



Energy & Utilities Subcommittee

Tuesday, October 20, 2015

9:00 AM

Webster Hall (212 Knott)

MEETING PACKET

Committee Meeting Notice

HOUSE OF REPRESENTATIVES

Energy & Utilities Subcommittee

Start Date and Time: Tuesday, October 20, 2015 09:00 am
End Date and Time: Tuesday, October 20, 2015 11:00 am
Location: Webster Hall (212 Knott)
Duration: 2.00 hrs

Overview of the U.S. Environmental Protection Agency's Clean Power Plan

NOTICE FINALIZED on 10/13/2015 4:03PM by Ellinor.Martha



The Florida House of Representatives

Regulatory Affairs Committee

Energy & Utilities Subcommittee

Steve Crisafulli
Speaker

Dane Eagle
Chair

AGENDA

Tuesday, October 20, 2015

212 Knott

9:00 am – 11:00 am

- I. Call to Order
- II. Roll Call
- III. Overview of the U.S. Environmental Protection Agency's Clean Power Plan
 - a. Florida Department of Environmental Protection, Paula Cobb, Deputy Secretary for Regulatory Programs
 - b. Florida Public Service Commission, Mark Futrell, Director, Office of Industry Development and Market Analysis
- IV. Adjournment



Florida Department of Environmental Protection

EPA's Clean Power Plan

Paula L. Cobb, Deputy Secretary for Regulatory Programs

October 2015





What is EPA's Clean Power Plan?

- EPA's Clean Power Plan uses **Section 111(d)** of the Clean Air Act to regulate **existing fossil fuel-fired electric generating units (EGUs)**.
- EPA's stated goal of the Clean Power Plan is to reduce national carbon dioxide (CO₂) emissions from the **power sector** by 32% from 2005 levels by 2030.



Components of EPA's Clean Power Plan

EPA's Clean Power Plan has **two main components**:

- 1. Category-specific CO₂ emission rates** (expressed as pounds of CO₂ per megawatt-hour) for two types of EGUs.
 - **Natural gas combined-cycle** EGUs have a final goal of **771 lb/MWh**.
 - **Fossil fuel-fired steam** EGUs have a final goal of **1,305 lb/MWh**.
- 2. Guidelines for states to develop "State Plans."**
 - Each state must submit a State Plan to EPA for approval.
 - States can craft State Plans so long as they achieve EPA's category-specific rate or an equivalent state-specific rate or mass goal.
 - EPA will impose a "**Federal Plan**" on states that do not develop their own State Plans or whose State Plans will not achieve EPA's required emission reduction goals.



EPA's Clean Power Plan – Key Dates

- **August 3, 2015** – EPA released **Final Clean Power Plan**. EPA also released **Proposed Model Trading Rules** and a **Proposed Federal Plan** that would apply to states that do not develop their own state plans.
- **September 6, 2016** – **Initial State Plan** (non-binding status report with extension request) or **Final State Plan** due.
 - EPA will impose a Federal Plan on states that do not submit a Status Report or State Plan by this date.
- **September 6, 2018** – **Final State Plan** due.
- **January 1, 2022** – CO₂ emission reduction accounting begins under Final State Plan and **Interim Goal** period begins.
- **January 1, 2030** – Affected EGUs must begin compliance with final CO₂ emission performance rates.



EPA's Clean Power Plan – How EGUs Comply with Goals

- Under a **Rate-Based Plan** (lb/MWh) individual affected EGUs must meet specific emission rates based on their type (natural gas combined cycle or fossil fuel steam)
 - Compliance with emission rates is achieved through the acquisition of “**Emission Rate Credits**” from new low- or zero-emitting generation (nuclear, solar, wind).
- Under a **Mass-Based Plan** (tons) all of a state's affected EGUs are limited to a total amount of CO₂ emitted within a given year.



