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U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW
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By E-mail to Regulations.gov

Re: Proposed Repeal of Clean Power Plan
Docket No. EPA–HQ–OAR–2017–0355

Ladies and gentlemen:

These comments are submitted on behalf of the labor union members of Unions for Jobs and Environmental Progress (UJEP), identified below.

Background

We appreciate EPA's invitation to comment on the proposed repeal of the Clean Power Plan. 82 Fed. Reg. 48,035, October 16, 2017. UJEP member unions represent workers from the electric utility, mining, rail, and construction sectors. We have participated for many years in various EPA rulemaking proceedings, including those related to ozone standards and ozone transport, new source performance standards, the MATS rule, and the Clean Power Plan. Our members have engaged the international climate change

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UJEP is an ad hoc association of labor unions involved in energy production and use, transportation, engineering, and construction. Our members are: International Association of Bridge, Structural, Ornamental and Reinforcing Iron Workers Union; International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers and Helpers; International Brotherhood of Electrical Workers; International Brotherhood of Teamsters; SMART Transportation Division; Transportation • Communications International Union - IAM; United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of the United States and Canada; United Mine Workers of America, and Utility Workers Union of America. For more information about us, visit www.ujep4jobs.org.

debate through the UN FCCC process, and through involvement with domestic climate legislation.

The Clean Air Act has been labor's friend when it balances environmental regulation with creating jobs, such as retrofitting scrubbers and SCRs. But it has not been our friend when its implementation does not take into consideration job impacts and threatens mine and plant closures. This is plainly the case with the Clean Power Plan, which deliberately sought a transformational shift in the balance of energy markets away from coal and toward increased natural gas and renewables generation.

UJEP Supports Repeal of the CPP

UJEP members support EPA's proposed repeal of the CPP for two reasons: first, the rule itself was illegal because it overstepped the bounds of EPA's authority under the Clean Air Act - a position affirmed in principle by the Supreme Court's February 9, 2016, orders staying implementation the rule; and second, because the rule would lead to the large-scale elimination of the nation's coal mining jobs and related electric utility coal generation. We cannot accept these devastating consequences for our members and their families and communities when EPA itself admitted that the rule would have little or no measurable impact on global climate change.[1]

The proposed repeal rule recognizes the adverse job impacts anticipated with the CPP, and finds that repeal of the CPP would mitigate these impacts:

> Also expected, as a result of the CPP, were shifts in regional workforces, particularly in the electricity, coal, and natural gas sectors. While employment effects are not experienced uniformly across the population and may be offset by new opportunities in different sectors, localized impacts could have adversely affected individuals and their communities. Workers losing jobs in regions or occupations with weak labor markets would have been most vulnerable. With limited re-employment opportunities, or if new employment offered lower earnings, then unemployed workers could face extended periods without work, or permanently reduced future earnings. In addition, past research has suggested that involuntary job loss may increase risks to health, of substance abuse, and even of mortality. These adverse impacts may be avoided with the proposed repeal of the CPP. 82 Fed. Reg. 48,049.

[1] *See*, EPA, Regulatory Impact Analysis for the Clean Power Plan Final Rule, EPA-452/R-15-003, August 2015 at Table ES-6 (climate-related benefits estimated using a social cost of carbon per ton of CO2 reduced, with no estimates of global temperature or sea level impacts.)

For the reasons discussed below, we agree with EPA's proposal to repeal the Clean Power Plan in its entirety based on the legal conclusion that "the CPP exceeds EPA's statutory authority" to regulate CO_2 emissions from existing fossil-fueled power plants under section 111(d) of the Clean Air Act (CAA).[2]

EPA lacks the legal authority to require States to set CO_2 performance standards based on beyond the fence measures

The proposed repeal rule provides a detailed analysis of EPA's Clean Air Act authority based on the following considerations: the statutory text in section 111(d) of the CAA; the legislative history of this provision; prior agency practice in setting performance standards based on physical or operational measures that can be taken at individual sources; the broader statutory context on the limitations of setting performance standards under other Clean Air Act regulatory programs; and the policy concerns of establishing performance standards that have transformational economic and energy effects.

The core legal argument against the approach to 111(d) regulation embodied in the Clean Power Plan is aptly summarized by the proposed repeal rule:

> (A)ll of the EPA's other CAA section 111 regulations are based on a (Best System of Emission Reduction) consisting of technological or operational measures that can be applied to or at a single source. The CPP departed from this practice by instead setting carbon dioxide (CO2) emission guidelines for existing power plants that can only realistically be effected by measures that cannot be employed to, for, or at a particular source. Instead, the CPP encompassed measures that would generally require power generators to change their energy portfolios through generation-shifting (rather than better equipping or operating their existing plants), including through the creation or subsidization of significant amounts of generation from power sources entirely outside the regulated source categories, such as solar and wind energy. 82 Fed. Reg. 48,037 (footnote omitted).

