

May 11, 2017

Mr. Scott Pruitt
Administrator
U. S. Environmental Protection Agency (EPA)
1200 Pennsylvania Ave, NW
Mail Code 1101 A
(Submitted by e mail to www.regulations.gov)

Ms. Samantha Dravis
Senior Counsel and Associate Administrator, Policy and Regulatory Reform Officer (RRO)
U. S. EPA

Mr. Ryan Jackson
Chief of Staff to the Administrator and Chair, Task Force on Regulatory Reform
U. S. EPA

**EVALUATION OF EXISTING REGULATIONS CONSISTENT WITH EXECUTIVE
ORDER 13777
EPA-HQ-OA-2017-0190**

Dear Mrrs. Pruitt, and Jackson and Ms. Dravis:

I am writing to submit the comments from the Florida Municipal Electric Association (FMEA) regarding U. S. EPA's regulatory reform efforts and the pursuit of determining priorities for action in 2017.

FMEA represents the unified interests of 34 public power communities (or municipally owned and operated) across Florida. Public power utilities play an important role in Florida's electric industry serving 15% of the state's population or about 3 million Floridians. FMEA utilities are committed to operating in a manner that assures environmental protection of our air, water, and natural resources while still providing reliable and affordable electric power to our customers. FMEA believes that environmental regulations should be crafted to provide for both environmental protection and reliable and affordable electric power.

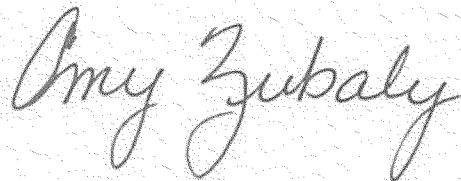
We look forward to working with you and your staff to address these priorities. FMEA offers these comments in advance of the deadline to assist your team in addressing both policy priorities and to contemplate the actions and requisite staff/contractors needed in the FY2018 budget. Please contact me at 850-224-3314, ext. 7, or azubaly@publicpower.com, for any appointments or questions. The names on the attached white papers also can provide detailed technical assistance in my absence.

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Sincerely,

A handwritten signature in black ink that reads "Amy Zubaly". The signature is written in a cursive, flowing style.

Ms. Amy S. Zubaly
Interim Executive Director

- Comments
- White Papers Addressing Many Points in Comments

**COMMENTS SUBMITTED
FROM FLORIDA MUNICIPAL ELECTRIC ASSOCIATION (FMEA)
TO
U. S. ENVIRONMENTAL PROTECTION AGENCY (EPA)
REGARDING EVALUATION OF EXISTING REGULATIONS CONSISTENT WITH
EXECUTIVE ORDER 13777
MAY 15, 2017
EPA-HQ-OA-2017-0190**

**FMEA COMMENTS ON EVALUATION OF EXISTING REGULATIONS UNDER
EXECUTIVE ORDER 13777**

The Florida Municipal Electric Association (FMEA) represents the unified interests of 34 public power communities (or municipally owned and operated) across Florida. Public power utilities play an important role in Florida's electric industry serving 15% of the state's population or about 3.0 million Floridians. FMEA utilities are committed to operating in a manner that assures environmental protection of our air, water, and natural resources while still providing reliable and affordable electric power to our customers. FMEA believes that environmental regulations should be crafted to provide for both environmental protection and reliable and affordable electric power.

FMEA offers these comments to assist the agency identifying opportunities to reduce regulatory costs while maintaining environmental and public health protection.

1. New Source Review (NSR): EPA's current enforcement policy related to NSR preconstruction permit program under Clean Air Act. **Citations:** Clean Air Act Section 7470 or 42 U.S. C Section 747(1)(3), 40 CFR Part 51.166(b)(3)(iii) and 40 C.F.R. Part 51.166(b)(47)(iii).

EPA's Office of Enforcement and Compliance Assistance has created significant regulatory uncertainty that deters modernization and energy efficiency improvements. Modernization and energy efficiency measures at factories and power plants are needed to revitalize American business. Similar modernization and energy efficiency measures are common in Germany, Japan, Canada, China, and other major trading countries. This does not require a change in law. Nor does it roll back environmental standards. EPA should also revise its enforcement policies for "routine maintenance, repair and replacement" or RMRR under 40 CFR Part 51.166(b)(47)(iii). (See white paper in appendix).

