difficult and time consuming compliance planning, procurement, construction and implementation is. The final rule must include sufficient deadlines to reasonably facilitate compliance and clear guidance as to how to apply for extensions where necessary.

Setting MACT Standards

- PowerSouth fully supports the detailed comments of NRECA and the Class of 85 regarding the shortcomings in the Proposed Rule in the critically important area of setting numeric standards.
- EPA must establish MACT floors based on the overall performance of existing EGUs so that they reflect actual, overall performance of existing sources. EPA is proposing to establish MACT standards for new and existing EGUs using a methodology that is inconsistent with the text of the CAA because it results in MACT standards that are neither feasible nor representative of the HAP emission limits being achieved by existing sources. EPA developed the proposed MACT floors for new and existing EGUs based on the best-performing sources for *each* pollutant, without regard to the overall performance of those units. The language of Section 112(d) does not in any way suggest that MACT floors should be based on the best-performing sources of each individual HAP.
- EPA cannot artificially lower mercury emission numeric standards by limiting the number of units used to set the floor. EPA must revise its methodology to include all sources in its data set. EPA established the mercury MACT floor for existing coal-fired units based on the top 12% of the units from which the Agency collected ICR data, instead of the top 12% of the units in the subcategory. This methodology is an abuse of discretion. It allows EPA to cherry pick data from sources it selects to set a floor of its choosing. Congress clearly did not intend for EPA to have such unbridled discretion.
- The Proposed Rule contains errors in data analyses. EPA should not promulgate the final rule until the Agency is confident that the underlying data and analyses has been quality assured. Fundamental errors in calculations have resulted in announced corrections to numeric standards for mercury during the comment period. Other errors still exist and should be corrected.
- PowerSouth recommends that EPA take whatever regulatory or judicial steps necessary to allow the agency time to closely examine correct and improve the Proposed Rule. This rulemaking has the potential to have dramatic effects and impact on regulated sources, and, therefore, on the American public. It should not be hastily prepared and rushed to completion.

- Numeric emission standards should not apply during startup and shutdown. EPA should establish work practice standards for periods of startup and shutdown as in prior MACT rulemakings.
- EPA should establish MACT standards based on a 12-month rolling average. The proposed 30 operating day rolling average is both unrealistic and unreasonable. A 12-month rolling average would achieve the desired environmental protection, and provide much needed operational flexibility and accommodate real world operating conditions for EGUs.

Comments on Proposed Non-mercury Metal HAP Rules and Compliance Provisions

- This portion of the Proposed Rule is indiscernible. Despite diligent, protracted study of the rule, participation in many, many conference calls and discussions with consultants, lawyers and EPA staff, PowerSouth is unable to follow the rationale in the rule. PowerSouth therefore cannot apply the requirements to our affected source, plan for compliance or effectively comment on the proposed rule.
    - The preamble, the rule, tabulated requirements and EPA explanations to specific questions are confusing and in some cases appear contradictory.
        - Table 2, sub-category 1 of the proposed rule (p.25126) applies to our existing units. The Table under 1(a) identifies the regulated pollutant as total particulate OR total non-Hg metal HAP OR individual metal HAP and states corresponding emission limits
        - Preamble of the rule (p.25029) and the rule itself (p. 25103) discusses testing requirements assuming use of a PM CEMS and details tests to determine total particulate AND total non-Hg HAP metals AND individual HAP metals. No indication is given as to how (or even if) results of the tests are to be compared to the standards in Table 2. If the Table is correct, a source could comply by running tests to determine total particulate (if results are less than 0.030 lb/MMBTU, the source passes initial certification), and no metals data would be needed at all OR a source could determine total metals and no total particulate or individual metals data would be needed, etc.
    - Answering an inquiry aimed at resolving EPA's intent, Barrett Parker of EPA stated in an email that both particulate AND metals testing is indeed required during the initial certification testing and in subsequent tests are required every 5 years. No indication was given as to how to determine compliance of the results. Mr. Parker did state that a relationship or correlation between filterable particulate and total particulate would be developed. He also stated a relationship or correlation between total particulate and total metals emissions could be developed. We surmise from his email that one would check total metals test results against the Table 2 standard (pass/fail) and check the total particulate results (pass/fail), then try to correlate those results with a Method 5 filterable test result and a PM CEMS reading. That PM CEMS reading in lb/MMBTU then would be the

"operational limit" to be calculated on a 30 boiler day operating average to determine compliance.