EPA's Clean Power Plan – Initial Steps

- By **September 6, 2016**, states must submit a **final State Plan** or a non-binding **status report** requesting a two-year extension.
- Extensions will be granted if states:
 - Identify the state plan approaches **under consideration**;
 - Explain why **additional time** is needed; and
 - Demonstrate **opportunity for public comment** on initial submittal and “**meaningful engagement with stakeholders, including vulnerable communities.**”
- Many states have begun the **outreach process** in preparation for submitting **status reports**.



EPA's Clean Power Plan – Affected Facilities in Florida

- The Clean Power Plan regulates **54 power plants** in Florida containing:
 - 30 coal-fired steam units;
 - 26 oil- or gas-fired steam units; and
 - 161 natural gas combined-cycle units.
- These units are operated by **four types of utilities**:
 - Investor-owned;
 - Municipal;
 - Electric cooperatives; and
 - Merchant power plants.



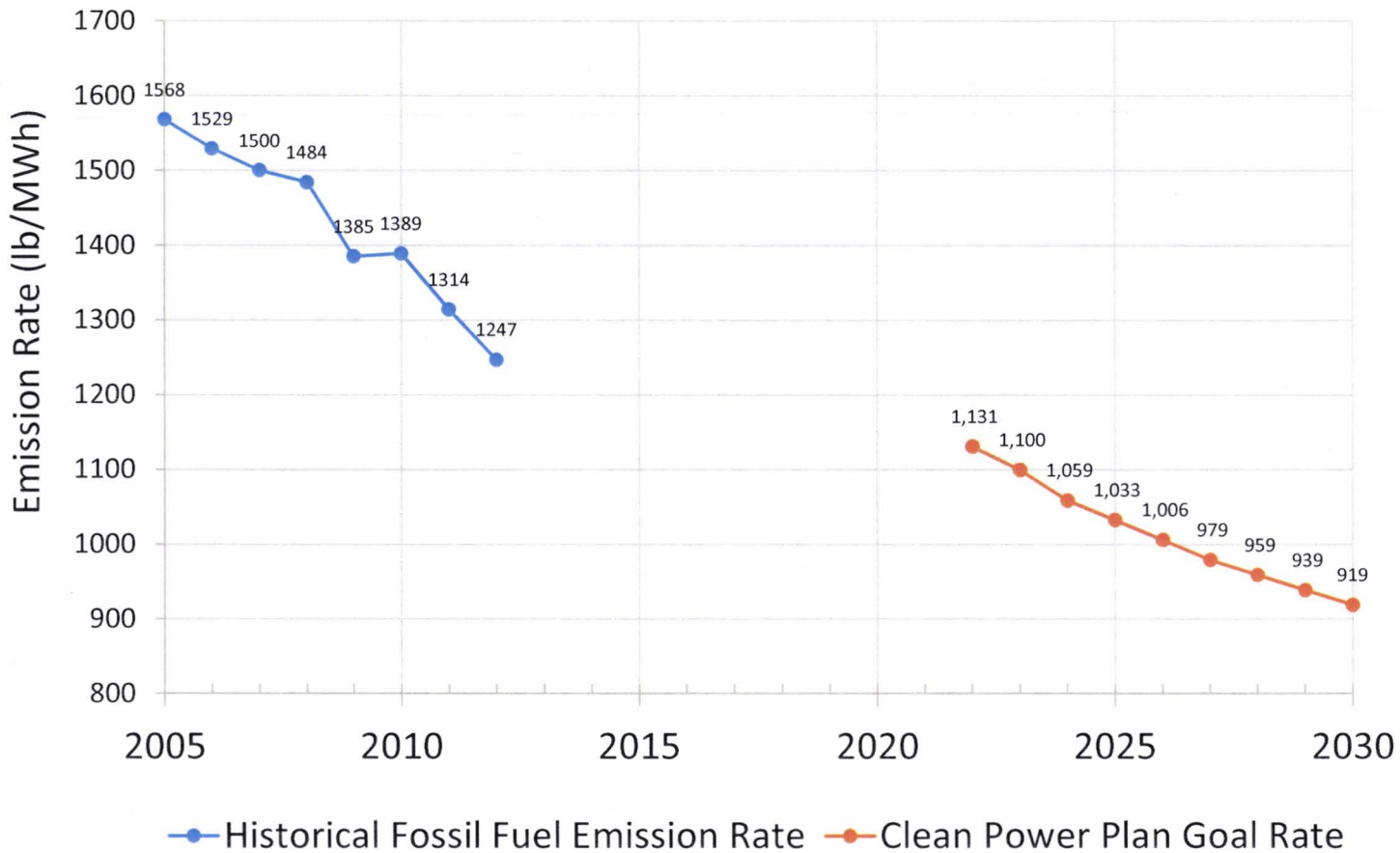
Florida's Interim and Final Goals

- In addition to setting category-specific emission rates, EPA's Clean Power Plan establishes equivalent **state-specific interim and final goals**, which apply the category-specific emission rates to the state's power generation mix in 2012.
- These equivalent goals are expressed in two ways, **rate-based** and **mass-based**, which a state could select for its State Plan instead of directly applying the category-specific emission rates.
 - **Florida's rate-based Interim Goal (2022-2029) is 1,026 lb/MWh;**
 - **Florida's rate-based Final Goal (2030 and beyond) is 919 lb/MWh.**
 - **Florida's mass-based Interim Goal (2022-2029) is 112,984,729 tons; and Final Goal (2030 and beyond) is 105,094,704 tons.**



Florida's Historical Emission Rates and EPA's Clean Power Plan Goals

Historical Emission Rate from 111(d) Affected Units and Clean Power Plan Goals





Initial State Planning

- **Winter 2015-16** – Outreach to stakeholders to assess impact of EPA's Clean Power Plan.
- **September 2016** – Florida's Status Report.
 - Non-binding.
 - Two-year extension.
 - Avoids immediate Federal Plan.
- **2017-2018**
 - Continue outreach with stakeholders and elected officials.