The agency's legal analysis provides compelling grounds for repeal of the rule. We particularly object to EPA's use of generating shifting measures under building blocks 2 and 3 of the rule - effectively mandating that utilities switch from coal to natural gas and expand their reliance on renewable energy. Solar and wind power are not even regulated under the Clean Air Act, and do not emit any of the pollutants subject to section 111(d) of the Act.

[2] 82 Fed. Reg. 48,035 (October 16, 2017).

The proposed repeal rule mirrors our opposition to the "outside the fence" measures called for by the CPP, finding that generation shifting is inconsistent with the requirement that controls be applied "to or at" the source:

> (T)he EPA proposes that the BSER be limited to measures that physically or operationally can be applied to or at the source itself to reduce its emissions. Generation shifting—which accounts for a significant percentage of the emissions reductions projected in the CPP and without which individual sources could not meet the CPP's requirements—fails to comply with this limitation. Accordingly, the EPA proposes to repeal the CPP. 82 Fed. Reg. 48,042.

By the same token, we support EPA's interpretation of its authority under the Clean Air Act as being limited to controls that can be applied *to* or *at* an individual source subject to regulation:

> After reconsidering the statutory text, context, and legislative history, and in consideration of the EPA's historical practice under CAA section 111 as reflected in its other existing CAA section 111 regulations, the Agency proposes to return to a reading of CAA section 111(a)(1) (and its constituent term, "best system of emission reduction") as being limited to emission reduction measures that can be *applied to or at* an individual stationary source. That is, such measures must be based on a physical or operational change to a building, structure, facility, or installation at that source, rather than measures that the source's owner or operator *can implement on behalf of* the source at another location. 82 Fed. Reg. 48,039 (emphasis in original).

Leaving aside the issue of whether EPA has authority to set performance standards based on beyond-the-fence measures, there are strong public policy grounds to adhere to EPA's prior practice of setting performance standards based only on physical or operational measures that can be taken at or applied to individual sources. It is not just illegal but also flawed public policy for EPA to adopt a rule that dictates to states their future energy mixes, and picks "winners and losers" as the CPP plainly does. The CPP sought to achieve a transformational change in the nation's electric supply system by largely eliminating coal in favor of natural gas and renewable energy. This is not a legitimate role for EPA – it is well outside its legal authority under the Clean Air Act and beyond its area of technical expertise.

Severability of Building Block 1 inside the fence measures

EPA's proposal to repeal the Clean Power in its entirety is based in part on the determination that the energy efficiency measures under building block 1 are not "severable and separately implementable" with the proposed invalidation of the

generation shifting measures under building blocks 2 and 3 of the rule. In particular, EPA concludes in its proposal that the rule's building block 1 measures do not "stand on their own" and therefore cannot be effectively implemented due to the "rebound effect" that would result once EPA repeals building blocks 2 and 3. This rebound effect would result from the projected increase in CO_2 emissions due to the improved competitiveness and increased generation by coal plants implementing heat rate improvements under building block 1.

We agree with EPA that it is appropriate to repeal the rule in its entirety, instead of revising the rule to require CO_2 performance standards based only on building block 1 efficiency measures. However, EPA's legal basis for repealing the Clean Power rule in its entirety should not be based solely on a conclusion that building block 1 is not severable and separately implementable due to a "rebound effect."

The objective of section 111(d) is not to achieve specific emission reduction goals or levels for individual sources or the source category as a whole. Rather, the statute establishes a technology-based regulatory program that requires states to impose on affected sources standards of performance that reflect the "best system of emission reduction" – without regard to the amount of emission reductions that can be gained by the application of those performance standards.

We therefore believe that a total repeal of the Clean Power Plan rule is necessary because building blocks 2 and 3 exceed EPA's statutory authority, and because building block 1 is fatally flawed due to serious technical shortcomings in the EPA analysis.[3] The 4% efficiency improvement called for by building block 1 is simply not achievable by most power plants. Many plants already have optimized their efficiency in the course of retrofits needed to comply with other EPA regulations such as the 2005 CAIR rule, the 2012 mercury MATS rule, and the 2011 and 2016 Cross State Air Pollution rules. EPA should develop a separate legal basis for repealing the building block 1 measures included in the rule, independent of the rebound effect cited in the proposal. This legal basis should be premised on the major technical flaws inherent in EPA's analysis for establishing building block 1 control measures.

