

**Annotated Table of Contents for EPA's Standards of Performance
for New, Modified, and Reconstructed Power Plants**

I. General Information	9
A. Executive Summary	9
B. Does this action apply to me?	30
C. Where can I get a copy of this document?	31
D. Judicial Review	31
E. How is this preamble organized?	32
II. Background	34
A. Climate Change Impacts from GHG Emissions	35
B. GHG Emissions from Fossil Fuel-fired EGUs	65
C. The Utility Power Sector	69
D. Statutory Background	85
E. Regulatory Background	90
F. Development of Carbon Pollution Standards for Fossil Fuelfired Electric Utility Generating Units	92
G. Stakeholder Engagement and Public Comments on the Proposals	94
III. Regulatory Authority, Affected EGUs and Their Standards, and Legal Requirements	99
A. Authority to Regulate Carbon Dioxide from Fossil Fuel-fired EGUs	100
B. Treatment of Categories and Codification in the Code of Federal Regulations	110
C. Affected Units	112
D. Units Not Covered by this Final Rule	114
E. Coal Refuse	129
F. Format of the Output-based Standard	131
G. CO2 Emissions Only	139
H. Legal Requirements for Establishing Emission Standards	140
I. Severability	166
J. Certain Projects under Development	167
IV. Summary of Final Standards for Newly Constructed, Modified, and Reconstructed Fossil Fuel-fired Electric Utility Steam Generating Units	173
A. Applicability Requirements and Rationale	173
B. Best System of Emission Reduction	182
C. Final Standards of Performance	190
V. Rationale for Final Standards for Newly Constructed Fossil Fuel-fired Electric Utility Steam Generating Units	193
A. Factors Considered in Determining the BSER	193
B. Highly Efficient SCPC EGU Implementing Partial CCS as the BSER for Newly Constructed Steam Generating Units	194
C. Rationale for the Final Emission Standards	195
D. Post-Combustion Carbon Capture	200
E. Pre-Combustion Carbon Capture	219

F. Vendor Guarantees, Industry Statements, Academic Literature, and Commercial Availability	231
G. Response to Key Comments on the Adequacy of the Technical Feasibility Demonstration	239
H. Consideration of Costs.....	248
I. Key Comments Regarding the EPA's Consideration of Costs	
J. Achievability of the Final Standards	289
K. Emission Reductions Utilizing Partial CCS.....	330
L. Further Development and Deployment of CCS Technology.....	332
M. Technical and Geographic Aspects of Disposition of Captured CO2	334
N. Final Requirements for Disposition of Captured CO2.....	367
O. Non-air Quality Impacts and Energy Requirements.....	414
P. Options That Were Considered by the EPA but Were Ultimately Not Determined to Be the BSER	423
Q. Summary.....	436
VI. Rationale for Final Standards for Modified Fossil Fuel-fired Electric Utility Steam Generating Units	438
A. Rationale for Final Applicability Criteria for Modified Steam Generating Units	439
B. Identification of the Best System of Emission Reduction...	448
C. BSER Criteria.....	451
VII. Rationale for Final Standards for Reconstructed Fossil Fuel-fired Electric Utility Steam Generating Units	454
A. Rationale for Final Applicability Criteria for Reconstructed Sources	454
B. Identification of the Best System of Emission Reduction...	454
VIII. Summary of Final Standards for Newly Constructed and Reconstructed Stationary Combustion Turbines	459
A. Applicability Requirements.....	459
B. Best System of Emission Reduction.....	461
C. Final Emission Standards.....	462
D. Significant Differences between Proposed and Final Combustion Turbine Provisions	463
IX. Rationale for Final Standards for Newly Constructed and Reconstructed Stationary Combustion Turbines	468
A. Applicability.....	468
B. Subcategories.....	494
C. Identification of the Best System of Emission Reduction...	517
D. Achievability of the Final Standards.....	540
X. Summary of Other Final Requirements for Newly Constructed, Modified, and Reconstructed Fossil Fuel-fired Electric Utility Steam Generating Units and Stationary Combustion Turbines	569
A. Startup, Shutdown, and Malfunction Requirements.....	569
B. Continuous Monitoring Requirements.....	577
C. Emissions Performance Testing Requirements.....	582

D. Continuous Compliance Requirements.....	583
E. Notification, Recordkeeping, and Reporting Requirements...	586
XI. Consistency between BSER Determinations for This Rule and the Rule for Existing EGUs	590
A. Newly Constructed Steam Generating Units.....	590
B. New Combustion Turbines.....	597
C. Modified and Reconstructed Steam and NGCC Units.....	598
XII. Interactions with Other EPA Programs and Rules	599
A. Overview.....	599
B. Applicability of Tailoring Rule Thresholds under the PSD Program	601
C. Implications for BACT Determinations under PSD.....	614
D. Implications for Title V Program.....	624
E. Implications for Title V Fee Requirements for GHGs.....	628
F. Interactions with Other EPA Rules.....	654
XIII. Impacts of this Action	661
A. What are the air impacts?.....	663
B. Endangered Species Act.....	665
C. What are the energy impacts?.....	671
D. What are the water and solid waste impacts?.....	671
E. What are the compliance costs?.....	672
F. What are the economic and employment impacts?.....	673
G. What are the benefits of the final standards?.....	674
XIV. Statutory and Executive Order Reviews	674
A. Executive Order 12866: Regulatory Planning and Review And Executive Order 13563: Improving Regulation and Regulatory Review	675
B. Paperwork Reduction Act (PRA).....	677
C. Regulatory Flexibility Act (RFA).....	681
D. Unfunded Mandates Reform Act (UMRA).....	684
E. Executive Order 13132: Federalism.....	686
F. Executive Order 13175: Consultation and Coordination with Indian Tribal Governments	687
G. Executive Order 13045: Protection of Children From Environmental Health Risks and Safety Risks	690
H. Executive Order 13211: Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use	692
I. National Technology Transfer and Advancement Act (NTTAA) and 1 CFR part 51	692
J. Executive Order 12898: Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations	694
K. Congressional Review Act (CRA).....	700
XV. Withdrawal of Proposed Standards for Certain Modified Sources	700
XVI. Statutory Authority	701