



EPA's Final Clean Power Plan Rule: Changes and Implications for Energy Efficiency



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The Big News Before the Release of the Final Rule

“White House axes efficiency from state clean power targets”

Source: Greenwire, E&E Publishing, Aug 1

The Big Changes – Forget What You Learned About the BSER Calculation



- The final Clean Power Plan differs in several ways from the proposed rule
 - Standards, based on new BSER blocks and interconnection/national approach
 - Timing for planning (to 2018) and implementation (to 2022)
 - Mass caps, with a leakage requirement (and new source complement)
 - More specific state plan design options
 - Proposed Federal Plan and model trading rules

Changes to Best System of Emission Reduction (BSER)

Proposed Rule

Building Block #1
Heat Rate Improvements at
Coal Plants

Building Block #2
Shift Generation from Coal
to Natural Gas

Building Block #3
(a) Credit for Existing and
Planned Nuclear Generation
(b) Generation from Existing
and New Renewables

Building Block #4
Energy Efficiency

What Changed?

Building Block #1
Change in details

Building Block #2
Change in details

Building Block #3
(a) Removed
(b) Post-2012 Renewable
Generation Only

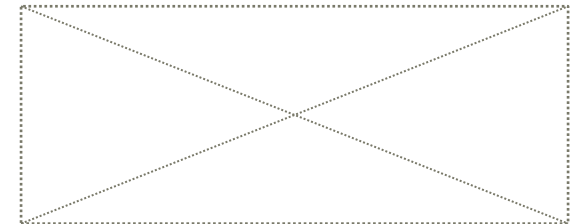
Removed from BSER

Final Rule

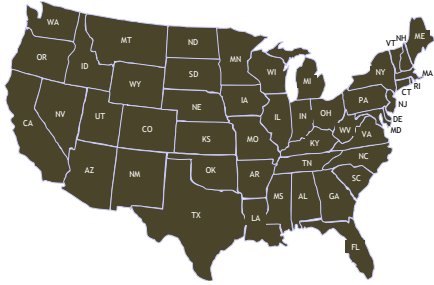
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Heat Rate Improvements at
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Building Block #3
Credit for New Renewable
Generation and New
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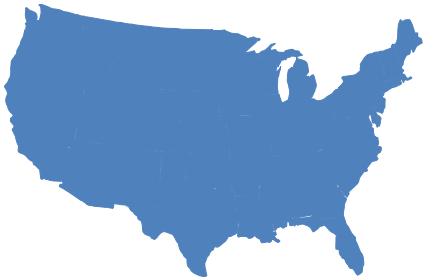
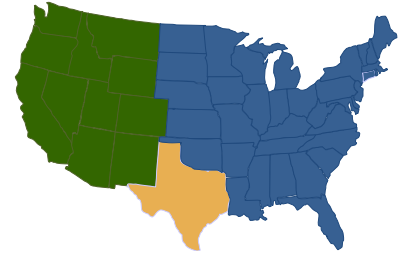


EPA Regionalizes BSER Approach



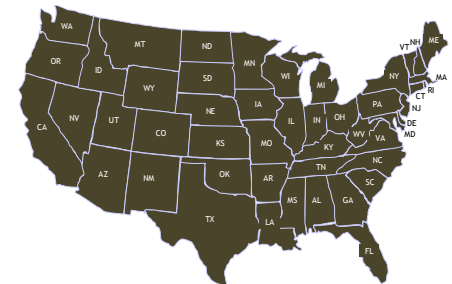
Step 1: State-specific adjusted baseline emissions and generation by technology – steam and NGCC

Step 2: Application of Building Blocks to determine technology-specific standards by interconnection



