

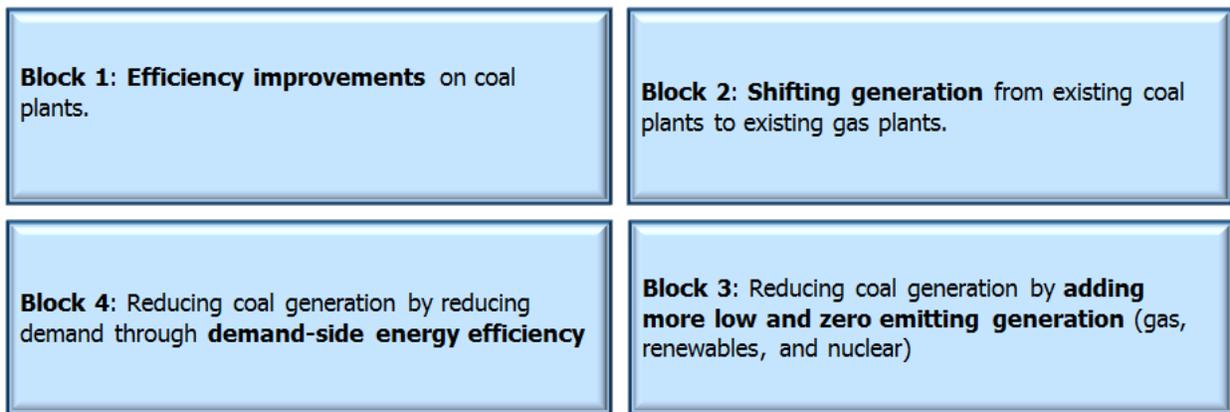


EPA’s “Clean Power Plan” Proposed Rule to Reduce Carbon Emissions at Existing Power Plants 12/1/14

BACKGROUND AND SUMMARY OF PROPOSAL

In June 2013, President Obama directed the Environmental Protection Agency (EPA) to use the Clean Air Act (CAA) to reduce carbon emissions at existing power plants. On June 2, 2014, EPA released its “Clean Power Plan,” proposed guidelines to be used by states to achieve an overall 30 percent emission reduction from 2005 levels by 2030. EPA relies on § 111(d) of the CAA as authority to do this.

The “[Clean Power Plan](#)” proposes state-specific carbon emission reduction goals and describes how it calculated those goals. Each state’s goal is an output-based emissions rate (CO₂ lbs/adjusted MWh) based on 2012 emissions and generation. EPA identified four sets of measures or “building blocks” that together make up the best system of emission reduction (BSER) for reducing carbon pollution under § 111(d).

