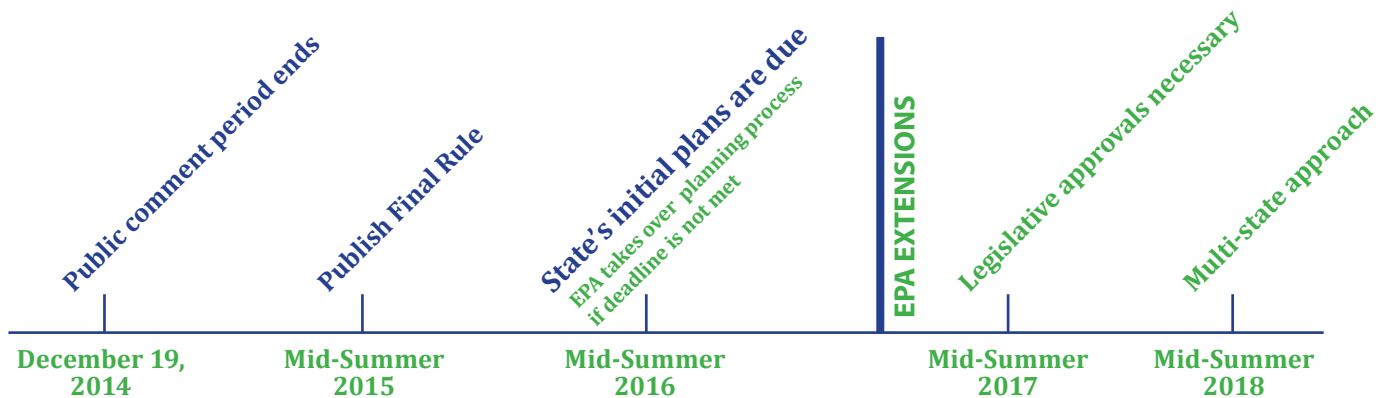


EPA'S GOAL: By 2030, the U.S. power sector will emit 30% less CO₂ than it did in 2005.

THE ISSUE

The Environmental Protection Agency (EPA) announced on June 2, 2014 new proposed rules that require states to develop plans to reduce carbon dioxide (CO₂) from existing fossil fuel-fired power plants. States have until mid-summer 2016 to submit implementation plans, although EPA may extend the deadline to mid-summer 2017 with appropriate justification, and to mid-summer 2018 for states undertaking a multi-state approach for achieving compliance. EPA has the authority to finalize and implement a federal implementation plan in states that do not develop their own state plans. EPA plans to propose such a plan in mid-summer 2015.



CHALLENGES FOR ARIZONA

Nationwide Goal: The nationwide CO₂ emissions reduction goal is 30 percent less than 2005 emission levels, but EPA's proposal required Arizona to have the **second highest goal** in the country at 52 percent reduction from a 2012 baseline. Our goal also excludes the Navajo Generating Station. EPA calculated individual state goals by looking at the state's mix of existing power sources and its ability to reduce CO₂ levels using a combination of measures – "building blocks." The proposed rules would require Arizona to reduce its carbon intensity to 702 lbs/Mega-Watt-hours (MGh) by 2030.

Interim Goal: EPA's goal calculation methodology assumes the complete retirement of all Arizona coal-fired power plants before the start of the compliance period beginning on January 1, 2020. The interim goal is an average emission rate of 735 lb/MW-hr during the period of 2020 through 2030. The additional emissions rate reduction is expected to be accomplished by a gradual increase in renewable energy generation and energy efficiency savings.

ARIZONA GOAL:

702

CO₂ emissions (lbs)

state electricity
generation (MWh)

2012 Baseline:

1453 lbs/MWh

BUILDING BLOCKS

0%

Increase efficiency of existing fossil fuel power plants through equipment upgrades and process improvements.

77%

Expand use of low-emitting power sources, such as natural gas.

10%

Use more zero- and low-emitting power sources, such as solar, wind and nuclear power.

13%

Increase energy efficiency and reduce energy demand.

Rising energy demand amid a growing population:

As one of the fastest growing states in the nation, Arizona must be realistic about meeting future energy demands. Lack of reliable, affordable and stable electricity production, transmission and availability for cooling needs is an immediate risk to the health and safety of Arizona's citizens.

WHAT WE ARE DOING RIGHT

Reduced Emissions: Since 2005, power plants in the western interconnect collectively have reduced emissions of nitrogen oxides by more than 50 percent and sulfur dioxide by more than 35 percent. Carbon dioxide emissions also are slightly lower despite the population increase in the U.S. South and West.

Solar Energy: Arizona ranks second in the nation in installed solar capacity and Arizona solar resources, with nearly 2,000 MW of installed capacity, power more than 250,000 homes in the Southwest.

Renewable Energy Sources: Due to prudent planning by the Arizona Corporation Commission (ACC), regulated Arizona utilities are required to meet 15 percent of their retail electric load from renewable energy sources by 2025.

Energy Efficiency Goals: EPA's proposal recognizes Arizona as being among the leading states for both energy efficiency standards and actual performance.

THE ADEQ APPROACH

Partnerships: On December 1, 2014, ADEQ in concert with Arizona's utilities, recommended that EPA modify the national goal calculus to allow newer, more efficient coal-fired power plants to continue serving base load after 2030. The proposal would resolve issues related to stranded assets due to early retirement while ensuring Arizona's continued ability to meet high summer energy demands. Specifically:

- Facilities 40 years old and younger on January 1, 2030, would not be eligible for redispatch under BB2
- Facilities that invest in expensive air pollution controls like Selective Catalytic Reduction or Bag Houses or Flue Gas Desulfurization would have 20 years to recover the cost of control
- There would be a more gradual phase-in of the redispatching requirements under BB2
- The program would give states the ability to set their own interim goals on the path to the final goal

Possible Legal Challenge: ADEQ's comments preserved its right to legally challenge the authority of EPA to set CO₂ emission reduction goals for the states.

QUESTIONS

What kind of plan should Arizona pursue?

- Multi-state or State & Tribal
- Modular Hybrid Plan
- State-only
- Utility portfolio
- Facility only
- Power consumers

What kind of complexity does Arizona want?

- CO₂ cap (mass based)
- Carbon emission rate based (lb/MW-hr)
- Multi-sector rules that consider and credit renewable energy production and energy efficiency standards
- Other

What legislative support is needed?: During the First Regular Session of the 52nd Legislature, ADEQ secured express legislative authorization in S.B. 1007 to develop, adopt and enforce a state 111(d) plan in response to EPA's final 111(d) rules in consultation with the ACC and electric utilities. EPA's final 111(d) rules are expected in mid-summer 2015. The bill also established a six-member joint legislative committee that will review ADEQ's proposed plan prior to its submission.



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