AMERICAN COALITION FOR CLEAN COAL ELECTRICITY

Clean Air Task Force
Proposal to Reduce Carbon Emissions

Recently, the Clean Air Task Force (CATF) issued a proposal to regulate carbon dioxide (CO_2) emissions from existing fossil fuel-fired power plants under Section 111(d) of the Clean Air Act.[i] According to CATF, its proposal is based on fuel switching[ii] and would establish emission standards of 1,450 pounds CO_2/megawatt-hour (MWh) for existing coal-fired units and 1,100 pounds CO_2/MWh for natural gas-fired units. Compliance with the standards is required by 2020, and states are allowed to set up trading programs by converting the emission standard for coal units into an emissions cap. The proposal would achieve a 27 percent reduction in CO_2 emissions from power plants in 2020 at a cost of $9.4 billion in the same year.[iii] These are a few of the problems with the proposal:

The CATF proposal is very costly. According to CATF, its proposal would …

- **Cost the electric sector $9.4 billion in compliance costs by 2020.** *(For perspective, electric sector compliance with all other clean air regulations, according to EPA figures, will cost roughly $19 billion in 2020.[iv] Therefore, the CATF proposal would increase electric sector compliance costs by almost 50 percent. In addition, the costs to comply with an emissions cap could be higher in later years because of economic growth.)*
- **Cause the retirement of an additional 42,000 MW of coal capacity.** *(FERC, NERC, and others have expressed serious concerns about threats to electric reliability caused by coal retirements. Currently, over 60,000 MW of coal capacity have announced retirement. More than 52,000 MW have been attributed to EPA policies, not including carbon regulations.[v])*
- **Increase national average electricity prices by more than 6 percent.[vi]** *(Prices in some coal-dependent regions and states are certain to be higher than the nationwide average. Analyses of other proposals with similar*

nationwide average price increases have projected double digit electricity price increases in many states.[vii]*)*

- **Increase natural gas prices by more than 11 percent**.[viii] *(This price increase is caused by a 34 percent increase in demand for gas by the electric sector to comply with the CATF proposal.*[ix] *The electric sector is projected to spend roughly $7 billion more for natural gas in 2020.*[x]*)*

The proposal is likely to have even greater negative economic impacts.

- **There is no information about the macroeconomic effects of the proposal, such as job losses due to higher electricity prices**. *A similar "system-based" proposal by NRDC is projected to cause the loss of more than 100,000 jobs in each of three major regions of the U.S.*[xi] *CATF also does not model the impacts of higher natural gas prices on other sectors of the economy, for example, manufacturers that rely on natural gas.*
- **Other costs are not included**. *The CATF report does not estimate the cost to expand natural gas infrastructure to accommodate its projected 34 percent increase in natural gas use by the power sector, nor does CATF estimate the increase in natural gas prices that power generators would pay to obtain firm gas supplies to serve increased baseload power needs.*

The proposal has negligible climate change benefits.

- **CATF's proposal would reduce global greenhouse gas emissions by 0.6 percent.**[xii] *Even shutting down the entire U.S. coal fleet would reduce projected sea level rise by less than the thickness of a dime and temperature increase by 0.05 degree F.*[xiii] *EPA Administrator Gina McCarthy has acknowledged the lack of discernable effects of EPA's climate change regulations in testimony before Congress.*[xiv]
- **CATF's cost-benefit analysis is flawed**. *CATF uses controversial social cost of carbon (SCC) values developed by the Administration without public input. Only recently, OMB solicited public comment on these values. Pretending for argument's sake these SCC values have merit, the climate change benefits of CATF's proposal should be valued at $258 million to $850 million for comparison to CATF's cost of $9.4 billion.*[xv] *Thus, the costs to the*

U.S. economy would outweigh the purported climate benefits to the U.S. by a ratio of 11-to-1 to more than 36-to-1.