- As previously stated, PowerSouth believes EPA's goals related to HAPs emissions reductions are being achieved, and will be further achieved, by other regulations (i.e., those leading up to CSAPR), and there is no need for EPA to further complicate the matter with its UMACT proposal. Further, PowerSouth believes EPA has not yet shown that regulating EGUs under Section 112 of the Clean Air Act is justified. However, if the UMACT rule is upheld we make the following suggestions" to help clarify this portion of the Proposed Rule
    - EPA should clarify Tables 1 and 2. Did the Agency intend to insert OR vs. AND between choices for compliance based on total particulate matter, total non-Hg metals, and individual HAP metals?
    - EPA should correct the text of the preamble and the rule accordingly
        - If Tables 1 and 2 are correct as written, the preamble and the rule should be updated to match. Tests that are not compared to a standard are unnecessary. Unnecessary tests should be deleted from the description of the initial and ongoing testing requirements.
        - If Table 1 and 2 are not correct in the proposal, DETAILED explanation and guidance as to how to run initial and subsequent stack tests, how to assess compliance of those results and how to determine the "operational limit" for continuous compliance should be issued by EPA. Regulated sources should not have to guess about what EPA intends!
        - This portion of the Proposed Rule should be re-written and re-published for comment.
- EPA's proposal for establishing an operating limit for sources using a PM monitor is inconsistent with the CAA. The methodology in effect requires unit specific emissions limits as operating limits. Through these unit-specific operating limits , EPA is proposing to set emissions standards that are more stringent than the MACT floor without considering the required statutory factors
- PowerSouth suggests EPA consider a surrogate standard based on filterable PM only. This would make compliance with continuous monitoring provisions much simpler and it would be consistent with other MACT rulemakings

Comments on use of SO_2 as a surrogate for HCl

- EPA should allow a 12-month rolling SO_2 limit and clarify that FGD bypass is allowed during times of FGD forced outage. These changes would allow very limited continued operation through the bypass during upset conditions. PowerSouth has experienced such forced outages due to unforeseen and unavoidable FGD failure.

Comments on Testing, Monitoring, Recordkeeping and Reporting Requirements

- Non-Hg metals stack testing bimonthly or monthly to confirm ongoing compliance in the Proposed Rule are unrealistic. Testing once every four operating quarters is more tenable, and will achieve the same results.
- PowerSouth supports using the Emissions Collection and Monitoring Plan System.
- PowerSouth DOES NOT support collection of continuous mercury or particulate data. EPA's authority under this section of the CAA is for exception reporting only.
- PowerSouth concurs with provisions of proposed monitoring rules that do not incorporate a bias adjustment factor. Such adjustments are indeed inappropriate for this rule.

Closing

PowerSouth appreciates the opportunity to provide comments on the Proposed Rule. If EPA continues to believe it is appropriate and necessary to regulate EGUs under Section 112, EPA must revise the proposed MACT standards and compliance requirements so that they better reflect the requirements of the CAA and actual EGU operations. In particular, the proposed monitoring, testing, and operational requirements are unreasonably burdensome and would impose excessive and unnecessary costs on utilities. PowerSouth urges EPA to re-evaluate the Proposed Rule in light of the information provided in these comments.

FMEA
FLORIDA MUNICIPAL ELECTRIC ASSOCIATION

October 3, 2011

The Honorable Art Graham, Chairman
Florida Public Service Commission
Capital Circle Office Center
2540 Shumard Oak Blvd.
Tallahassee, FL 32399-0850

RE: EPA Rulemakings on Clean Air Act Toxics and Coal Combustion Residuals

Dear Chairman Graham:

The Florida Municipal Electric Association (FMEA) joins in and supports the requests to the Commission of Progress Energy and Gulf Power to urge the EPA and the President to take all available steps to improve EPA's proposed Clean Air Act Toxics Rule (EGU MACT) by lowering compliance costs and reducing regulatory uncertainty while still achieving necessary emission reductions. Florida's Investor Owned, Cooperative and Municipal generating utilities actively participated in the rulemaking process for the Clean Air Mercury Rule (CAMR), which was later vacated by the D.C. District Court of Appeals. In good faith and to meet the timeline requirements of CAMR, Florida utilities committed to install air pollution control (APC) equipment prior to the Vacatur. EPA's replacement for CAMR, the Utility Air Toxic Rule, is overly stringent and renders much of the CAMR APC equipment inadequate to comply with this rule. We also have serious concerns that EPA has failed to evaluate the cumulative impact of the multitude of new EPA regulations placed on electric utilities.