[3] The December 17, 2017, ANPRM for a potential replacement rule calls for comment on technical deficiencies in the studies and other methods that EPA relied upon in setting the standards for building block 1; our comments on that proposal will address this issue in more detail.

Replacement of the Clean Power Plan

In the preamble to the proposed repeal rule, EPA noted that it plans to issue an advanced notice of proposed rulemaking (ANPRM) on whether it should adopt a new rule to replace the Clean Power rule. EPA issued this ANPRM on December 17, 2017, calling, *inter alia,* for comments on the design of a replacement rule that would respect the agency's prior practice of issuing emission control regulations under section 111(d) based on controls that can be applied to or at an individual source.

We strongly support the adoption of a replacement rule if EPA repeals the Clean Power rule - an effective and workable replacement rule that is consistent with Clean Air statutory requirements. A replacement rule should give states the primary authority to implement unit-by-unit standards of performance taking into account the flexibilities, such as remaining useful life of the unit, provided by section 111(d).

Reform of the New Source Review Program

EPA's proposed repeal of the Clean Power rule limits the regulatory focus of any future replacement rule to those on-site measures that can be applied to, at, or for a particular power plant. This means that the ability to implement heat rate improvements and other plant efficiency measures will be critical for maximizing the CO_2 emission reductions from existing power plants.

The complexity and arbitrariness of the current NSR plant modification rules are major deterrents for the power sector to invest in efficiency improvements that can achieve substantial additional CO_2 emission reductions. Easing this regulatory barrier should increase the CO_2 emission reductions achievable at existing power plants – both in general and as states implement a future replacement rule.

We note that the ANPRM for a potential replacement rule calls for comment on a number of issues related to NSR reform, and we intend to offer comments on this matter in our forthcoming comments on the ANPR.

Revisions to EPA's CPP Cost-Benefit Analyses

EPA initially estimated that the CPP would generate total climate and health-related benefits in the range of $18 billion to $86 billion by 2030, depending on the choice of discount rates for the social cost of carbon and health-related cobenefits.[4] Compliance

[4] *See*, EPA, Regulatory Impact Analysis for the Clean Power Plan Final Rule, EPA-452/R-

costs with the rule when fully implemented were estimated at $5.1 to $8.5 billion in 2030, depending upon the choice of a rate-based or mass-based compliance method.[5] Virtually all of the health-related benefits that EPA estimated for the CPP were based on the reduction of premature mortality due to reduced exposure to PM2.5, regardless of ambient concentration:

> Below are key assumptions underlying the estimates for PM2.5-related premature mortality, which accounts for 98 percent of the monetized PM2.5 health co-benefits:
> 1. We assume that all fine particles, regardless of their chemical composition, are equally potent in causing premature mortality. This is an important assumption, because PM2.5 varies considerably in composition across sources, but the scientific evidence is not yet sufficient to allow differentiation of effect estimates by particle type. The PM ISA concluded that "many constituents of PM2.5 can be linked with multiple health effects, and the evidence is not yet sufficient to allow differentiation of those constituents or sources that are more closely related to specific outcomes" (U.S. EPA, 2009b).
> 2. We assume that the health impact function for fine particles is log-linear without a threshold in this analysis. Thus, the estimates include health co-benefits from reducing fine particles in areas with varied concentrations of PM2.5, including both areas that do not meet the National Ambient Air Quality Standard for fine particles and those areas that are in attainment, down to the lowest modeled concentrations.[6]

The proposed CPP repeal rule and related Regulatory Impact Analysis (RIA) correctly take issue with EPA's previous estimates of the costs and benefits of the CPP, including its mass-based approach to assessment of PM2.5 cobenefits that ignores the relative toxicity of the thousands of chemical constituents of fine particulates. The principal components of PM2.5 attributable to electric utility emissions are sulfates and nitrates, both non-toxic soluble compounds.

The RIA seeks to estimate the foregone benefits of repeal using different metrics for climate and health-related benefits. Primary among these revisions are reduced social costs of carbon for estimating climate-related benefits, consistent with E.O. 12866, and adjustments to PM2.5 health-related benefits based upon three alternative exposure levels relative to the levels of the National Ambient Air Quality Standards.

15-003, August 2015 at Table ES-8 (mass-based implementation).
[5] *Id.*, at Tables ES-9, ES-10.
[6] *Id.*, at ES-18.

We agree in principle with the methodologies employed in the repeal RIA for estimating foregone climate and health-related benefits, including the use of alternative metrics for estimating health cobenefits from PM2.5, as a means to illustrate the uncertainties inherent in such estimates.