2. Revise modeling under EPA's Cross-State Air Pollution Rule (CSAPR) without changing final rule. **Citations:** Section 110(a)(2) of the Clean Air Act and Sections 103, 320, 42 U. S.C. Section 7410(a)(2)(K) and 42 U. S. C Section 7475 (a)(3) and 40 C.F.R. Part 51 Appendix W, and 82 Fed. Reg. 5182 (Jan. 17, 2016); amended 82 FR 8499 (Jan. 26, 2017). 40 C.F.R. 40 CFR Parts 52, 78, and 97: "2008 CSAPR Update Rule for the 2008 Ozone Standard - 81 Fed. Reg. 74,504(Oct. 26, 2016) and Air Quality Modeling TSD for the Final Cross-State Air Pollution Rule Update; to be amended by the 2015 CSAPR Update Rule, See Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone Standard, 81 Fed. Reg. 1,733 (Jan. 6, 2017); amended 82 Fed. Reg. 8,499 (Jan. 26, 2017).

EPA's cross state air pollution regulations are designed to prevent NAAQS violations in a state due to air emissions from an upwind state. The methodology used by EPA in developing its interstate rules have been rejected by the courts several times. The emission allocation methodology used by EPA in its cross-state rulemaking has produced rules that over control the emissions in some states at the expense of others. EPA's emission allocation methodology is greatly dependent on computer modeling. FMEA believes that dispersion modeling can be improved and should be made far more transparent. (See white paper in appendix).

3. Repeal 2015 Start Up, Shut Down & Malfunction (SSM) regulation and revise rule back to pre-2015 SSM policy on affirmative defense for emergency conditions. Citation: 40 C.F.R.63.1111 or §63.6(e)(3). This repeal of the 2015 final rule is consistent with the policy views of many state agencies who have undertaken litigation measures against the 2015 rule requiring revisions to all state SIPs for SSM provisions for those nonattainment areas. Deference should be shown to state agencies which have better expertise on how to achieve responsible air pollution reductions with reasonable start up, shut down and malfunction of many thousands of pieces of manufacturing equipment and combustion sources—including combined cycle natural gas units (NGCC) and coal-fired power plants. (See white paper in appendix).

4. Repeal Clean Power Plan (NSPS for new, modified and reconstructed as well as existing power plants—Clean Air Act Section 111(b) and 111(d) respectively). **Citations:** 80 Fed. Reg. 64,510 (Oct. 23, 2015 and codified at 40 C.F.R. part 60,70, 71, 98 and 80 C.F.R. 64,662 (October 23, 2015 to be codified at 40 C.F.R. part 60). CO₂ regulations should be made within fence line of power plant and be consistent with the NSPS program for conventional pollutants. The consideration of remaining useful life of the plant is key in any requirements for CO₂ reductions, energy efficiency, use of renewables, and other requirements.

5. Repeal and replace Effluent Limitation Guidelines (ELG) for Steam Electric under Clean Water Act regulation should be replaced with a more realistic regulation after providing transparency on data underpinning the rule on water toxicity weighting. **Citation:** 40 C.F.R. Part 423. Power plants expected to retire within few years should not be required to install expensive ELG controls. All data used by EPA and contractors to determine toxicity weighting and other methods for setting ELG standards should be visible in the proposed rule. EPA should not be allowed to redact data in proposed rules. If data is Confidential Business Information (CBI) and provided to the government under CBI protections, those protections should be followed. EPA redacted data that was not submitted under CBI protections. (See white paper in appendix).

6. Revise Ozone/PM 2.5 National Ambient Air Quality Standards (NAAQS) Citation: 42 U.S.C. §740. NAAQS standards, reviewed every five years, should be based upon human health exposure not theoretical human health exposure based upon overly conservative modeling. All human health exposure scientific studies conducted by EPA or EPA contractors should be visible to the public for public comments when EPA proposes revision to the NAAQS consistent with the Data Quality Act.

7. EPA's Regulatory Impact Analysis (RIA) Needs to Be Reviewed and Revised to Fully Reflect the Requirements of Executive Order 13563 and Executive Order 12866 along with OMB Circular A – 4.

While Executive Order 13563 and Executive Order 12866 along with OMB Circular A – 4 provide the agency with guidance on how to prepare a comprehensive benefit cost analysis in the Regulatory Impact Analysis (RIA) process for a proposed regulation, the agency often fails to follow the intent of this guidance by utilizing techniques that significantly overestimate the benefits of the regulation while greatly underestimating the cost. (See white paper in appendix).

8. Designating Certain Biomass Fueled Electricity Production as Carbon Neutral for Federal Regulatory Purposes. For over 6 years EPA has been attempting to develop Biogenic Assessment *Factor* (*BAF*) that would clearly establish carbon neutrality for certain biomass fuels. Despite the fact that numerous studies have confirmed most biomass fuel streams are carbon neutral, EPA's Science Advisory Board (SAB) has yet to accept a final accounting framework to establish carbon neutrality for biomass fuels. EPA should expeditiously complete and adopt a BAF for biomass fuels. (See white paper in appendix).