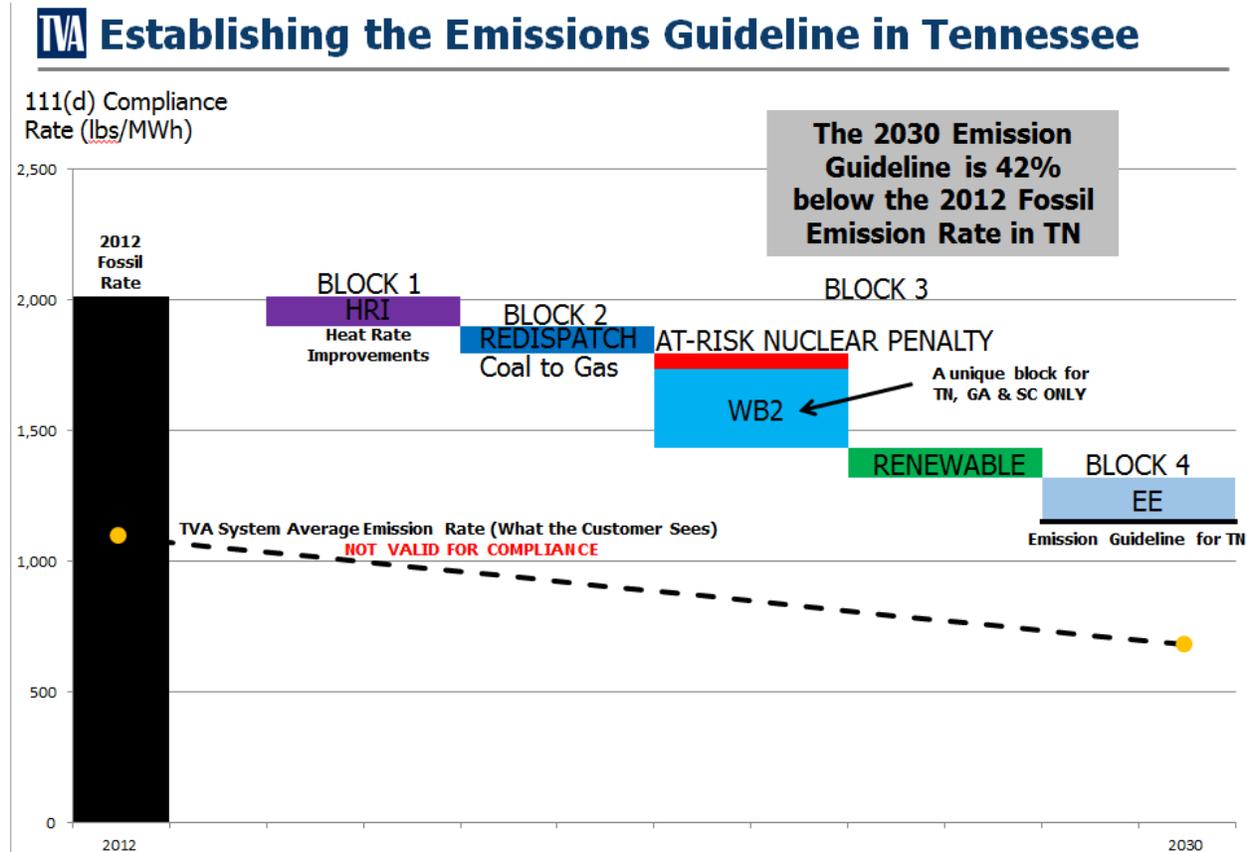


Each state’s emission reduction level is calculated by applying these four BSER building blocks to 2012 fossil emissions and generation. EPA is proposing an “interim goal” that a state must meet on average over the 10-year period from 2020-2029 and a “final goal” that a state must meet at the end of that period in 2030 and thereafter based on a 3-year average. EPA is seeking input on a variety of measures that could adjust these emission goals or the ultimate stringency of the rule. States must develop plans to meet their goals for EPA approval, but EPA technically is not prescribing a specific set of measures that states must include in their plans. EPA asserts that states have flexibility on how to use these measures to achieve emissions reductions equivalent to the goal.

Stringency of Rule on the Valley

EPA has determined that the proposed Clean Power Plan will reduce power plant carbon emission by 25-30% below 2005 levels by 2030. TVA has achieved this already. In response to directions from its Board, TVA has been investing in cleaner energy resources and retiring coal-fired generation across its power system. Due to these investments and lower demand for electricity on its system, TVA achieved a 30% carbon emission reduction from 2005 levels in 2013. As a result, TVA should be well positioned to comply with the proposed rule. However, as it is structured, the proposal not only ignores earlier emission reductions, but handicaps some of the states in which those reductions have been made. This

occurs in part because the rule's baseline from which compliance is measured is not 2005, but 2012. Early actions taken since 2005 are being used to justify more stringent emission guidelines in states where those actions occurred. Shown below is an example for the State of Tennessee showing EPA's use of these building blocks to set the emission guidelines. Watts Bar Nuclear Unit 2, TVA's under-construction nuclear unit, is the largest component in setting the Tennessee guideline.



The rule is highly variable among states. Across our service area, Tennessee and Mississippi have the sharpest reduction goals at 42%, Alabama must achieve a 30% reduction, and Kentucky must achieve a 19% reduction from 2012 fossil emission rates. TVA and others have pressed EPA to better explain several critical features of the rule to better assess the impacts of the rule and enable more thoughtful engagement.

EPA, on November 3, released additional information on certain aspects of the rule and then, on November 6, issued information to describe how States can translate the emission rate levels (tons of CO₂/MWh) in the proposed rule to equivalent mass-based tonnage requirements (tons of CO₂). TVA included its comments on the NODA and rate-to-mass guidance in the full comment document submitted on December 1st.

TVA Actions

- TVA submitted a joint nuclear letter to EPA along with the other owners of the nation's five new nuclear units under construction in Tennessee, Georgia and South Carolina stating that EPA's

proposed rule is flawed in its approach to this carbon-free generation and results in more stringent requirements that are unique to the Southeast.

- TVA submitted comments to EPA on the proposed Clean Power Plan on December 1, 2014, after discussions with our customers, stakeholders and regulatory officials.

TVA Issues Included in Comments

- TVA and its customers have invested over \$4 billion and continue to invest in Watts Bar Nuclear Unit 2, which accounts for nearly one-third of Tennessee's emission rate reduction goal. Rather than giving Tennessee and TVA additional compliance flexibility, TVA's forward-looking investment in carbon-free generation is being used to set a more stringent standard for Tennessee. EPA is proposing to include this under-construction generation in Tennessee's emission reduction goal; thereby, significantly increasing the stringency of the goal. Penalizing such early actions is bad environmental policy.
- EPA has set state-by-state emission goals, but electricity is not confined by state lines. TVA and many other utilities plan and operate generating assets on a multi-state system-wide basis, not state-by-state. EPA responds that states can agree to join multi-state plans, but doing that likely will be unworkable for most states and regions.
- EPA does not give any credit for early actions before 2012 but continues to measure reductions from 2005 levels. TVA reduced its carbon emissions over 20% between 2005 and 2012.
- The emission rate goals in the proposed rule are front-loaded, meaning that the reduction required to meet EPA's initial 2020 compliance date is daunting. There is insufficient time to achieve the proposed emission rate by 2020 due to the state planning and subsequent actions that must take place between now and 2020.
- Shifting generation from coal-fired plants to natural gas plants and increasing generation from renewable energy resources are used by EPA to reduce emissions in its building blocks, but these adversely impact the reliability of the electric transmission grid. The 2020 interim compliance date does not provide states or utilities sufficient time to address these impacts.

TVA has been taking the actions that will enable it to achieve the 30% reduction goal of EPA's Clean Power Plan. It has done this in an economically-sensible way that does not threaten its mission to continue to provide the public affordable and reliable electricity. Unfortunately, the structure of the rule not only ignores those actions, but relies on them to make the rule more stringent in states served by TVA. This unnecessarily and unfairly increases the cost impact on TVA's customers and threatens TVA's ability to continue to provide reliable electric service.

EPA expects to issue a final rule in June 2015 and is expected to make some modifications to the rule before this date in response to comments on the proposed rule.