

REDUCING GREENHOUSE GASES, SAFEGUARDING RELIABILITY AND PROTECTING OUR CUSTOMERS

EPA HAS A PROPOSAL; AMEREN'S PLAN REDUCES EMISSIONS AND PROTECTS CUSTOMERS WHILE ENSURING THE ELECTRIC GRID WE RELY ON STAYS DEPENDABLE.

In June 2014, the U.S. Environmental Protection Agency (EPA) proposed a Clean Power Plan that calls on U.S. electric utilities to reduce carbon dioxide (CO₂) emissions by 30% (below 2005 levels) from existing power plants by 2030. If implemented as-is, Ameren estimates the EPA proposal will cause our Missouri customers to shoulder \$4 billion in additional costs and raise system reliability risks in Missouri, Illinois and other regions.

For decades, Ameren has been reducing emissions from our generation fleet. We also have expanded use of renewable energy including hydropower, solar, landfill gas and wind. Ameren Missouri has developed a **better** Transition Plan that ultimately meets EPA's 30% CO₂ reduction targets while minimizing the rate impact on customers and protecting jobs, the economy and ensuring system reliability.

CURRENT EPA CLEAN POWER PROPOSAL:

- » Unnecessarily costly and unworkable in several technical and legal respects
- » Raises system reliability risks
- » Aims for 30% cut in CO₂ by 2030; aggressive interim targets are based on flawed assumptions that require Ameren Missouri to achieve over 60% of the 2030 target by 2020
- » Imposes impractical requirements upon utilities & customers, forcing construction of not-yet-needed gas plants
- » Front-loads costs for new generation so customers pay more, sooner; would cost average Missouri customer up to 4x the cost of the Ameren Transition Plan

AMEREN TRANSITION PLAN:

- » Achievable and responsible
- » Ensures dependable energy to power our customers' quality of life
- » Accomplishes EPA's 30% reduction in annual CO₂ emissions by 2035, only a 5-year-longer timeframe
- » Optimizes use of existing, low-cost generation resources through their normal life expectancy
- » Minimizes financial burden on customers—saves \$4 billion; critically important for low- and fixed-income customers who can least afford price increases

TO SAVE MISSOURI CUSTOMERS \$4 BILLION AND ENSURE RELIABILITY, AMEREN URGES SIMPLE MODIFICATIONS TO EPA'S PROPOSAL

We believe the goal of reducing CO₂ emissions by 30% while maintaining the dependability of the electric grid can be achieved if three important changes are made:

ELIMINATE INTERIM REQUIREMENTS

EPA prescribes aggressive interim emission reductions starting in 2020. To reduce the cost of the rule while ensuring reliability, EPA should eliminate the interim targets and give states the flexibility to adopt interim milestones as appropriate.

PROVIDE CREDIT FOR PLANT RETIREMENTS

Unreplaced retired coal units should be treated as a zero-emitting resource (similar to how customer energy efficiency programs are treated).

EXTEND THE COMPLIANCE DATE

States should be given the flexibility to extend the compliance date to allow the orderly retirement of coal plants as states implement their transition plans.



TOO MUCH, TOO SOON: 2020 TARGETS CREATE MAJOR RELIABILITY CONCERNS

- » Closure of coal-fired energy centers will be accelerated to comply with EPA rules set to take effect between now and 2020.
- » Experts estimate that in just five years, the U.S. could lose more than one-third of its coal-fired generating fleet. Those sources generate enough electricity to power 57 million residential homes in America.
- » The grid operator in much of Ameren's service territory (MISO) has raised reliability concerns as a result of the stringent interim targets. The North American Electric Reliability Corporation and Southwest Power Pool also are raising reliability concerns.
- » Removal of the interim targets significantly reduces reliability concerns.

CONCLUSION: Because energy is an indispensable necessity, the reliability risks posed by the Clean Power Plan in its current form are not acceptable. The Clean Power Plan needs to be amended so the 2020 interim targets are removed.

For more information, visit AmerenMissouri.com/TransitionPlan



KEY ELEMENTS OF OUR 20-YEAR TRANSITION PLAN

Ameren is focused on responsibly transitioning to cleaner, more diverse generation sources while keeping energy affordable. Our Transition Plan was developed in conjunction with existing Missouri Integrated Resource Planning. Key elements include:



Continuing to offer valuable energy efficiency programs that encourage customers to consume less energy



Retiring coal units as they reach their normal end-of-life to minimize customer cost impacts



Expanding cleaner resources by building additional renewable power to meet customer demand



Further diversifying by building new natural-gas-fired generation



Extending operating license of Callaway Nuclear Energy Center, a reliable source of low-cost, carbon-free power, and maintaining options for more nuclear generation

CORE CHALLENGES WITH CURRENT EPA CLEAN POWER PLAN

EPA's proposal is currently unworkable in several technical and legal respects. It would raise system reliability risks and drive uneconomic actions resulting in rate increases to customers, along with job losses and damage to the economy. We will work constructively to implement energy policies that work for the long-term benefit of our customers, communities, region and environment.

TECHNICAL

ASSUMPTIONS

EPA assumes coal-fired plants can reduce emissions by an additional 6% (the average amount that EPA assumes a plant can reduce emissions through efficiency improvements).

EPA assumes that natural gas combined cycle plants (NGCC) can be dispatched at a 70% capacity factor.

EPA assumes each state would increase customer energy efficiency (EE) programs, resulting in an annual incremental reduction of electricity consumption of 1.5%.

FLAWS

Ameren's Missouri generation facilities already have implemented improvements and best practices that have significantly improved efficiency. Additional improvements to eke out minute efficiency increases of 1% or 2% would be extremely expensive.

States in Regional Transmission Operator (RTO) regions cannot ensure dispatch of NGCC plants at a 70% capacity factor because they do not control dispatch; RTOs do. In addition, it has not been determined that there is adequate natural gas pipeline capacity or electric transmission capacity to effect this dispatch.

Ameren Missouri has estimates of realistically achievable potential for customer EE projects that are much lower than EPA's unrealistic estimates. In addition, customer adoption of EE measures is beyond the control of states and utilities.

PROPOSED RESOLUTIONS

States should be provided discretion on setting power-plant-specific improvement targets based upon improvements that already have been made.

EPA should clearly state that projects to enhance plant efficiency do not increase emissions and, therefore, do not trigger potential permitting requirements under the Clean Air Act's New Source Review Program.

EPA should direct states in RTO regions to work with RTOs, utilities and pipelines to determine the level of dispatch that can be reasonably achieved and allow states to modify their targets (if necessary) to reflect the achievable level of dispatch.

Energy efficiency can be an effective method to reduce emissions by reducing demand. Because each state has methods to determine the cost-effectiveness of EE, as well as reduction verification methods, each state should have authority over assumptions.

LEGAL

EPA's proposal is promulgated under Section 111(d) of the Clean Air Act.

EPA's interpretation of its authority is a transformative expansion without clear congressional authorization.

In some cases EPA is attempting to regulate activities that are the purview of the individual states and other federal agencies.

From a legal perspective, EPA should define and limit emissions standards based solely on what is achievable at existing power plants.

States should be given the flexibility to develop any programs that achieve an equivalent emissions reduction. This would make the rule more consistent with provisions of the Clean Air Act.