9. EPA Should Immediately Revise Its Coal Combustion Residuals Regulation (CCR). EPA should remove the requirement that facilities must cease placing CCR and Non-CCR waste streams into a CCR unit within six months a specific occurrence. **Citation:** 40 C.F.R. Parts 257 and 261. EPA's CCR regulation has several onerous requirements that would force an entire power plants to shut down its operations within six months after a specific CCR unit (either impoundment or landfill) occurrence (e.g.an elevated groundwater monitoring concentration). The shutdown would be required because the regulation requires that placement of CCRs or non-CCR wastewater streams in the CCR unit must cease within the six months. (See white paper in appendix).

Thank you for reviewing FMEA's comments. FMEA would be pleased to meet with EPA staff to discuss any of these recommendations in more detail. The attached white papers offer more details on several of these topics. FMEA looks forward to submitting more detailed comments to address these concerns and recommendations for corrective action during individual rulemakings or calls for comments.

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APPENDIX- WHITE PAPERS

1. **New Source Review Permitting Regulation’s current interpretation (2 pages)**
2. **Cross-State Air Pollution Rule (CSAPR) to Address Downwind Air Pollution Through Good Neighbor Policy (2 pages)**
3. **EPA’s Startup, Shutdown, and Malfunction (SSM) “SIP Call” Action Raises Safety Concerns and is Based on Insufficient Data. (2 pages)**
4. **EPA’s Regulatory Impact Analysis (RIA) Needs to be Reviewed and Revised to Fully Reflect the Requirements of Executive Order 13563 and Executive Order 12866 Along with OMB Circular A-4. (1 page)**
5. **Designing Certain Biomass Fueled Electricity Production as Carbon Neutral for Federal Regulatory Purposes. (2 pages)**
6. **Effluent Guideline Regulation Needs to be Repealed and Replaced (example from Lakeland Electric, Lakeland, FL) (1 page)**
7. **Revise Coal Combustion Residuals Regulation (CCR) (3 pages)**

New Source Review - triggering NSR in Permit Reviews for Existing Sources Discourages Energy Efficiency and Power Plant/Factory Modernization

Why it is Broken: Adopted in 1977, New Source Review (NSR) was designed by Congress to address new, greenfield factories. NSR is often interpreted as a “new” source regulation but this name is now a misnomer. As initially implemented by EPA, an existing source would only be subject to NSR when a change was made to the source that resulted in a significant annual emission increase of a regulated air pollutant. Because of its broad nature, Congress included an exception for emission increases due to routine maintenance repairs, and replacement (RMRR). This exception was extremely important because without it, when a unit would shut down, emitting no emissions, it would violate the NSR emission increase criteria by simply restarting the unit.¹ Under the Clinton Administration NSR application, the RMRR exception was greatly narrowed to the point that virtually any activity on a generating unit could trigger NSR for that unit. This narrowing was so prescriptive that efficiency improvements at existing factories and power plants could be NSR violations. The most egregious effect of NSR is to discourage modernization and expansions of factories, refineries, paper companies, steel mills, and power plants because it triggers Prevention of Significant Deterioration (PSD) and Best Available Control Technology Requirements (BACT) requirements that rarely can be economically justified for an existing unit. While NSR has been wielded as a cudgel against coal, recent actions by EPA and environmentalists against natural gas generation indicates that NSR challenges to modernization of factories will not be limited to coal.

Economic Implications in Florida: Corrections to the NSR program would allow utilities and other industries to make improvements and modernize without impairing air quality.² The corrections would enable utilities to make repairs to superheaters, replace economizers, make tubing changes with new materials that do not pit and install new turbine blades, etc., which would improve the efficient operation of the plants

How to Fix the Problem:

Many fine legal scholars, think tanks and public policy institutions³ have written about ways to surgically correct NSR without leaving the door open to NSR abuses. NSR needs to be clearer and to provide bright lines about what is permissible and what is not under RMRR. EPA should work with industry to develop a list of projects that can be categorically excluded from NSR under the RMRR provision of the regulation. This would help eliminate unnecessary NSR permitting that now averages 14 months for power plants and refineries.⁴ FMEA urges EPA to consider many responsible recommendations made for reform.

¹ Until the reinterpretation under the Clinton administration, RMRR was applied to activities on the unit that was typical for that class of unit. In other words, routine repairs replacement and maintenance to a unit that was routine for that class of unit in the industry.

² It should be noted that all major air pollution sources operate under a Title 5 permit which establishes the emission limits for that facility. These emission limits are set at levels that assures no NAAQS will be violated.