I have attached a copy of our comments to EPA on the Utility Air Toxic Rule that presents FMEA's concerns with the serious economic impacts of this rule and the minimal environmental benefits to our customers.

In addition, FMEA requests that the Commission urge the EPA and the President to maintain the nonhazardous classification for coal combustion residuals (CCRs) under the Resource Conservation and Recovery Act (RCRA) and to consider supporting HR 2273.

Sincerely

Barry Moline

Barry Moline
Executive Director

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FMEA
FLORIDA MUNICIPAL ELECTRIC ASSOCIATION

Comments on the Proposed Electric Utility Air Toxics Rule

Docket No. EPA-HQ-OAR-2009-0234
76 Fed. Reg. 24976 (May 3, 2011)

Comments by Florida Municipal Electric Association (FMEA) and the FMEA Major Generator Coalition

August 2, 2011

The Florida Municipal Electric Association (FMEA) represents 34 community-owned electric utilities serving 2.8 million customers in Florida. The Major Generator Environmental Coalition includes the City of Tallahassee, Gainesville Regional Utilities, Orlando Utilities Commission, JEA of Jacksonville, Florida Municipal Power Agency and Lakeland Electric. The FMEA major generators are almost entirely fossil fuel-based with a significant percentage of that fuel composed of coal and oil. As Florida's and the Nation's economy struggle to recover, it is critically important to our ratepayers and our communities that EPA proposes an air toxic rule that assures that not only will public health be protected but also that it fully considers costs, economic growth, technological feasibility and national energy security.

While FMEA is grateful for EPA's 30 day extension of the comment period, we believe that the magnitude of the economic impact of the proposed air toxic rule and serious questions as to the data relied upon by EPA in formulating this rule, justifies an additional 30 day extension for public comments.

Although our members have had insufficient time to fully evaluate the proposed air toxic rule and the supporting technical documents, our review to date has created serious concerns as to EPA's justification for the rule and the proposed limits.

Policy Issues:

Pursuant to Executive Order 13563, FMEA Believes That EPA Has an Obligation to Maintain Consistency in Its Regulations When Addressing Court Vacaturs and Remands of CAIR and CAMR.

FMEA's generating utilities actively participated in the lengthy and deliberative stakeholder process to develop the Clean Air Interstate Rule (CAIR) and the Clean Air

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Mercury Rule (CAMR). Prior to the Court Vacatur of these rules, and in good faith to successfully meet the compliance time requirements for the rules, our members as well as many other utilities financially committed to and installed the additional air pollution controls needed to meet CAIR and CAMR emission reduction requirements. This additional air pollution control equipment has cost our members hundreds of millions of dollars and may now prove insufficient to meet the tighter air toxic emission limits proposed by EPA. It is noted that EPA provided detailed Regulatory Impact Assessments (RIAs) for CAIR and CAMR that demonstrated dramatic reductions in utility mercury emissions and deposition while having a minor impact on utility fuel mix. While FMEA acknowledges that EPA has been given significant discretion under the Clean Air Act (CAA), we believe that proposing air toxics limits that are more restrictive than those envisioned under CAMR would result in greater costs without commensurate benefits to the public. In addition, EPA's use of its discretion to increase the stringency of both CATR and the utility air toxics rule beyond that necessary to address the deficiencies identified by the Court is in conflict with the President's Executive Order 13563.[1] Specifically, FMEA members relied on EPA's CAIR and CAMR rules to establish air pollution control strategies which involved the commitment of hundreds of millions of dollars that will ultimately be paid by our customers. By expanding and modifying these rules as to both stringency and methodology beyond that necessary to meet the Court remand and Vacatur, EPA has created uncertainty for our utilities and forced additional costs onto our customers. These additional costs will exacerbate the weak Florida economy without any measurable improvement to air quality.

