

Comments of Arkansas Electric Cooperative Corporation Re: U.S. Environmental Protection Agency (EPA) Proposed Rule on Greenhouse Gas Emission (GHG) from Existing Stationary Sources: Electric Utility Generating Units (Clean Air Act, Section 111(d))

Introduction

Arkansas Electric Cooperative Corporation (AECC) is an Arkansas not-for-profit electric utility owned by 17 distribution cooperatives across the state of Arkansas, which in turn are owned by the utility customers they serve (members). AECC's mission is to provide reliable, affordable, responsible electric service to its members. As a result, AECC is a consumer advocate representing more than 38 percent of the residential consumers in Arkansas. AECC's service territory extends into 74 of Arkansas's 75 counties, and covers more than 60 percent of the state's geographic area.

AECC has reviewed EPA's proposed Rule on GHG Emissions from existing sources and has concerns about the effect of the proposed Rule, and the resulting compliance obligations, on AECC's members in the following five categories:

1. Increased Cost;
2. Economic Inequities;
3. Decreased Reliability;
4. Premature Retirements and Future Utility Planning Complications; and
5. Errors in the proposed Rule and Compliance Hurdles.

Preliminary comments on the proposed Rule are summarized below. Details, analyses, and other information for categories 1 and 2 listed above are presented as appendices to this document.

Summary

(1) Increased Cost

AECC has completed a preliminary analysis of the costs of compliance with the proposed Rule to AECC's members. This preliminary analysis reveals that AECC's costs will increase primarily due to a shift in the fuel source used for AECC's power plants from coal to natural gas. Using historic, current and projected costs for coal, natural gas, and the cost to replace coal capacity retired solely as a result of efforts to comply with the proposed Rule, AECC anticipates that a typical residential member's bill will increase 10 percent to 30 percent compared to that same member's bill today, depending on the exact measures implemented.

(2) Economic Inequities

Arkansas is an economically-disadvantaged state and currently ranked 46th in per capita income nationally. Notwithstanding, the proposed Rule requires Arkansas to reduce GHG emissions by 44 percent, which is the sixth highest reduction proposed for any state. This disproportionate burden leads to economic inequity for Arkansas, while simultaneously placing Arkansas at a

disadvantage for attracting economic development to the state. National Economic Research Associates, Inc. (a global firm of economic, finance and business experts) estimates between 15,000 and 57,000 jobs will be lost in the multi-state region that includes Arkansas as a result of the proposed Rule's implementation.

In addition to the loss of jobs from plant and associated industry closures, the average Arkansas household spends about 20 percent of its after tax income on energy, with electricity representing more than 77 percent of that cost. Sharp increases in electricity costs will be especially hard on lower income households, as cost of living or salary increases will not likely keep pace with rising electricity prices. Similarly, the lower one's income, the greater the proportion of that income is spent on utility services. Finally, the proposed Rule will result in the forced, early retirement of coal plants, which provide a stable tax and employment base for the communities in which they are located. Such plant closures will further exacerbate the economic strife already being experienced in those communities, several of which are in high unemployment counties within Arkansas.

(3) Decreased Reliability

During this past winter (2014), AECC and many other power producers across the country, experienced natural gas delivery interruptions (called "curtailments") solely due to gas pipeline constraints. Although 2014's winter was unusually cold, the inability to get natural gas to fuel power plants, and the resultant cost increases experienced, heighten the concerns about whether the natural gas pipeline system will be ready and able to accommodate a large increase in demand, when it cannot satisfy existing demand during high-volume periods. By the same token, the winter 2014 curtailments occurred when natural gas deployment was significantly below what the proposed Rule will require it to be in the future, because the proposed Rule calls for a shift from coal to natural gas in power production. Given, natural gas cannot be stored for future use onsite, power plants can only run on gas if the gas is delivered when needed. This uncertainty about supply undoubtedly will affect reliability and could even affect safety, if power cannot be delivered during peak utility usage times (such as for heating on a very cold winter day or air conditioning on a very hot summer day). Given the paramount importance the natural gas delivery system will have under the proposed Rule's power supply regime, qualitative and comprehensive studies are needed to assess the capabilities of the natural gas pipeline system and the vulnerability of the system to attacks with resultant impacts to electricity supply.