March 4, 2014

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[i] Clean Air Task Force, *Power Switch; An Effective, Affordable Approach to Reducing Carbon Pollution from Existing Fossil-Fueled Power Plants*, February, 2014. ("CATF proposal")

[ii] Page 3 of CATF proposal.

[iii] *Power Switch* sometimes uses the phrase "in" 2020, and other times "by" 2020. For purposes of this paper, we assume the effects cited by CATF occur "in" the year 2020.

[iv] EPA, *Benefits and Costs of the Clean Air Act From 1990 to 2020*, March 2011. EPA estimated electric sector compliance costs at $10.4 billion in 2020. This estimate included the Clean Air Mercury Rule (CAMR) but did not include MATS, which had not been promulgated yet. Our estimate of $19 billion in 2020 is calculated as EPA's $10.4 billion estimate, minus the $750 million cost of CAMR in 2020 (from the CAMR RIA), plus $9.6 billion per year, which is EPA's estimate for the cost of MATS (from the MATS RIA).

[v] *Coal Unit Shutdowns As of January 26, 2014*, americaspower.org.

[vi] According to CATF, their proposal will increase average national wholesale electricity prices by 6.9 percent and increase national average retail electricity prices by 6.2 percent. CATF believes that allowance allocations can lower the average retail price increase to 2.3 percent. However, we consider this unlikely because it would require all states to participate in a nationwide cap-and-trade program with agreement on issues such as allowance allocations, baselines, credit for early reductions, offsets, winner states versus loser states, leakage, etc.

[vii] *See*, e.g., NERA Economic Consulting, *A Carbon Dioxide Standard for Existing Power Plants: Impacts of the NRDC Proposal*, December 2013.

[viii] Page 6 of CATF proposal.

[ix] According to EIA's *AEO 2014 Early Release*, in 2020, the power sector is projected to use 8.8 trillion cubic feet (Tcf) of natural gas; overall consumption is projected to be 24.6 Tcf. CATF projects increased power sector consumption of 3 Tcf in 2020 under its proposal.

[x] Page 23 of CATF proposal.

[xi] NERA Economic Consulting, *A Carbon Dioxide Standard for Existing Power Plants: Impacts of the NRDC Proposal*, December 2013.

[xii] CATF projects a CO_2 emission reduction of 308 million tonnes in 2020. Current global greenhouse gas emissions are approximately 49 billion tonnes. (United Nations Environment Programme, *The Emissions Gap Report 2012*)

[xiii] ACCCE, *Climate Effects of Carbon Regulations for the U.S. Coal Fleet*, September 2013.

[xiv] "EPA Head Admits Being Clueless about Any Obama Climate Plan Benefits," *Forbes*, September 22, 2013, reporting on the House Energy and Power Subcommittee hearing "The Obama Administration's Climate Change Policies and Activities," September 18, 2013. In response to a question from Representative Pompeo (R-KS) as to whether EPA's climate policies will have an impact on any of 26 "climate indicators" on EPA's website, Administrator

McCarthy stated, “It is unlikely that any specific one step is going to be seen as having a visible impact on any of those impacts.”

[xv] In 2010, the Administration’s Interagency Working Group (IWG) on the social cost of carbon (SCC) stated that “… a range of values from 7 to 23 percent should be used to adjust the global SCC to calculate domestic effects.” (Interagency Working Group on Social Cost of Carbon, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866*, February 2010). In its 2013 update, the IWG acknowledged that OMB guidance requires analysis from a domestic perspective but chose to provide only global values. (*See* 2013 update, page 14.) Following OMB guidance, we use 7 percent and 23 percent of the IWG’s global SCC value of $12/tonne in 2020 (5 percent discount rate), resulting in adjusted SCC values of $0.84/tonne and $2.76/tonne. CATF estimates a reduction of 308 million tonnes below business as usual in 2020. Therefore, the domestic climate change benefits in 2020 are the product of the adjusted SCC values and the 308-million tonne emission reduction.