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[1] Executive Order 13563 provides in Section 1. General Principles of Regulation (a) Our regulatory system must protect public health, welfare, safety, and our environment while promoting economic growth, innovation, competitiveness, and job creation. It must be based on the best available science. It must allow for public participation and an open exchange of ideas. It must promote predictability and reduce uncertainty. It must identify and use the best, most innovative and least burdensome tools for achieving regulatory ends. It must take into account benefits and costs, both quantitative and qualitative. It must ensure that regulations are accessible, consistent, written in plain language, and easy to understand. It must measure, and seek to improve, the actual results of regulatory requirements. (b) This order is supplemental to and reaffirms the principles, structures, and definitions governing contemporary regulatory review that were established in Executive Order 12866 of September 30, 1993. As stated in that Executive Order and to the extent permitted by law, each agency must, among other things: (1) propose or adopt a regulation only upon a reasoned determination that its benefits justify its costs (recognizing that some benefits and costs are difficult to quantify); (2) tailor its regulations to impose the least burden on society, consistent with obtaining regulatory objectives, taking into account, among other things, and to the extent practicable, the costs of cumulative regulations; (3) select, in choosing among alternative regulatory approaches, those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity); (4) to the extent feasible, specify performance objectives, rather than specifying the behavior or manner of compliance that regulated entities must adopt; and (5) identify and assess available alternatives to direct regulation, including providing economic incentives to encourage the desired behavior, such as user fees or marketable permits, or providing information upon which choices can be made by the public.

EPA Interpretation of Section 112(n)(1)(A) Is Inconsistent with Congressional Intent and the President's Regulatory Directive.

Section 112(n)(1)(A) states that: *The Administrator shall perform a study of the hazards to public health reasonably anticipated to occur as a result of emissions by electric utility steam generating units of pollutants listed under subsection (b) of this section* ***after imposition of the requirements of this Act.*** *The Administrator shall report the results of this study to the Congress within 3 years after November 15, 1990. The Administrator shall develop and describe in the Administrator's report to Congress alternative control strategies for emissions which may warrant regulation under this section. The Administrator shall regulate electric utility steam generating units under this section, if the Administrator finds such regulation is appropriate and necessary* ***after considering the results of the study required by this subparagraph.***

It is apparent that Congress intended EPA to consider the impact of air toxic emissions from the utility industry after "imposition of the requirements of this Act" for use in the "necessary and appropriate" determination. The text the EPA used on page FR 76-24993 for this phase is * * *, which tends to cloud the Congressional intent. It does not appear that EPA fully considered utility air toxic emissions after "imposition of the requirements of this Act" in its determination of "one in a million" risk and its conclusion that the delisting necessary to implement CAMR was not possible. EPA failed to consider the significant additional air toxic reductions that can reasonably be estimated from implementing CATR II and revised NAAQSs for Ozone and PM 2.5 as well as the new NAAQSs for one hour SO_2 and NO_x concentrations. FMEA believes that EPA has the capability to estimate the additional air toxic reductions from implementing these and other programs.[2] We also believe these reductions could likely reduce air toxic cancer risk to below the "one in a million" criteria for delisting.

FMEA believes that:

- During the rule making process, EPA demonstrated that emission reductions from implementing CAIR and CAMR were sufficient to meet CAA requirements and were protective of human health.

- The Court did not find the CAMR structure violated CAA requirements but rather EPA failed to properly delist mercury and nickel.

[2] EPA has demonstrated the ability to estimate future emission reductions resulting from implementation of present and future CAA regulations. For example EPA in its March 2011 report "The Benefits and Costs of the Clean Air Act from 1990 to 2020" was able to project emission reductions, costs and benefits through 2020.

- EPA should initiate the CAA delisting procedure for mercury and other Hazardous Air Pollutants (HAPs) and follow CAMR rule structure.

- EPA's Air Toxic Rule should require mercury reductions that are commensurate with the CAMR rule.

EPA Did Not Use the Best Science as Required by Executive Order 13563 in Establishing the Reference Dose (RfD) for Mercury.

President Obama's Executive Order (EO) requires that Federal Regulations "must be based on the best available science". EPA failed to comply with the EO by relying on the flawed Faroe Islands study to calculate their mercury RfD. The Faroe Islanders receive mercury exposure by atypical consumption of pilot whale meat contaminated by PCBs which has little relationship to fish consumption in the U.S. EPA chose not to use the Seychelles Islands study, the most relevant to the U.S., where there was no adverse response observed in women or their children despite maternal mercury levels 10 times those found in the U.S. It is noted that EPA's RfD is half that of the World Health Organization and Canada, one-third of the Agency for Toxic Substances and Disease Registry (ATSDR) and one-quarter of the Food and Drug Administration's recommendation.[3] By establishing an RfD based on a 5.8 ppb maternal blood level, EPA has determined that 8% of U.S. child bearing age women are at risk significant harm from mercury exposure to their unborn children. However, credible science available to EPA indicates that any effects from mercury blood levels used by the EPA to create their RfD are virtually non-existent.