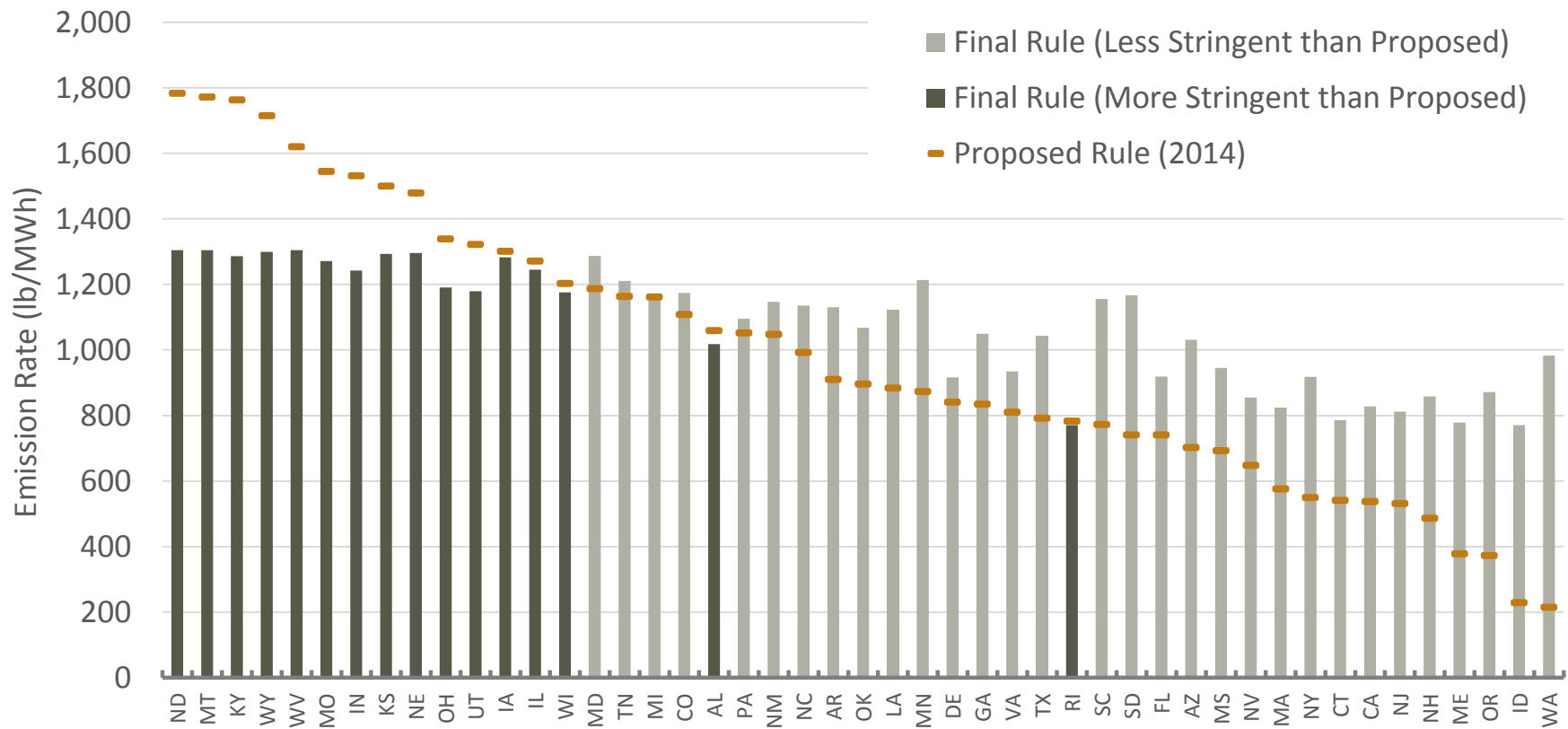
Step 3: Least stringent of interconnection standards in each year sets national technology-specific BSER standards

Step 4: State rate standards equal to weighted-average of national technology-specific BSER rates and 2012 adjusted baseline generation mix



States Mixed on Standards in Final Rule

2030 Rate Standards by State under Final and Proposed Rules

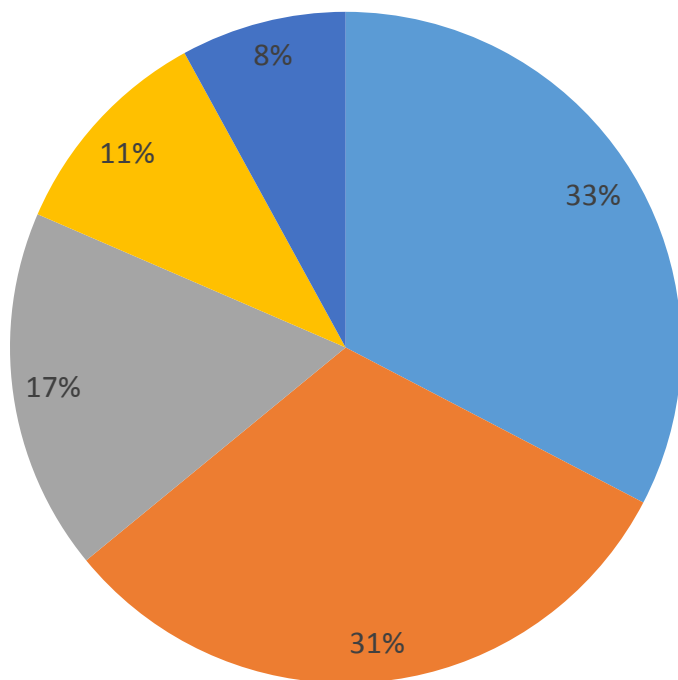


Source: <http://www.epa.gov/airquality/cpp/tsd-cpp-emission-performance-rate-goal-computation-appendix-1-5.xlsx>