³ Including but not limited to Resources for the Future, Indiana University Law School, Heritage Foundation, and others. See Environmental Law Reporter, 47 ELR 10026, “EPA’s New Source Review Program: Time for Reform?”, Environmental Law Institute (ELI), <http://www.eli.org>

⁴ Id, derived from EPA’s RACT/BACT/LAER Clearinghouse 9(RBLC) as described in footnote 30 of ELI article.

Correcting the NSR program does not mean allowing companies and power plants to avoid their responsibilities for reducing pollution under NAAQS, HAP/NESHAP regulations, and other Title I requirements. But power plants and factories should be encouraged to undertake energy efficiency programs and to replace out of date components and equipment in order to be competitive economically as well as reduce air pollutant emission rates. Allowing energy efficiency modernization at power plants and factories can also be a “no regrets” approach.

Cross-State Air Pollution Rule (CSAPR) To Address Downwind Air Pollution Through Good Neighbor Policy¹

On July 6, 2011 EPA issued a rule designed to address ozone air pollution in downwind states under Clean Air Act's Section 110(a)(2)6, Sections, 103 & 320 or 42 U.S.C. Section 7410(a)(2)(K). While addressing air pollution in downwind states is appropriate, EPA's rulemaking was flawed—both in how it was developed and proposed implementation. While the courts, including the Supreme Court, addressed EPA's mistakes in prior transport rulemakings², FMEA offers suggestions on how EPA can prevent these mistakes from happening in future transport rules.

Why It is Broken: EPA's Transport Rule included 28 "eastern" states but EPA did not name all the states potentially affected in the proposed rule. EPA required more reductions than necessary to prevent nonattainment. Modeling downwind effects was based improperly on 2007 baseline data which did not reflect massive reductions in ozone precursors from Federal and State rules including repowering and shutdowns from the Mercury Air Toxics Standard (MATS). Most significantly, the entire program is premised upon the assumption that air pollution transports in directions that defy real world experience. Example; prior attempts to include Florida into CSAPR presumed that air pollution from electric utilities in Florida transported across the Gulf of Mexico and contributed to air pollution in Houston. States did not receive fair or adequate distribution of allowances. CSAPR exemplifies EPA overreach and "hiding the ball" because EPA did not give adequate notice and public comment on all the EPA data published in the Federal Register. Much of the data was hidden in the Notice of Data Availability and difficult to comprehend.

EPA imposed Federal Implementation Plans (FIPs) in 2012 to force states to act without first giving the states "a reasonable time to implement that requirement³."

How to Fix the Problem:

- EPA should provide to the states the annual amount of emission reductions required for an upwind state to avoid impacting a NAAQS nonattainment area or maintenance area in a downwind state. This reduction should not be based on the maximum reduction possible or what EPA considers low cost reductions for that state but what is actually required to comply with section 126 of the CAA.

¹ 40 C.F.R. 40 CFR Parts 52, 78, and 97: "2008 CSAPR Update Rule for the 2008 Ozone Standard - 81 Fed. Reg. 74,504(Oct. 26, 2016)and Air Quality Modeling TSD for the Final Cross-State Air Pollution Rule Update; to be amended by the 2015 CSPAR Update Rule, See Preliminary Interstate Ozone Transport Modeling Data for the 2015 Ozone Standard, 81 Fed. Reg. 1,733 (Jan. 6, 2017); amended 82 Fed. Reg. 8,499 (Jan. 26, 2017).

² The U.S. Supreme Court held in *EPA v. Homer City* 134 S.Ct. 1584 (2014), that EPA may not "over-control" downwind states under the Good Neighbor provisions of the Clean Air Act, and that it may not require any reduction from an upwind state beyond what would be necessary to attain or maintain a NAAQS at a downwind monitor

³ North Carolina v. EPA, (D. C. Circuit,2011).

- When cross state or “good neighbor” policy regulations result in emissions trading and distribution of allowances, EPA should always start the compliance program at the beginning of a calendar year but no sooner than 8 months after the rule is published to allow companies to plan ahead.
- Utility planning time must be adequate to manage capital expenditures, buy or sell allowances, or raise municipal bonds to finance projects. During the 2012-2013 CSAPR trading time the states and companies were not given enough time to develop and use banked credits. EPA should leave development of unit level allocation methodology under all emissions trading programs to states, providing the affected electric utilities with a great opportunity for meaningful input into these important decisions. Power plants must be assured, in implementation of cross state regulatory programs, that the electric utility has adequate generation to meet all state, local and national electric reliability standards. EPA has historically presumed that states (and their utilities) can immediately replace any lost generation capacity due to plant closures. Replacing that generation with natural gas, or renewables (with natural gas as a backup) requires significant advance planning. When EPA conducts any Regulatory Impact Analysis (RIA), EPA should not count the benefits found in other air pollution regulations such as PM or ozone NAAQS or even those pollutants reduced due to NESHAP/HAP regulations. Those reductions should be counted once in the first regulation such as when a NAAQS is revised. In the 2011 CSAPR RIA EPA asserted that the net benefits (over costs) ranged between \$120 and \$280 billion while OMB reported net benefits of \$39.4 billion per year.⁴ Even if the lower cost benefit estimate of \$39.4 billion per year is correct, that figure would represent more than 40% of the \$90 billion in all of EPA regulations’ net benefits claimed by the Obama Administration between 2009 and 2012.
- “Cooperative Federalism” should allow all states (and the regulated parties) sufficient time to develop their own methods for compliance before any FIP is imposed.