FMEA is concerned that EPA's overly conservative RfD is actual causing greater damage to children than the benefits that EPA hopes to achieve. In nations such as Japan and

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[3] In 2001, EPA validated the current RfD for mercury of 0.1 micrograms per kilogram of body weight per day that was established in 1996. However, the Food and Drug Administration (FDA) and the Agency for Toxic Substances and Disease Registry (ATSDR) have recommended regulatory levels that are significantly less stringent than EPA's reference dose. FDA has established an acceptable daily intake for mercury of 0.4 micrograms per kilogram of body weight per day. ATSDR has stated that "daily intake of methylmercury at a level of 0.3 micrograms per kilogram [of] body weight per day for extended periods up to a lifetime presents no risk of adverse health outcomes in even the most sensitive human populations (pregnant women, developing fetuses, and young children)." In 2003, the World Health Organization (WHO) revised its recommendation for safe intake levels for mercury in food to 1.6 micrograms per kilogram of body weight per week. In fact, the reference dose for mercury adopted by WHO is more than two times greater, and ATSDR's is three times greater, than EPA's reference dose. EPA's reference dose is the lowest due to the inclusion of an extremely conservative safety factor. (Source MercuryAnswer.org)

Korea, with the maternal blood mercury levels higher than the U.S., there is no evidence of harm to child development or IQs.[4] Some health experts are arguing that EPA's warnings to pregnant women to not eat fish that have higher than normal mercury accumulation (such as shark or swordfish) over the last 15 years have actually harmed the health of children in the U.S by reducing beneficial fish consumption by this important group (women of child-bearing age).

Two recent scientific studies point in this direction. A study published in the Lancet in 2007 (Maternal Seafood consumption in Pregnancy and Neuro-developmental Outcomes in Childhood: An Observational Cohort Study; Hibbeln, Vol. 369: pages 578-585) concludes maternal consumption of less than 340 grams of seafood per week did not protect children from adverse outcomes (less verbal intelligence and social development); rather, consumption of more than 340 grams of seafood a week produced beneficial outcomes, suggesting that "advice to limit seafood consumption could actually be detrimental."[5] The study concludes that "the risks of the loss of nutrients were greater than the risk of harm from trace contaminants in 340 grams of seafood a week."

Another recent relevant study has been published in the New England Journal of Medicine by Dariush Mozaffarian[6]. The study found no evidence of any clinically relevant adverse effects of mercury exposure on coronary heart disease, stroke or total cardiovascular disease in U.S. adults that was not outweighed by the beneficial effects of eating fish. This study, with a finding of no impact on adults, was funded by NIH.

EPA has pointed for a number of years to the high health risk from exposure to mercury in the U.S. but the Agency's own proposed Utility MACT finds that the risk is very small. In the meantime, there is concern that EPA's fish warnings have caused women to lower all fish consumption, which is harmful to their health and the health of their children.

EPA's Compliance Costs May Be Understated, While EPA's Methodology Appears to Overestimate Monetized Benefits.

While EPA has estimated a range of monetized benefits for the air toxics rule, it presents a solitary figure for the costs of compliance based on an assumption that only 11.1 gigawatts (GW) of coal-fired generation will be prematurely shutdown due to the air toxic rule (9.9 GW) and CATR rule (1.2 GW). However, other analyses from highly regarded experts place coal-fired electric generating unit (EGU) shutdowns at 48 GWs or

[4][4] Based the UN Food and Agriculture Organization data, Japan and South Korea consumed 152.1 and 112.9 pounds of fish annually compared to U.S. consumption of 46.1 pounds. The average IQ in Japan and Korea are 105 and 106 respectively while the U.S. is 98 based on the 113 county IQ studies by Richard Lynn and Jelte Wicherts.

[5]Hibbeln and his colleagues reported that the verbal IQ scores for children from mothers with no seafood intake were 50% more likely to be in the lowest quartile.

