



Edison Electric
INSTITUTE

EPA's Proposed 111 Rules

Metropolitan Washington Council of Governments
Climate, Energy and Environment Policy Committee

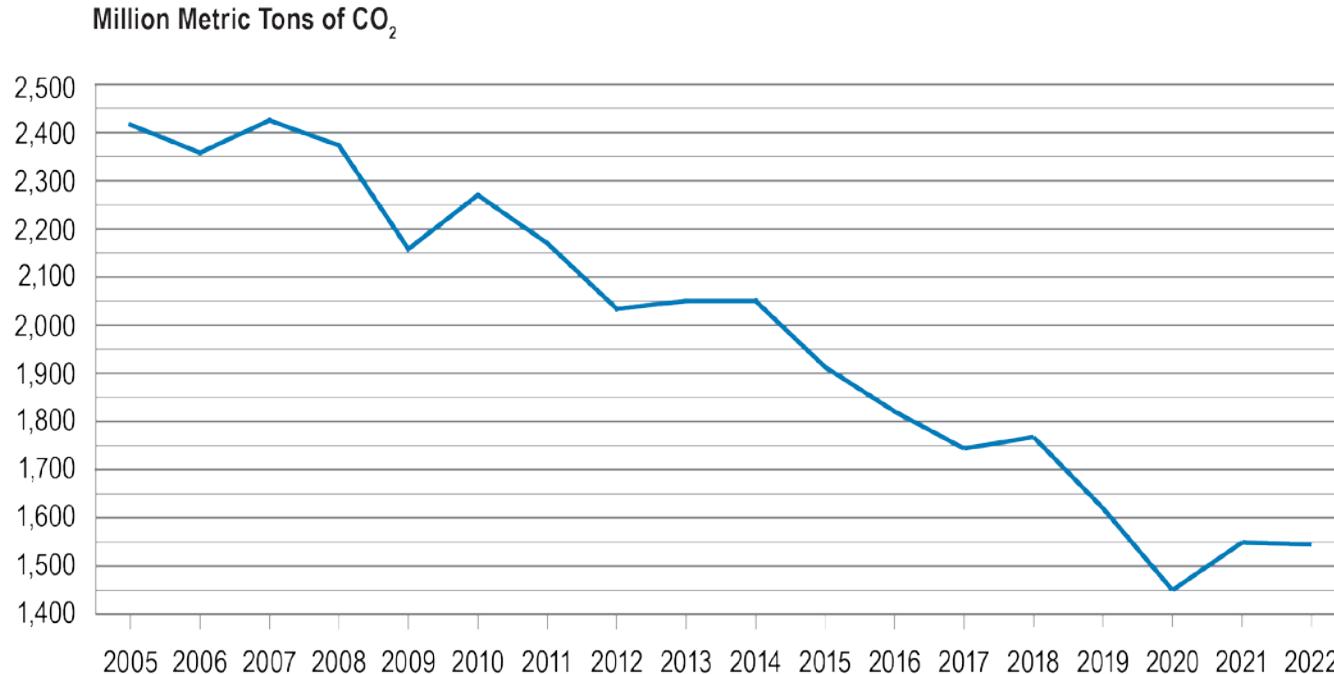
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Proposed Rules

- EPA's proposed 111 Rule is made of 4 distinct elements:
 - 111(d) rule for existing steam EGU's
 - 111(d) rule for exiting gas units
 - 111(b) for new gas units
 - Repeal of the ACE rule

Reducing Carbon Emissions



Today, more than 40 percent of U.S. electricity comes from carbon-free sources

As of 2022, electric power industry CO₂ emissions were 36 percent below 2005 levels

Overall trajectory is expected to continue based on current trends.