 - Assess potential strategies for compliance.
 - Monitor legal challenges.
 - Track federal developments.

U.S. EPA's Clean Power Plan
Florida Public Service Commission Jurisdiction

Presentation to the

House of Representatives
Energy and Utilities Subcommittee



Mark Futrell
Florida Public Service Commission Staff
October 20, 2015

Overview

- Florida Public Service Commission (FPSC) authority over electric utilities
- FPSC functions over planning, resource selection, and cost recovery
- Observations on the Clean Power Plan



FPSC Authority Over Electric Utilities

- Ensure utilities provide adequate, safe, and reliable service at reasonable rates
- Jurisdiction over the planning, development, and maintenance of a coordinated electric power grid
- Oversight of utility ten-year plans for meeting customer energy needs
- Establish conservation goals and approve cost-effective utility plans and programs



FPSC Authority Over Electric Utilities

- Facilitate third party and customer-owned renewable energy development through standard purchase power contracts and interconnection agreements
- Determine need for certain new power plants
- Establish rates to recover, in part, costs for conservation, purchases of renewable energy, new generation, and environmental compliance



Ten-Year Site Plans

- Section 186.801, Florida Statutes, requires all major generating electric utilities to submit a Ten-Year Site Plan for FPSC review
- The FPSC performs a preliminary study of each plan and determines whether it is “suitable” or “unsuitable”
- The FPSC forwards its review of the Ten-Year Site Plans to the FDEP for use in subsequent power plant siting proceedings



Ten-Year Site Plans

- Provides the results of a utility's integrated resource plan
 - Forecast of customer energy requirements
 - Assessment of options to maintain reliability
 - Conservation, energy efficiency, and demand response
 - Purchases from renewables, third parties, and other utilities
 - Modernization of existing generation
 - Construction of new generation
- Identifies locations of future power plants



Conservation Goals and Programs

Florida Energy Efficiency and Conservation Act
Sections 366.81-.82, and 403.519, F.S.