⁴ The George Washington University Regulatory Studies Center, www.regulatorystudies.gwu.edu, August 28, 2012.

EPA's Startup, Shutdown, and Malfunction (SSM) "SIP Call" Action Raises Safety Concerns and Is Based on Insufficient Data

Background and Context of SSM Regulations

State regulations establish numerical emission limits on facilities such as boilers and combustion turbines. The numerical emissions limits are often based on full capacity operation.

To address transient conditions that occur during startup and shutdown of the facilities, and to address infrequent malfunctions that may occur at the facilities, states also establish startup, shutdown, and malfunction (SSM) regulations that govern during such events. The state SSM regulations typically include requirements applicable during SSM events, such as using best operational practices to minimize emissions and minimizing the duration of the events.

Under the Clean Air Act's (CAA) federalist framework for emissions reductions, whereby states are assigned the lead role in determining the best way to meet EPA national air quality standards, EPA has previously approved state SSM rules as part of State Implementation Plans (SIPs) under Section 110 of the CAA.

In reaction to petitions filed with the Court and EPA by environmental groups that oppose state SSM rules, EPA quickly entered into a "sue and settle" process with the groups. EPA proposed and finalized a "SIP Call" action requiring 36 states to submit "corrective" SIPs that revise or remove their SSM rules – the same rules previously approved by EPA.¹

A Practical Example of Why Long-Standing State SSM Regulations Are Necessary

Fossil-fueled electric utility steam generating units (boilers) are subject to numerous emission limits and often employ an array of emission control technologies (e.g. electrostatic precipitators (ESPs), flue gas desulfurization (FGD) systems, and selective catalytic reduction (SCR) systems).

For boilers, numerical opacity limits (an indicator of particulate matter emissions) are set by regulation and met by the use of ESP technology during periods of normal boiler operation. But during boiler startups, long-standing state SSM regulations allow best operational practices for the control technologies to limit emissions. This is necessary because initial operation of ESP's must be delayed until flue gas moisture and temperature conditions are reached that allow safe, reliable, and efficient ESP and boiler operation. Also, initial ESP operation must not interfere with safe and reliable operation of other emission control technologies (e.g. FGD and SCR systems) employed by the boiler.

¹ State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls To Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, Final Action, 80 Fed. Reg. 33840, June 12, 2015.

Similarly, the FGD and SCR systems have specific criteria that must be met for safe, reliable, and efficient operation – and therefore best operational practices for those technologies are allowed during startup to limit relevant emissions, pursuant to current state SSM regulations. A work practice standard or a combination of such standards, to apply in place of a numerical emission limit during startup, is an example of a best operational practice allowed by current state SSM regulations.

EPA's SSM SIP Call Action is Unreasonable and in Many Instances, Unachievable

EPA's analysis of the potential impacts of its SSM SIP Call action on states and sources is inadequate. EPA failed to examine all relevant data and would require states to initiate a massive undertaking of case by case permits, an undertaking that EPA's regional offices are not prepared to oversee in a timely manner, such that the SIP process could be brought to a standstill in some states. Sources accepted numerical emission limitations in their permits with the understanding that work practice standards would apply at all times, including during SSM. Some sources cannot meet the new EPA SSM requirements due to technology limitations (see attached SSM example).

EPA's SSM SIP Call action exceeds EPA's authority and inappropriately limits the rightful authority of states submitting SIPs to select the most suitable mix of emissions controls specific to the circumstances of the state to meet national air quality standards.

EPA should:

- 1) withdraw the SSM SIP Call; and,
- 2) approve the state SSM SIPs that already have been (or will be) determined by the states to be adequately protective of the environment.