[6] (Mercury Exposure and Risk of Cardiovascular Disease in Two U.S. Cohorts, March 24, 2011, Volume 364: pages 1116-1125)

higher.[7] DOE experts believe under certain scenarios coal-fired EGU shutdown due to the proposed utility air toxic rule and other proposed EPA regulations could reach 70 GWs.[8] FMEA believes that EPA should provide a range of low (best case) and high (worst case) estimates for compliance costs for the air toxic rule and estimate the range of cumulative impacts of the air toxic rule and other proposed rules. In addition, EPA makes the assumption that new moderately priced natural gas from shale formations will provide sufficient gas to allow fuel switching from coal to gas and replacement of existing coal capacity with gas-fired combined cycle units. However, a recent article in the New York Times indicates that the amount of gas available from shale formations may be greatly overestimated and that the cost of this gas may be significantly higher than original industry projections.[9]

FMEA is concerned that EPA claims of monetized health benefits do not provide an accurate comparison of benefits and compliance costs. As pointed out on FR 76-24979 EPA attributes 90% of the monetized benefits of the air toxics rule to the number of premature deaths avoided due to reductions in PM 2.5. These are co-benefits and in fact have nothing to do with mercury or non-mercury HAPs emissions. The claimed co-benefits for the rule amount to 99.99% of the rules monetized benefits or $59 billion to $140 billion as compared to annualized value lost income of $450,000 to $5.9 million over the life time of the U.S. population based on a reduction of 0.00213 IQ points.

We also have concerns that the method that EPA uses to estimate monetized benefits produces estimates larger than are reasonable. Specifically, we have concerns that using the value of a statistical life (VSL) based on the public's willingness to pay (WTP) results in a VSL of about $8 million. EPA uses this VSL to monetize a premature death avoided regardless of the length of time death is postponed whether a week, a month or several years. In contrast, the annual value for GDP per person in the U.S. is approximately $42,000. Even if the air toxic rule postponed a premature death for 10 years, the GDP value would be about 5% of the EPA VSL.

The National Research Council, in announcing its 2008 report "Estimating Mortality Risk Reduction and Economic Benefits from Controlling Ozone Air Pollution," noted: "EPA applies the VSL to all lives saved regardless of the age or health status. For instance, a person who is 80 years old in poor health is estimated to have the same VSL as a healthy two year old. To determine if an approach that accounts for differences in the remaining life expectancy could be supported scientifically, EPA asked the committee to examine the value of extending life. For example, EPA could calculate the VSL to estimate the value of remaining life, so the two-year-old would have a higher VSL than an 80-year-old. It is plausible that people with shorter remaining life expectancy would be willing to

[7] "Proposed CATR and MACT" American Coalition for Clean Coal Energy, NERA 2011
[8] James Wood, deputy assistant secretary for the U.S. Department of Energy, comments at the Eastern Coal Council's Annual Conference May 2011
[9] New York Times article June 26, 2011 "Insiders Sound an Alarm Amid a Natural Gas Rush"

devote fewer resources to reduce their risk of premature death than those with longer remaining life expectancies. In contrast, if the condition causing the shortening of life expectancy could be improved and acceptable quality of life can be preserved or restored, people may put a high value on extending life, even if they have other health impairments or are quite elderly. "

In addition, considering the reductions of SO2 and NOx due to CATR and the revisions of the Ozone and PM2.5 NAAQS and the one hour SO2 and NOx NAAQS, it is likely that the PM 2.5 reductions attributed to the air toxics rule would have occurred without the rule.

The MACT Provisions of EPA's Air Toxics Rule Should Not Apply to Non-mercury Metals and Acid Gases.

In the rule preamble and the supporting technical documents, EPA fails to provide any evidence of any risk to the general population from non-mercury metal HAPs and acid gases. FMEA believes that it is only appropriate to develop regulations under Section 112 for the two hazardous air pollutants (mercury and nickel) for which EPA has provided evidence of a significant risk to the public.[10] If EPA believes that non- mercury metals and acid gases must be regulated, EPA should regulate these HAPs under a less costly and more flexible health- based standard.