- “...critical to utilize the most efficient and cost-effective demand-side renewable energy systems and conservation systems...”
- FPSC must, at least every five years, set goals and approve utility plans and programs that are designed to:
 - Reduce the growth rates of peak demand
 - Reduce and control the growth rates of electricity consumption
 - Conserve expensive resources, particularly petroleum fuels



Determination of Need for New Generation

- FDEP coordinates a multi-agency review of the environmental and land-use impacts of new power plants subject to Chapter 403, F.S.
- The FPSC must determine the need for a new power plant pursuant to Section 403.519, F.S.
- Following hearings before an Administrative Law Judge, the Governor and Cabinet, sitting as the Power Plant Siting Board, makes a final certification decision



Determination of Need for New Generation

- In determining whether a new power plant is needed, the FPSC must consider:
 - Reliability and integrity of the grid
 - Adequate electricity at a reasonable cost
 - Conservation reasonably available to mitigate need
 - Renewable energy utilized to the extent reasonably available
 - Impacts on fuel diversity
 - If the power plant is the most cost-effective alternative



Renewable Energy

Sections 366.051, and 366.91, F.S.

- Utilities must interconnect with and purchase capacity and energy from renewable generators at rates that do not exceed the utility's cost of generation
- The FPSC annually approves standard contracts to purchase renewable energy
- These standard contracts can form the basis for negotiated contracts
- Utilities must offer standard interconnection agreements and net metering for customer-owned renewable generation



Recovery of Costs to Provide Service

- Base Rates
 - Recover the cost of generation (excluding fuel) and delivery of electricity to retail customers
- Cost Recovery Clauses
 - Annually adjusted rates to recover variable costs
 - Fuel
 - Purchased power, including renewable energy
 - Environmental compliance
 - Energy conservation



Environmental Cost Recovery

Sections 366.825, and 366.8255, F.S.

- A utility with a power plant affected by the Clean Air Act may submit, for FPSC approval, a plan to bring a power plant into compliance
- FPSC approval of a plan submitted by a utility shall establish that the utility's plan to implement compliance is prudent
- The FPSC must determine, in a subsequent proceeding, that the actual costs of implementing the plan are reasonable



Environmental Cost Recovery

Sections 366.825, and 366.8255, F.S.

- The Environmental Cost Recovery Clause provides a mechanism for annual FPSC review and approval of prudently incurred environmental compliance costs, such as:
 - Clean Air Act compliance plan activities
 - Capital investments
 - Operation and maintenance expenses
 - Emission allowance costs



U.S. EPA's Clean Power Plan

FPSC Comments on the June 2014 Proposal

- EPA's proposal, if made final, could bypass or preempt the FPSC's jurisdiction
- Could limit Florida's ability to maintain fuel diversity
- Implementation phase could negatively impact Florida's grid reliability and could result in a higher cost of electric service



U.S. EPA's Clean Power Plan

FPSC Comments on the June 2014 Proposal

- EPA does not take into account early actions which have reduced CO₂ emissions in Florida by 25 percent since 2005
- Emissions requirements should only be set for affected generating units based on onsite actions within a utility's control
- Best System of Emission Reduction (BSER) should be based on Florida-specific policies and circumstances, not national or regional assumptions



U.S. EPA's Clean Power Plan

FPSC Staff Observations on the August 2015 Final Rule

- Carbon emission limits for Florida have increased
- Implementation glide path established by phasing in emission standards during the interim period, beginning in 2022, as opposed to the 2020 interim standard
- Energy efficiency dropped as a BSER, reducing risk of EPA taking jurisdiction
- Energy efficiency, both utility and non-utility programs, may still be used as a compliance measure



Questions?

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