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Issue: EPA's Regulatory Impact Analysis (RIA) Needs to Be Reviewed and Revised to Fully Reflect the Requirements of Executive Order 13563 and Executive Order 12866 along with OMB Circular A – 4

The Problem: While Executive Order 13563 and Executive Order 12866 along with OMB Circular A – 4 provide the agency with guidance on how to prepare a comprehensive benefit cost analysis in the Regulatory Impact Analysis (RIA) process for a proposed regulation, the agency often fails to follow the intent of this guidance by utilizing techniques that overestimate the benefits of the regulation while underestimating the cost. For example, the clear majority of the monetized benefits from EPA air pollution regulations are developed from the calculation of the value of a statistical life (VSL) and premature deaths avoided (PDA). EPA's Inspector General has recommended that EPA use the value of statistical life years (VSLY) to calculate the actual monetized value of PDA. This process, along with taking credit for health benefits below NAAQS, greatly exaggerates the monetized benefit of the regulation. Another major shortcoming is the fact that EPA gives no recognition to the fact that increased regulatory costs often result in reduced medical care and in many cases statistical premature deaths.

In addition, EPA counts the benefits from proposed regulations across statutory programs, referred to as co-benefits, which also overestimates the benefits of a proposed regulation. For example, in the Electric Generating Unit (EGU) Mercury Air Toxic Standard (MATs) regulation EPA counted the health benefits from other pollution reductions found in rulemakings to reduce criteria pollutants including NO_x, SO₂, and Particulate Matter or (PM^{2.5}). However, the Clean Air Act requires the establishment of National Ambient Air Quality Standards (NAAQS) for criteria air pollutants that are to be set at levels that protect the health and welfare of the most vulnerable citizens. The health benefits that EPA attributed to the MATs have already been achieved through the NAAQS process. EPA has incorporated a process in its Regulatory Impact Analysis (RIA) that monetizes health benefits for criteria pollutant reductions below than NAAQS down to background levels. If NAAQS is properly set, there should be no monetized health benefits below the NAAQS level. This practice by EPA should be eliminated.

Solution: EPA's RIA process needs to be reviewed and revised to fully comply with the directives and intent of Executive Order 13563 and Executive Order 12866 along with OMB Circular A – 4. Key revisions need to include: elimination of PDA credits for reducing criteria pollutants below the NAAQS level, taking credit for co-benefits for emission reductions that will be achieved under other Clean Air Act (CAA) regulations and the incorporation of estimated health impacts including PDAs for regulatory costs related to the affordability of healthcare.

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Issue: Designating Certain Biomass Fueled Electricity Production As Carbon Neutral for Federal Regulatory Purposes.

Background: Although many peer reviewed studies have shown that combusting biomass for electric energy production produces significantly less air pollution and GHGs when compared to the open burning or natural decomposition of the biomass material, EPA has failed to fully recognize the environmental benefits of utilizing certain biomass fuels for electric energy production in its regulatory actions. Studies indicate that the net greenhouse gas emissions are zero and in some cases the warming potential is actually negative when combusting biomass for energy production as compared to allowing the materials to be open burned or naturally decompose. (See Tables A, B, and C in the appendix to this paper)

Electricity production in the U.S. is currently generated utilizing only a fraction of the renewable biomass available in this country. Analyses by the U.S. Department of Energy and the Union of Concerned Scientists estimate that between 680 million and one billion tons of biomass fuel could be available in a sustainable manner annually.¹ In addition, there is tremendous potential benefit in reducing wildfires by harvesting dead trees for biomass fuel from US forests.²

Problem: For over six years, EPA has been attempting to develop biogenic accounting factors (BAF) that would clearly quantify carbon neutrality for various biomass fuels. In 2011, EPA prepared the “Draft Accounting Framework for Biogenic CO₂ Emissions from Stationary Sources.” In the draft framework, EPA indicated that many biogenic fuels used to power electric generating units will likely be considered carbon neutral. Also, an earlier NREL study confirmed the carbon neutral/negative status of biomass fueled generation.³ In his letter of May 25, 2012 to Dr. Holly Stallworth of the EPA Science Advisory Board, William Hohestein of the USDA concluded “*There is minimal uncertainty that using biomass fuel to generate electricity produces significant greenhouse gas benefits.*” Despite the fact that numerous studies have confirmed most biomass fuel streams are carbon neutral, EPA's Science Advisory Board (SAB) has yet to accept a final accounting framework to establish carbon neutrality for biomass fuels.

Solution: EPA should expeditiously complete and adopt a BAF for biomass fuels. In addition, EPA should establish categorical carbon neutral determinations for various biomass fuel streams previously determined by EPA to be categorical non-waste fuel pursuant to 40 CFR section 241.4. Sufficient scientific data exist to classify these non-waste fuels as carbon neutral without going through the eventual BAF process. Fuels not specifically listed should be added to the categorical list once a BAF indicating carbon neutrality is determined.

