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NERA'S ANALYSIS OF THE "CLEAN POWER PLAN"

NERA Economic Consulting was asked to analyze the energy market impacts and costs of EPA's proposed Clean Power Plan. The analysis focused primarily on two scenarios for complying with the EPA proposal. In one scenario, each state is assumed to use the least expensive (optimum) combination of the four "building blocks" proposed by EPA. In the other scenario, NERA's analysis assumes that certain real-world constraints might limit state compliance options.ⁱ These are some of the highlights of the analysis.

- Double-digit electricity rate increases are projected in 43 states, even if states do not have any constraints that could drive rates higher.
- > 14 states could have peak-year electricity rate increases exceeding 20 percent.
- Compliance costs total \$366 billion to \$479 billion over 2017-2031, and annual compliance costs average \$41 billion to \$73 billion. (This cost *far exceeds* the cost of the previously most expensive rule for power plants, the Mercury and Air Toxics Standards rule, which costs \$10 billion per year.)
- > Consumers must spend **\$560 billion** on ways to cut electricity use.
- Coal retirements are projected to increase by at least 45,000 MW. (Even without the Clean Power Plan, more than 70,000 MW of coal capacity have announced retirement, most of which are due to EPA policies.ⁱⁱ) In total, the U.S. could lose *more than one-third* of its coalfired electric generating fleet by 2020.ⁱⁱⁱ
- > Natural gas prices could increase by as much as **29 percent**.

The NERA model is calibrated to the U.S. Energy Information Administration's *Annual Energy Outlook* (AEO) 2014 reference case projection. In addition, NERA relied on EPA assumptions in many instances. The NERA analysis, however, cannot capture all the real-world impacts of EPA's proposal. For example, the model assumes an ideal least-cost solution to meet the proposal's CO₂ emission requirements, and the results do not include potential impacts such as costs to upgrade the electric transmission grid and increase natural gas infrastructure. NERA's report is available at <u>www.americaspower.org</u>.

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ⁱ Real-world constraints include the need for state legislation to increase the use of renewable energy sources and to establish more aggressive end-use energy efficiency programs, as well as legal constraints if EPA imposes a Federal Implementation Plan on states.

ⁱⁱ Most of the 70,000+ MW total are retirements of existing coal units. However, the total includes some conversions from coal to natural gas. Coal retirements and conversions are based on company announcements, as of October 2014.

ⁱⁱⁱ NERA's analysis projects total coal retirements of 97,000 MW under the optimum compliance scenario, which is approximately one-third of the generating capacity of the U.S. coal fleet. NERA projects total coal retirements of 220,000 MW under the other scenario. This means more than two-thirds of the U.S. coal fleet would retire.