Proposed EPA GHG Performance Standards for Fossil-Based Electric Generating Units – DRAFT (06/09/23)

	Proposed Best System of Emissions Reduction (BSER) and Resulting Performance Standards¹				
	Through Dec. 31, 2029	Jan. 1, 2030 – Dec. 31, 2031	Jan. 1, 2032 – Dec. 31, 2034	Jan. 1, 2035 – Dec. 31, 2039	2040 and beyond
111(d) – Existing Steam EGUs (coal-fired)*					
• Retire by 12/31/2031	No applicable standard	Routine operations/no emissions increases***	Unit retired		
• Retire 2032-2034	No applicable standard	20% annual capacity factor (CF) restriction***		Unit retired	
• Retire 2035-2039	No applicable standard	40% natural gas co-firing***			Unit retired
• Retire after 1/1/2040	No applicable standard	CCS at 90% capture rate***			
111(d) – Existing Steam EGUs (gas-fired)*					
• ≥45% Capacity Factor	No applicable standard	Routine efficient operations; 1,300 lb CO ₂ /MWh			
• <45% Capacity Factor ²	No applicable standard	Routine efficient operations; 1,500 lb CO ₂ /MWh			
111(d) – Existing NGCC**					
• CCS option	1000 lb CO ₂ /MWh or current permit standard			CCS at 90% capture rate***	
• Hydrogen (H ₂) option	1000 lb CO ₂ /MWh or current permit standard		30% hydrogen blending by volume (from 1/1/2032 until 1/1/2038)***	96% hydrogen blending by volume (after 1/1/2038)***	
111(b) – New NGCC³					
• Base load > 45-55%*** (CCS option)	Highly efficient generation/best O&M practices 770 lb CO ₂ /MWh for > 2,000 MMBTU/h Units 770-900 lb CO ₂ /MWh for < 2,000 MMBTU/h Units			CCS at 90% capture rate 90 lb CO ₂ /MWh	
• Base load > 45-55%*** (H ₂ option)	Highly efficient generation/best O&M 770 lb CO ₂ /MWh for > 2,000 MMBTU/h Units 770-900 lb CO ₂ /MWh for < 2,000 MMBTU/h Units		30% hydrogen blending by volume 680 lb CO ₂ /MWh (until 1/1/2038)	96% hydrogen blending by volume 90 lb CO ₂ /MWh (after 1/1/2038)	
111(b) – New CT²					
• Intermediate – NGCC < 45-55% CF CT < 33-40% CF	Efficient operations 1,150 lb CO ₂ /MWh		30% hydrogen blending by volume 1,000 lb CO ₂ /MWh		
• Low Utilization (CT)***	Use of clean fuels (NG, Nos. 1 & 2 fuel oil); 20% annual CF restriction; 120-160 lb CO ₂ /MMBTU				

* States set emissions limits for existing units under Clean Air Act §111(d) that reflect EPA's BSER. Under Clean Air Act §111(b), EPA sets emissions limits based on its BSER determination for new units.

** Only applies to NGCC units that are >300 MW with a capacity factor of ≥50%.

*** Actual CF restriction will be a unit-specific inquiry, based on design efficiency. States will set resulting performance standards using a unit-specific baseline emissions rate.

¹ A covered EGU is not required to use the technology identified as BSER, but instead to achieve an emissions rate equivalent to using the BSER. For existing units, the proposed regulations would allow states to authorize the use of various compliance flexibility tools to meet the standards (e.g., averaging, trading, banking, etc.).

² EPA does not propose a BSER or presumptive emissions rate for natural gas steam boilers that operate at capacity factors of less than 8%.

³ New source standards are effective upon proposal, which is the date of Federal Register publication.

The **Edison Electric Institute** (EEI) is the association that represents all U.S. investor-owned electric companies. Our members provide electricity for more than 235 million Americans, and operate in all 50 states and the District of Columbia. As a whole, the electric power industry supports more than 7 million jobs in communities across the United States.

In addition to our U.S. members, EEI has more than 60 international electric companies, with operations in more than 90 countries, as International Members, and hundreds of industry suppliers and related organizations as Associate Members.

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