¹ US Billion Ton Update: Biomass Supply for a Bio Energy and Bioproducts Industry. ORNL/TM – 2011 – 224. Oak Ridge, Tennessee; The Promise of Biomass Energy Clean Power and Fuel If Handled Right, Union of Concerned Scientists, September 2012.

² The U.S. Forest Service has estimated that there are over 100 million dead trees that have died since 2010 in California alone.

³ The National Renewable Energy Laboratory (NREL) produced a report (NREL/TP-510-32575) which analyzed the use of biomass in the generation of electricity. One of the cases studied biomass that was burned in a boiler in a controlled manner instead of being landfilled or allowed to decompose in the field. Burning biomass in the boiler avoided the production of methane, which has a greenhouse warming potential over 21 times that of CO₂. The study showed a negative Greenhouse Warming Potential (GWP) of -410 g CO₂-equivalent/kWh of electricity produced.

Appendix: Evaluating Air Emissions from Biomass Fueled Electricity Production

Proper Evaluation of Air Emissions from Biomass Fueled Electricity Generation: With the possible increase in the use of biomass fuels, it is appropriate to consider the potential impact on air quality. Some critics erroneously compare emissions from biomass fueled generation to fossil fueled generation. The correct comparison is between emissions from open burning such as forest fires, prescribed fires, and land clearing debris burning and controlled combustion in electric generating units with modern combustion controls and flue gas clean-up devices. Due to superior combustion and the air pollution control systems employed by biomass to energy facilities, the emissions of traditional air pollutants, air toxics and greenhouse gases are a fraction of that from open burning of the similar materials as seen in the tables below.

Air Emission (lb/ton of Biomass Combusted)	CO	NO _x	PM _{2.5}	VOCs
Biomass Fueled Generation	1.36464	1.19406	0.26	0.15
Open Burning	153.2	3.6	10.8	8

Source: AP – 42, Table 13. 1-2 1996; Emission limits for GREC biomass to energy facility.

	Dioxin Emissions (lb/ton of Biomass Combusted)
Biomass Fueled Generation	7.2753 X 10⁻¹⁰
Open Burning	3.98157 X 10⁻⁸

Source: inventory of sources and environmental releases of dioxin like compounds in the United States for 1987, 1995, and 2000. US EPA, November 2006; Emission limits for GREC biomass to energy facility.

	CH ₄	N ₂ O
Biomass Energy Source	lb/ton	lb/ton
Agriculture Byproducts	0.58	0.08
Wood residuals	0.28	0.14
Open Burning Forest Slash	11.4	8.3

Source: EPA AP 42 – Table 1.6 – 3, 1996; EPA Emission Factors for Greenhouse Gas Inventories Updated April 4, 2014.

Biomass fueled Electricity Production does not increase air pollution but rather decreases it by reducing uncontrolled open burning of biomass materials.

EPA's Should Immediately Revise Its Coal Combustion Residuals (CCR) Regulation by Removing the Requirement That Facilities Must Cease Placing CCR and Non-CCR Waste Streams into a CCR Unit within Six Months of a Specific Occurrence

The Problem: EPA's CCR regulation has several onerous requirements that would force an entire plant to shut down within six months after a specific CCR unit (impoundment or landfill) occurrence (e.g. an elevated groundwater monitoring concentration). The shutdown would be required because the regulation requires that placement of CCRs or non-CCR wastewater streams in the CCR unit must cease within the six months. Further, all coal units at a facility using the CCR unit would have to shut down within six months as well as any other electric generating units at the facility using the CCR unit (e.g. natural gas combined cycle generation utilizing the CCR unit for its low-volume wastewater discharges).

For some of the occurrences, the regulation appears to provide an alternative to the six month requirement – but the onerous requirements for the alternative make it illusory. The alternative unreasonably requires the absence of other on-site or off-site CCR disposal capacity, for which an increase in cost or inconvenience associated with other disposal capacity may not be considered.

EPA removed critical provisions from the proposed rule that would allow a more reasonable and flexible approach for monitoring and corrective action based on site-specific conditions. At the time, the rule was self-implementing so the justification for removal was the lack of regulatory oversight. However, the recently-enacted Water Infrastructure Improvements for the Nation Act (WIIN Act) established authority for states and EPA to implement a permitting program for the CCR regulation so the justification for EPA not removing the above substantive provisions of the CCR regulation no longer exists.

The attached table summarizes the regulation sections, types of CCR units affected, and triggering occurrences.

Requested Regulation Revisions

Remove the onerous six-month cessation requirement on the placement of CCRs.

Remove non-CCR waste streams from the regulation section.

Remove the illusory alternative requirement.

Provide that the permitting authority (state or EPA, under WIIN) should work with the owner/operator of the affected CCR unit to determine an appropriate course for corrective action and schedule going forward.

