

Implications of EPA's Clean Power Plan for U.S. Power Sector

EPA'S Goal: By 2030

*The EPA announced on June 2, 2014 new proposed rules under **Section 111d of the Clean Air Act** that require states to develop plans to reduce carbon dioxide (CO₂) from existing fossil fuel fired power plants. EPA's proposal will result in the closure of older less efficient coal and oil power plants owned by utilities and electric cooperatives throughout the country and it encourages renewable energy and natural gas fired power generation.*

AZ's Goal from EPA: By 2020 (interim goal) and by 2030 (final goal)

*The nationwide CO₂ emission reduction goal is 30% below 2005 emission levels. The EPA plan developed specifically for AZ sets the **second highest goal** in the country at **52% reduction** of CO₂ emissions. In addition, at least 77% of the 2030 goal will have to be achieved by 2020 (i.e. interim goal).*

*Arizona will begin to implement their plan in June 2017, but has very little flexibility in achieving the 52% reduction contemplated by EPA. EPA envisions Arizona can achieve its goal by shutting down all operating coal plants in the state by 2020 and ramping up all operating natural gas plants to 70% capacity. As you would expect, full implementation of EPA's proposed rule could undermine the reliability of the grid in Arizona and is infeasible without the addition of new resources. Consequently, AZ is in need of a **solution** to EPA's interim and final goals of the Clean Power Plan.*

SunZia and Bowie Power Station: Solutions to EPA's Goal for AZ

*The Clean Power Plan allows for proactive engagement of all stakeholders to help find a solution for achieving EPA's goals. Bowie Power and SunZia Southwest Transmission have been actively engaged and have suggested that Arizona consider importing renewable generation through SunZia's transmission line and commencing operation of Bowie Power Station which will use natural gas. Both projects, once in operation, would immediately offset CO₂ emissions from Arizona's old, polluting and inefficient coal and oil plants. One of SunZia's 1500 MW transmission lines importing renewable wind generation from New Mexico could reduce Arizona's state-wide emission rate by 30%; and one 500 MW block of Bowie Power Station could reduce the CO₂ emission rates by 10%. Doubling Bowie and SunZia to their full build-out capacity of 1000MW and 3000MW, respectively, would allow AZ to achieve nearly **80% of EPA's Clean Power Plan**. These projects are optimally designed to support AZ in meeting EPA's vision of the nation providing reliable, affordable, clean and stable electricity to consumers.*