UJEP has previously raised questions about EPA's estimates of health-related cobenefits occurring at air quality levels below those the agency determined to be appropriate for setting the NAAQS.[7] By statute, the primary NAAQS are designed to be set at levels that protect even sensitive members of the population from any adverse health effects from exposure to ambient air pollution without regard to cost and with an adequate margin of safety. For this reason, the highest degree of confidence should be placed on the exposure estimates for air quality not meeting applicable NAAQS.

When PM2.5 cobenefits are measured at air quality levels not meeting the applicable NAAQS, the net benefits of the repeal rule are estimated at $7.1 to $12.6 billion at full implementation in 2030, taking into account avoided compliance costs of $14.4 billion.[8]

In addition, EPA notes that the agency relied upon now-stale data for its 2015 estimates of climate and health benefits related to reduced electric utility emissions, and did not account for the ongoing protections for public health provided by state and local air quality programs:

> (R)ecent changes in the electric power sector have affected expectations about the impact of the CPP since its supporting analysis was conducted in 2015. In general, current expectations about future emissions of pollution from the electric power sector without the CPP are lower than they were at the time the final CPP

[7] For example, UJEP's May 8, 2017 comments submitted in response to E.O. 13777 addressed the use of PM2.5 health co-benefits in EPA's 2012 MATS rule, and recommended that benefits be estimated for exposures down to, but not below, the applicable NAAQS: "Models that EPA relied on in the MATS rule estimated premature mortality benefits associated with exposure to PM2.5 at ambient concentrations below the annual PM2.5 standard, extending below background levels. EPA's RIA for the Proposed MATS rule shows that all of the premature mortality cobenefits estimated for PM2.5 reductions occur in areas meeting the then-current annual standard of 15 ug/m3, with the vast majority in areas meeting the current standard of 12 ug/m3. ... EPA should impose analytical consistency to its NAAQS standard-setting process and its regulatory impact analyses by eliminating any cobenefit reductions measured at ambient air quality levels below applicable NAAQS."

[8] 82 Fed. Red. 48,047 (Table 5).

was analyzed. Relative to its 2015 projections of the electric power sector, the EIA's 2017 AEO forecasts lower future emissions levels without the CPP. Specifically, in AEO2017, the forecast for NOx emissions from the electric power sector in 2030 without the CPP is approximately 27 percent lower than the analogous forecast in AEO2015. The forecast for SO2 emissions from the electric power sector in 2030 is 6 percent lower in AEO2017 than in AEO2015. Therefore, there is significant uncertainty as to the current applicability of results from the 2015 CPP analysis, including the assessment (of) human health benefits.

Furthermore, the proposed action does not affect the level of public health and environmental protection already being provided by existing NAAQS and other mechanisms in the CAA. This proposed action does not affect applicable local, state, or federal permitting or air quality management programs that will continue to address areas with degraded air quality and maintain the air quality in areas meeting current standards. Areas that need to reduce criteria air pollution to meet the NAAQS will still need to rely on control strategies to reduce emissions.[9]

It also should be noted that CO2 emissions from coal and natural gas electric utility units have declined overall by 22% since 2005,[10] meaning that more than two-thirds of the CO2 emission reductions sought by the CPP already have been achieved before the rule took effect. Most of these reductions are due to the impact of lower natural gas prices and MATS compliance costs on the retirement of older and smaller coal-based units.[11]

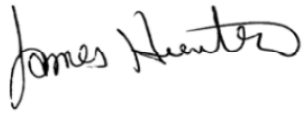
Conclusion

UJEP intends to submit comments, individually or collectively, on the various rules that EPA will be reviewing pursuant to Executive Order 13777. We view complete repeal of the CPP, and promulgation of a replacement rule consistent with the requirements of the Clean Air Act, as essential first steps to preserve fuel diversity and to protect reliability and existing jobs, while creating opportunities for new, well-paying jobs in the electric generation, mining, and rail transport sectors.

[9] 82 Fed. Reg. 48,048.
[10] Data for 2005 to 2016 from EPA/CAMD (all coal and natural gas acid rain units), as of November 1, 2017.
[11] DOE/EIA reports that "(s)ince 2002, the electricity industry retired more than 53 GW of coal capacity, most of which were older, smaller, relatively inefficient coal-fired generating units. EIA, *Today in Energy*, February 27, 2017. Supporting data show that the largest numbers of retirements occurred in the 2012-2016 period, coinciding with the decline of natural gas prices and compliance with the MATS rule.

We will appreciate EPA's consideration of our views, and would welcome the opportunity to meet with EPA to discuss these comments in greater detail.

Sincerely,



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