**Summary of Requirements for Six-Month Cessation
of Placing CCR and Non-CCR Waste Streams in a CCR Unit**

CCR Regulation Section	Type of CCR Unit	Occurrence	257.103 Alternative
257.101(a)(1)	Existing Unlined Impoundment	Groundwater Monitoring Concentration	Available; But Must Meet Qualifications
257.101(b)(1)	Existing Impoundment	Location Standard Demonstration	Available; But Must Meet Qualifications
257.101(b)(2)	Existing Impoundment	Safety Factor Assessment	Not Available
257.101(c)(1)	New Impoundment	Safety Factor Assessment	Not Available
257.101(d)(1)	Existing Landfill	Location Restriction Determination	Available; But Must Meet Qualifications

Summary of the 257.101 and 257.103 Regulatory Language

- Except if a section 257.103 alternative can be met (if available under the regulation), if an owner/operator of an applicable type of CCR unit determines that it cannot meet a specified requirement or schedule, the owner/operator must within six months of the determination cease placing CCR and non-CCR waste Streams in the CCR unit, and then must close (or retrofit where allowed) the CCR unit.
- Under the section 257.103 alternative, the owner/operator may continue to receive CCR in the CCR unit (if the alternative is available for the particular occurrence), but only if all conditions for either of two specific options are met:
 - “No alternative CCR disposal capacity” option: To qualify, the owner/operator must show that there is no alternative disposal capacity available on-site or off-site. An increase in cost or inconvenience of other existing capacity cannot be used to support qualification. This option has a five-year limit.
 - “Permanent cessation of a coal-fired boiler(s) by a date certain” option: To qualify, the owner/operator must show that there is no alternative disposal capacity available on-site or off-site. An increase in cost or inconvenience of other existing capacity cannot be used to support qualification. This option requires that the coal-fired unit must cease operation by a date specified in the regulation, and the impoundment or landfill must complete closure by a date specified in the regulation.

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ISSUE:

Effluent Limitation Guidelines (ELGs) for Steam Electric Power Generating Regulation
 ELG rule, 40 CFR 423, was published at 80 FR 67837-67903 (November 3, 2015) and became effective January 4, 2016.

RESPONSIBLE AGENCY:

United States Environmental Protection Agency (EPA)

IMMEDIATE ACTION REQUESTED:

Issuance of immediate guidance to all states requiring an extension of the ELGs deadline for indirect and direct dischargers to enable newly appointed EPA staff sufficient time to evaluate the validity and impact of this substantial regulation.

THE PROBLEM: The ELG rule imposes excessively harsh discharge water requirements for all power plants. The new ELG standards are more stringent than those currently in place for drinking water. To avoid unnecessary waste of resources and compliance costs, a temporary stay is necessary. If the requirements for ELG are not revised, many electric generating units, which were not part of the EPA baseline study, may be forced to cease operation resulting in higher electric rates to customers and loss of employment.

SPECIFICS: As an example, consider Lakeland Electric (LE), a municipal utility in Lakeland, Florida with an active coal-fired power plant, McIntosh Power Plant (MPP) Unit 3, that is an **indirect discharger** with an estimated \$6 to \$10 million cost to comply with the ELG rule.

- **Unnecessary Additional Compliance** – MPP Unit 3 wastewater is treated onsite in accordance with the discharge permit issued by the Publicly-Owned Treatment Works (POTW) before being discharged. The POTW then routes the wastewater through a staged wetland treatment system and carefully monitors the water quality before discharging to the environment in accordance with its NPDES permit. All surface water quality requirements are already consistently met.
- **Biased compliance schedule** – *Indirect dischargers must be compliant by November 1, 2018.* However, direct dischargers have until December 2023 to attain compliance. Both direct and indirect dischargers should have same compliance schedule in a revised rule.
- **Environmental Impact** – The impact occurs at the POTW's discharge point and from plants that directly discharge to the environment. ELG should not impose harsh treatment standards on indirect dischargers because the plants are not discharging to environment. POTW provides additional treatment, is accountable for water quality at its discharge point, and has authority to regulate upstream discharges into its system in order to insure downstream compliance (environmental impact).
- **Excessive Quality Thresholds** – ELG rule is an industrial wastewater standard that requires drinking water quality standards thereby causing LE to immediately spend \$6-\$10 million to comply.

Contaminant	Drinking Water Limit Mg/L	ELG 1 Day Limit Mg/L	ELG 30 Day Limit Mg/L
Mercury	0.002	0.000788	0.000356
Arsenic	0.01	0.011	0.008
Nitrate/Nitrite as Nitrogen	10	17	4.4
Selenium	0.05	0.023	0.012