EPA's Use of Discretion Should Reflect Sound Judgment and the Clear Intent of Executive Order 13563

FMEA acknowledges that EPA has discretion in developing utility air toxics rules under Section 112 and believes that this discretion allows EPA to consider the economic realities facing the country today. It is noted that EPA has been given relatively little discretion in developing MACTs for virtually ever industrial source except for electric utilities, which got entirely different treatment under (n)(1)(a). In addition, FMEA believes that Executive Order 13563 provides important guidance as to the use of EPA's discretion. All the information provided by EPA in the preamble of the proposed air toxics rule indicates that the proposed rule will have a major impact on the fuel mix of electric utilities and electric generating capacity. The projected cost for the rule is significant while providing only minimal benefits from the direct reduction of hazardous air pollutants. By EPA's own calculations, 99.99% of all benefits from the proposed rule will result from co-benefits associated with estimated reductions of SO2 and NOx resulting in lower ambient PM2.5 and Ozone levels. However, these co-benefits would naturally follow the implementation of other CAA requirements currently in progress

[10] FMEA is not necessarily supporting EPA's findings regarding the risk but that EPA used scientific data and analysis to demonstrate a risk to the public.

including the revised $PM_{2.5}$ and Ozone NAAQS as well as the one hour SO2 and NOx NAAQS, which will lead to lower SO_2 and NO_x caps under CATR.[11]

FMEA believes that EPA has used it discretion to increase the stringency of the proposed Utility Air Toxics Rule without regard to the lack of additional health benefits that might accrue or the unnecessarily high costs that will be incurred by the public. We believe that EPA should use its discretion to minimize the cost impact of this rule while still providing for the safety of the public by modifying the proposed rule as follows:

- EPA should eliminate the use of a "Franken" Plant approach to establish a MACT standard for coal and oil-fired EGUs. Specifically, we believe that EPA could establish a MACT that is based on the performance of individual EGUs for all HAPs to be regulated. This would result in less compliance cost with little-to-no change in health benefits or impacts.

- EPA should not expand the proposed utility toxics rule beyond mercury and nickel since EPA provided no data as to any health risks associated with non-mercury metal HAPS and acid gases related to fossil fuel-fired EGUs. Regulating these emissions would serve no purpose and would add cost without commensurate health benefits. In addition, EPA has not shown that the regulation of HCl and other air toxics is necessary and appropriate.

- EPA should use its discretion to regulate utility air toxics with health-based emission standards, which would decrease costs without jeopardizing public health and safety.

EPA's Proposed Compliance Requirements Are Overly Burdensome and Should Be Modified

FMEA believes that there are certain compliance requirements for the proposed air toxic rule that may result in periods of noncompliance by some EGUs that may be capable of complying with the emission limits under normal operations. We believe that the following changes would facilitate compliance with the proposed rule:

- PM compliance testing should involve only filterable particulates. Including soluble particulates will complicate compliance testing without providing any significant additional compliance assurance.

- Compliance during startup and shutdown may not be reasonable in some cases. EPA makes the case most coal-fired utilities start up on natural gas and therefore should be in compliance during periods of startup and shutdown. However there are many EGUs that use oil for start up when natural gas is unavailable.

[11] In the preamble for CATR, EPA discusses this relationship between revisions to lower NAAQS and future reductions of SO_2 and NO_x cap under CATR.

Manufacturers' protocols often require additional delays or control equipment during startup when using oil as opposed to natural gas. EPA should consider an exception to the provision related to compliance during startup and shutdown when an EGU is forced to use oil or natural gas is not available.

- FMEA believes that a 30-day rolling average for compliance may be unworkable for some units and is unnecessarily restrictive. Many coal-fired EGUs are designed to work to burn a variety of coal types. In addition, chemical constituents of coals from the same source can vary significantly. In certain cases variations in chlorine content in a coal may mean the difference between compliance and noncompliance with EPA's proposed air toxic rule limits. Since EPA's concern centers around long-term emissions of air toxics into the environment, FMEA suggests a 12-month rolling average as the basis for determining compliance with proposed air toxic limits.

- EPA should expand the number of subcategories to reflect fuel composition, air pollution controls (APCs), and/or boiler size and type on the effectiveness of air toxic emission reductions.

FMEA Support of Other Trade Association Comments

FMEA utilities are members of the American Public Power Association (APPA), the Class of 85 Regulatory Group, and the Florida Electric Power Coordinating Group (FCG). We endorse the comments provided by these groups on EPA's utility air toxic rules.

FMEA appreciates the opportunity to provide comments on EPA's proposed Utility Air Toxic Rule. If you have any questions or need further information on our comments please contact Barry Moline, Executive Director of the Florida Municipal Electric Association at 850-224-3314, ext. 1 (bmoline@publicpower.com) or Robert L Kappelmann PE, FMEA Energy and Environmental Policy Consultant at 904-307-6277 (kapprl@juno.com).

Sincerely,

Barry Moline

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Executive Director