

## Analysis of Strategies for Reducing Multiple Emissions from Electric Power plants with Advanced Technology Scenarios

**Table 1. Description of the Analysis Cases**

Case Name	Description	Emissions Limits
CEF business-as-usual	Reference case in the CEF report. Prepared using a revision of the <i>Annual Energy Outlook 1999</i> version of the National Energy Modeling System, which is known as CEF-NEMS.	Includes limits for SO <sub>2</sub> and NO <sub>x</sub> under CAAA90.
CEF moderate	Case in the CEF report adding the moderate CEF policies to the CEF business-as-usual case. Prepared using CEF-NEMS.	Includes limits for SO <sub>2</sub> and NO <sub>x</sub> under CAAA90.
CEF advanced	Case in the CEF report adding the advanced CEF policies to the CEF business-as-usual case. Prepared using CEF-NEMS.	Reduces SO <sub>2</sub> emissions from electricity generators in steps between 2010 and 2020 to 4.48 million tons to simulate a particulate reduction policy. Includes a domestic CO <sub>2</sub> trading system across all energy sectors, which is assumed to equilibrate at a permit value of \$50 per metric ton carbon equivalent.
Reference	EIA reference case for this analysis, incorporating some revisions to the <i>Annual Energy Outlook 2001</i> reference case. Prepared using NEMS.	Includes limits for SO <sub>2</sub> and NO <sub>x</sub> under CAAA90.
Reference with emissions limits	EIA case adding the emissions limits specified in the request for analysis to the above reference case. Prepared using NEMS.	Between 2002 and 2007, reduces NO <sub>x</sub> emissions from electricity generators to 75 percent below 1997 levels, Hg emissions to 90 percent below 1999 levels, CO <sub>2</sub> emissions to 1990 levels, and SO <sub>2</sub> emissions to 75 percent below the CAAA90 requirements.
Advanced technology	EIA case incorporating the <i>Annual Energy Outlook 2001</i> high technology assumptions for end-use demand, generation, and fossil fuel supply technologies to the reference case. Prepared using NEMS.	Includes limits for SO <sub>2</sub> and NO <sub>x</sub> under CAAA90.
Advanced technology with emissions limits	EIA case adding the emissions limits specified in the request for analysis to the above advanced technology case. Prepared using NEMS.	Between 2002 and 2007, reduces NO <sub>x</sub> emissions from electricity generators to 75 percent below 1997 levels, Hg emissions to 90 percent below 1999 levels, CO <sub>2</sub> emissions to 1990 levels, and SO <sub>2</sub> emissions to 75 percent below the CAAA90 requirements.
CEF-JL moderate	EIA case incorporating the moderate CEF policies in the reference case. Prepared using NEMS.	Includes limits for SO <sub>2</sub> and NO <sub>x</sub> under CAAA90.
CEF-JL moderate with emissions limits	EIA case adding the emissions limits specified in the request for analysis to the above CEF-JL moderate case. Prepared using NEMS.	Between 2002 and 2007, reduces NO <sub>x</sub> emissions from electricity generators to 75 percent below 1997 levels, Hg emissions to 90 percent below 1999 levels, CO <sub>2</sub> emissions to 1990 levels, and SO <sub>2</sub> emissions to 75 percent below the CAAA90 requirements.
CEF-JL advanced	EIA case incorporating the advanced CEF policies in the reference case. Prepared using NEMS.	Reduces SO <sub>2</sub> emissions from electricity generators in steps between 2010 and 2020 to 4.48 million tons to simulate a particulate reduction policy. Includes a domestic CO <sub>2</sub> trading system across all energy sectors, which is assumed to equilibrate at a permit value of \$50 per metric ton carbon equivalent.
CEF-JL advanced with emissions limits	EIA case adding the emissions limits specified in the request for analysis to the above CEF-JL advanced case. Prepared using NEMS.	Between 2002 and 2007, reduces NO <sub>x</sub> emissions from electricity generators to 75 percent below 1997 levels, Hg emissions to 90 percent below 1999 levels, CO <sub>2</sub> emissions to 1990 levels, and SO <sub>2</sub> emissions to 75 percent below the CAAA90 requirements. Includes a domestic CO <sub>2</sub> trading system across all energy sectors, which is assumed to equilibrate at a permit value of \$50 per metric ton carbon equivalent.

Source: Energy Information Administration, Office of Integrated Analysis and Forecasting.