(4) Premature Retirements and Future Utility Planning Complications

Power plants, regardless of the fuel used, are long-term investments engineered with life expectancies well beyond 30 years with many plants operating 50 to 60 years. If the proposed Rule becomes final in June 2015, AECC will be faced with untenable decisions on the selection of future generation technology and will likely be forced to opt singularly for NGCC plants to meet the proposed 2030 emissions targets, given the state of current power production technology. That said, the proposed Rule's emissions targets extend beyond the year 2030, and the next phase of targets ratchet up to require an 80 percent reduction by the year 2050.

In order to achieve an 80 percent reduction by 2050 compared to 2012 emission levels, even though NGCC technology is required in the near-term to meet the year 2030 targets, such technology cannot meet the 2050 GHG target, making NGCC investments obsolete long-term. Notwithstanding the fact that current technology cannot meet the emissions standards projected to be in place in the next 35 years or so, AECC and similarly-situated utilities have a statutory obligation to provide an essential public service. Thus, utilities cannot wait for technology to catch up because they have to provide utility service in the meantime. As a result, AECC will be forced to make costly long-term decisions that will produce only short- or medium-term results. Another consequence of the forced closure of the existing fleet of generating units that cannot achieve the more stringent emissions targets will be accelerated depreciation and other stranded costs that result from retiring generation resources well ahead of their economic or useful lives. In short, new technologies are required to achieve the long-term reductions required by the proposed Rule and utilities will need more latitude and time to make better, cost-based planning decisions in the interim.

(5) Errors in the Proposed Rule and Compliance Hurdles

As part of its preliminary analysis, AECC discovered several errors or open questions associated with the proposed Rule's assumptions that will affect compliance with the proposed Rule. Each of these matters needs correction and/or clarification:

Errors in the Proposed Rule

1. Reliance on a baseline year of 2012 (or any single year, for that matter) disregards the variability of electric power generation resulting from anomalous weather years, unanticipated outages and other facts. In order to accurately assess historical emission levels, a multi-year baseline must be used.
2. The proposed Rule's current baseline year (2012) does not include annual emissions from the John W. Turk, Jr. Power plant. The plant was placed in service in December 2012.
3. The proposed Rule indicates NGCC capacity in Arkansas is currently 5,588 MW. However, AECC's analysis shows there is a maximum of 5,114 MW of NGCC capacity in the state.
4. The proposed Rule assumes existing power plants can improve the efficiency of their power production by 6 percent, which is not technically feasible for the plants in Arkansas. Even with significant time and the investment of tremendous capital, the most likely efficiency improvements will be in the 1 percent to 2 percent range, at most.
5. Contrary to the proposed Rule's assumption, the nuclear units in Arkansas are currently not "at risk" of shutting down. This inaccurate assumption artificially lowers Arkansas's target emission rate.

Compliance Hurdles with the proposed Rule

6. In order to prepare adequately to meet the 2030 emissions target, given the long-term nature of utility operations planning, the majority of the steps taken to achieve those emissions reductions will be made prior to 2020. Additional time for compliance with the proposed Rule would give utilities more flexibility in the near-term to meet the initial

targets, and additional time in this instance would lower cost and other impacts on electric utility consumers.

7. The proposed Rule disproportionately targets states with under-utilized NGCC capacity without any analysis concerning why the capacity is under-utilized. In Arkansas' case, for example, the Union Power Partners Station is under-utilized due to transmission constraints among other reasons, issues that no amount of redispatch, as contemplated by the proposed Rule, can address.
8. As the proposed Rule is currently drafted, it is unclear which state has the contractual rights to renewable generation when the renewable generation is produced in one state but consumed in another. Which state can claim the credit for such emission lowering activity is a policy matter that, currently, is unclear and needs to be clarified.