

THIRD WAY TAKE Published March 6, 2015 · 3 minute read

EPA's Math on Nuclear in Greenhouse Gas Rule Doesn't Add Up





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There has been a lot of clamor about the Environmental Protection Agency's (EPA) proposed regulation of greenhouse gases, and a lot of it has been just that—clamor. But one area has been controversial for good reason: the EPA missed the mark on nuclear energy. The EPA must move quickly to fix this mistake by treating zero emission nuclear power the same way it treats every other zero-carbon energy source. Nuclear power is the largest source of emissions-free generation in the United States. In 2013, the nation's 99 operating nuclear plants provided more than 63% of the country's emissions-free electricity.

As it is currently written, the EPA's rule will end up discouraging the construction and use of new nuclear energy. That's because the rule treats new nuclear power plants that are currently under construction at Watts Bar, Vogtle, and Summer as though they were already in existence. This might make sense on paper—it's not as though these plants are at risk of cancellation. But in the real world, it sends a signal to utilities that they should defer construction until after the EPA's rule takes effect in 2020. By waiting, the utilities would

ensure that they receive full credit from the EPA for the zero-carbon electricity the reactors generate when they are turned on. This is inconsistent with both the rule's goal of reducing carbon emissions and also with the fact that other zero-carbon technologies covered by the rule are not similarly discounted.

Unfortunately, the EPA's proposed rule does not treat existing nuclear plants already in operation much better than it treats plants that are under construction. For reasons that are not entirely clear, EPA "counts" 5.8 percent of each state's nuclear capacity as "at risk" of closure. This is a fairly technical area, but the bottom line is that, as the rule is currently written, any state can shut down a nuclear power plant (like Vermont did recently, closing the 600-megawatt Vermont Yankee plant) and replace the vast majority of it with new gas or coal and see no greenhouse gas regulatory penalties. This is because the replacement megawatts minus 5.8% of it—is held to a different standard, the one that applies to new generation. Translation? As long as a state replaces 5.8 percent of the megawattage from a shuttered nuclear plant with a zero or low-emission source, the rest of the new generation can be carbon-intensive fossil energy without penalty. And so, where nuclear closures are concerned, it's perfectly possible and indeed predictable that emissions will go up, not down, under this rule. This makes absolutely no sense for a regulation that's sole purpose is to reduce greenhouse gas emissions.

States should have to meet the goals of the regulation—emissions reductions—by actually reducing emissions, not just meeting formulaic goals. The EPA should fix its proposal and treat all emissions—free generation the same by including 100 percent of the nuclear capacity generation in the formula it uses to determine the baseline emissions reduction each state needs to meet.

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