



The information presented here reflects EPA's modeling of the Clear Skies Act of 2002. The Agency is in the process of updating this information to reflect modifications included in the Clear Skies Act of 2003. The revised information will be posted on the Agency's Clear Skies Web site (www.epa.gov/clearskies) as soon as possible.



SANCAMO ELECTRIC SANCAM

The Clear Skies Act

Technical Support Package

September 2002



Introduction

- On February 14, 2002, President Bush proposed the Clear Skies Initiative, a mandatory program for the control of sulfur dioxide (SO₂), nitrogen oxides (NOx) and mercury (Hg) from the electricity generation sector.
- On July 26, 2002, Chairman Billy Tauzin and Chairman Joe Barton introduced the Clear Skies Act in the U.S. House of Representatives (H.R.5266), and on July 29, 2002 Senator Bob Smith introduced the legislation in the Senate (S.2815) by request of the Administration.
- Extensive information on Clear Skies is currently available on EPA's website at www.epa.gov/clearskies. This package is designed to provide additional technical support to accompany the newly introduced legislation.

Table of Contents

•	Section A:	Program Elements in the Clear Skies Act pg. 5
•	Section B:	Human Health and Environmental Benefitspg. 16
•	Section C:	Projected Costs pg. 46
•	<u>Section D</u> :	Projected Impacts on Generation and Fuel Use pg. 54
•	Section E:	Projected Impacts at the State and Regional-Level pg. 67
•	Section F:	Factors Affecting the Installation of Control Technologies pg. 88
•	Section G:	Summary of the Models used for this Analysis pg. 99

- EPA used a number of different analytical tools to prepare this analysis. The projections are EPA's estimates; modeling by other Agencies, such as DOE's Energy Information Administration (EIA), would likely show different impacts.
 - The economic impacts, as well as the impacts on generation and emissions, were developed using the Integrated Planning Model (IPM[®]).
 - Air quality impacts were projected using:
 - (1) Regional Modeling System for Aerosols and Deposition (REMSAD) and,
 - (2) Comprehensive Air Quality Model with Extensions (CAMx).
 - Several additional models were used for the economic and benefit analysis, as described in section G.

Many of the results presented in this analysis are compared to a Base Case:

- The <u>EPA 2000 Base Case</u> in IPM includes Title IV, the NOx SIP Call, and state-specific caps in Connecticut, Missouri and Texas, all finalized before March 2001. The Base Case does not include any actions finalized after this date.
- The <u>REMSAD Base Case</u> includes the rulemakings in the EPA 2000 Base Case, as well as the Tier II and Heavy Duty Diesel rules.