

## **Methodology for the Obama Coal Plant Regulations Counter**

CATF relied on three US EPA documents and associated files to determine the avoided mortalities by year as the basis for the counter. The counter represents the cumulative avoided mortalities estimated by two rules: the Mercury and Air Toxics Standards (MATS), the Cross-State Air Pollution Rule (CSAPR) and the update to CSAPR for the 2008 Ozone National Ambient Air Quality Standards (NAAQS).

EPA develops regulatory impact analyses for its rules to document their impacts. The references for the counter are the Regulatory Impact Analysis for the Federal Implementation Plans to Reduce Interstate Transport of Fine Particulate Matter and Ozone in 27 States; Correction of SIP Approvals for 22 States (EPA-HQ-OAR-2009-0491), Regulatory Impact Analysis for the Proposed Cross-State Air Pollution Rule (CSAPR) Update for the 2008 Ozone National Ambient Air Quality Standards (NAAQS) (EPA-452/R-15-009) and the Regulatory Impact Analysis for the Final Mercury and Air Toxics Standards (EPA-452/R-11-011).

Each rule enumerates annual benefits. As recommended by the Science Advisory Board in 2004, the timing of the annual benefits follow a lag structure and are distributed over the course of 20 years. EPA assumes a cessation lag between the change in PM exposures and the total realization of changes in mortality effects. Thirty percent of the benefits occur in the first year, with 12.5 percent of the benefit each year for years two through five and the remaining 20% of the benefit evenly distributed over the final fifteen years. Ozone benefits accrue in the year they occur with no lag.

The counter assumes particulate and ozone benefits began in 2014 resulting from CSAPR. MATS benefits are added starting in 2016 with additional ozone benefits beginning in 2017 from the NAAQS update to CSAPR. Benefits are totaled on an annual basis. The counter represents cumulative benefits starting from 2014. The value in the counter is the sum of all prior annual year avoided mortalities plus the fraction occurring to date in the current year, which is simply the current year annual total times the percentage of the current year elapsed.