

BEFORE THE
UNITED STATES HOUSE OF REPRESENTATIVES
COMMITTEE ON ENERGY AND COMMERCE
SUBCOMMITTEE ON ENERGY AND POWER
TESTIMONY OF JOHN N. VOYLES, JR.
VICE PRESIDENT, TRANSMISSION AND GENERATION SERVICES
LG&E AND KU ENERGY LLC
ON
“The American Energy Initiative”
The U.S. Environmental Protection Agency’s proposed
Greenhouse Gas New Source Performance Standards (NSPS)

July 16, 2012



LG&E and KU Energy LLC
220 W. Main Street
P.O. Box 32020
Louisville, KY 40232

Summary for Testimony of John N. Voyles, Jr.
On behalf of
LG&E and KU Energy LLC

Representing LG&E and KU Energy LLC, a wholly owned subsidiary of PPL Corporation (PPL), the following is a summary of major concerns the Company has with the United States Environmental Protection Agency's proposed Greenhouse Gas New Source Performance Standards released for public comment on Friday, April 13, 2012:

- As proposed, the rule would effectively eliminate new coal-fired generation from the nation's energy portfolio;
- There should not be one NSPS for all new fossil-fired generating units based on the fuel which has the lowest emission rate;
- The proposed standard is not continuously achievable for natural gas combined cycle generating units;
- Establishing a single GHG NSPS standard for all fossil-fired units establishes a bad precedent for any future standards that may be promulgated for existing or modified sources;

Good morning Chairman Whitfield and Subcommittee Members

Thank you for the opportunity to appear before you today to present comments regarding the Environmental Protection Agency's proposed rule entitled "Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units."

My name is John N. Voyles, Jr. I am Vice President, Transmission & Generation Services for LG&E and KU Energy LLC. LG&E and KU Energy is a wholly owned subsidiary of PPL Corporation (PPL) and operate Louisville Gas and Electric Company and Kentucky Utilities Company; both vertically integrated investor-owned regulated utilities that serve a total of 1.3 million customers in 90 Kentucky counties and 5 counties in Virginia.

Today, the companies operate electric generating stations with a capacity of approximately 8,100 MW. Of this capacity, 74% is coal-fired, 25% is gas-fired peaking units and the remaining 1% is hydroelectric units. Approximately 96% of our coal-fired units are equipped with sulfur dioxide controls and 67% of those units have SCR for nitrogen dioxide control. After assessing the impact of the most recent regulations promulgated by the EPA, specifically the lower National Ambient Air Quality Standards (for SO₂ and NO₂), the Mercury and Air Toxics Standards (MATS) rule and the Cross State Air Pollution Rule (CSAPR), the companies developed compliance plans, which were presented to and approved by the Kentucky Public Service Commission in December 2011 and April 2012. Those plans include installing additional environmental controls at 4 stations and replacing some existing control equipment at one station. Also, the companies will retire 800 MW of coal-fired capacity and will be

constructing a new 640 MW gas-fired combined cycle unit. These investments are expected to cost an estimated \$3 billion and to raise electric rates approximately 14% and 18% for KU and LG&E customers respectively by 2016.

With this background, we are concerned that the proposed rule would effectively eliminate new coal-fired generation from the nation's energy portfolio by setting a standard which could only be achieved by coal units through the use of carbon capture and sequestration (CCS) technology – a currently undemonstrated technology that is not cost-effective under current market conditions. Today, we offer 3 specific comments:

1. A separate standard for coal-fired units is critical in order to ensure a diverse, cost-effective energy portfolio.

The proposed CO₂ standard is a “one size fits all” standard applicable to new generating units – both natural gas-fired and coal fired. Over the 40-year history of the Act, EPA has never set a single NSPS for all fossil-fueled power plants based on an emissions rate achievable only by the fuel type with the lowest emissions rate. In fact, in past rulemakings EPA has routinely established subcategories based on different fuels, industrial processes, equipment, and other factors.

The proposed standard assumes that CCS technology sufficient to capture and store at least 50% of CO₂ emissions is available for new coal-fired units. While EPA's proposal for a framework to establish compliance under a sliding scale over a 30-year period certainly would appear to provide additional flexibility for new coal units with CCS, EPA also implicitly acknowledges the uncertainties as to when or if CCS technology will be developed. Significant technological,

financial, legal and regulatory barriers still exist to the commercial deployment of CCS.

The Clean Air Act does not allow EPA to mandate a particular fuel and generation technology which is exactly what the agency has done in requiring coal-fired generation to comply with a standard based on new natural gas combined cycle plants using a specified technology. Although low natural gas prices may currently favor new natural gas plants over coal plants, there can be no guarantee that natural gas prices will remain at those levels indefinitely. Approximately 42% of the nation's power is supplied by coal-fired plants that utilize various boiler designs and fuel combinations. As a matter of statutory compliance and sound energy policy, it is critical for EPA to set a separate standard for new coal-fired units that will permit those types of units to remain an option in the future. Such an approach is consistent with the relevant provisions of the Clean Air Act as implemented by EPA in the past and this Administration's stated energy policy objective of achieving a diverse energy portfolio.

2. The proposed standard does not allow continuous compliance for new combined cycle units.

The proposed standard of 1,000 lbs CO₂/MWH does not take into account the full range of operation normally experienced by a combined cycle unit. The proposal is based on an assumption that the standard is capable of being achieved by a combined cycle unit at all times of operation including startup, shutdown, and malfunction. Based on the extensive analysis conducted by the company in the course of planning and designing for our current combined cycle project, during periods of startup and shutdown the emission rate will exceed the standard. Because combined cycle units will generally be operated as intermediate load units, they will likely experience regular startups and shutdowns that will pose a substantial challenge in meeting

the emissions standard.

3. Failure to provide a separate standard for coal-fired units establishes an unworkable regulatory precedent in the case of existing, modified, and reconstructed sources.

We fully support EPA's decision to defer promulgation of standards for modified or reconstructed facilities and guidelines for existing facilities. EPA states that it "anticipates" that existing and modified sources will be required to comply with a future standard "at the appropriate time." While we acknowledge that EPA has the authority to set separate standards for new and modified sources, we remain concerned about the potential precedent of a single standard for new fossil-fired units that could potentially increase the risk of such a standard for existing or modified sources if EPA ultimately opts to proceed with standards for such facilities or EPA's deferral is overturned by the courts.

While extremely problematic for new facilities, a single standard for all existing or modified fossil-fired units would have even more extreme impacts. A standard requiring each existing coal-fired unit to achieve CO₂ reductions equivalent to a gas-fired unit would likely result in shutdown of virtually all coal-fired units in the nation. Such a result would wreak havoc with the nation's energy supply in terms of both cost and reliability. In the state of Kentucky, and other Midwest states, where customers obtain more than 90% of their electricity supply from coal-fired generation, the outcome would be disastrous to the economies of those states.

Although contrary to EPA's stated policy, a single NSPS standard could also create a precedent for combining coal-fired and gas-fired units into one category for criteria air pollutant regulation and subjecting those units to standards that can only be achieved by combined cycle units.

EPA has stated that its proposal does not apply to modified units, but the proposed rule does not contain express language to that effect. The potential for future standards applicable to modified sources results in substantial uncertainties, particularly for units facing major projects for purposes of compliance with CSAPR and MATS. To avoid regulatory uncertainty and unintended consequences, EPA should clarify that the proposed rule does not apply to existing modified units by including clear and unambiguous language in the Code of Federal Regulations stating that the performance standard established by the proposal does not apply to existing units.

Thank you for your time and interest. We have included a full copy of the comments the company filed with the EPA on June 25, 2012.