EE Displaces Coal to Drive Emission Reductions in EPA's Analysis of Final Rule

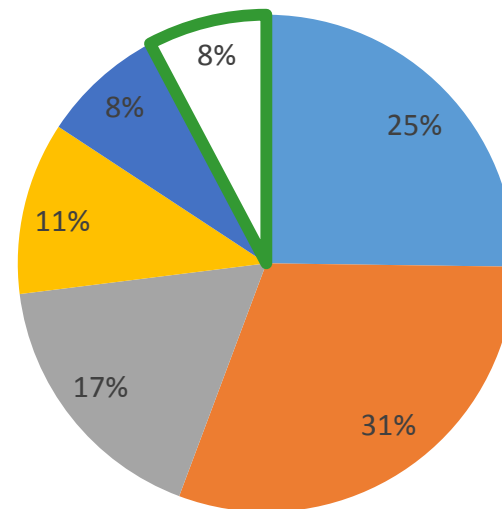


EPA Base Case – U.S. 2030:
Generation Mix (GWh)

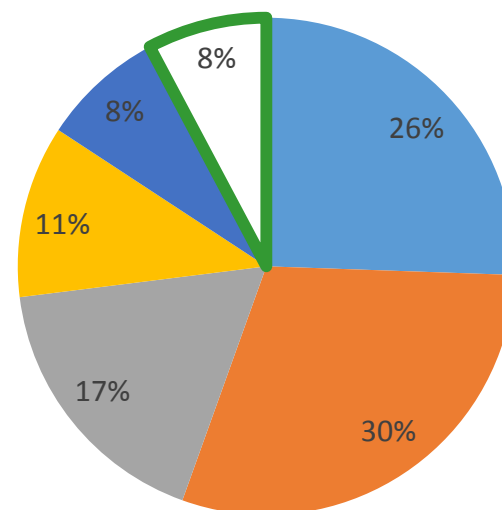


■ Coal ■ Gas ■ Nuclear ■ RE ■ Hydro/Other ■ EE

EPA Rate Case – U.S. 2030:

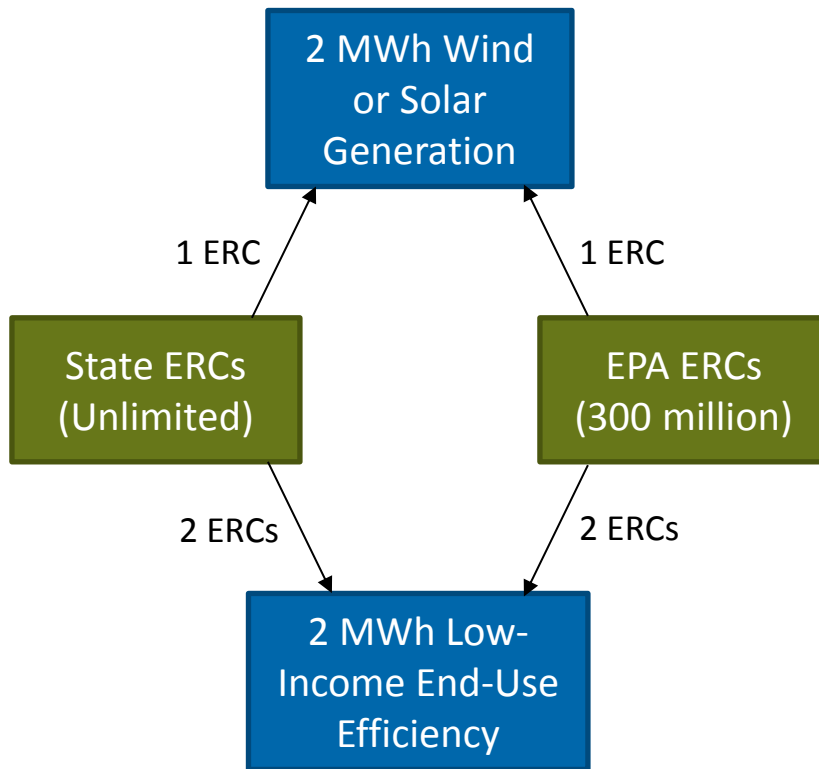


EPA Mass Case – U.S. 2030:



Source: <http://www.epa.gov/airmarkets/programs/ipm/cleanpowerplan.html>

EPA's Nod to EE in the Final Rule – Clean Energy Incentive Program (CEIP)



- EPA proposed CEIP to motivate early action for RE and EE in 2020 and 2021
 - Projects built post-plan submission
 - Based on generation/contribution in 2021/22
- Allowances are set-aside from budgets in the first compliance period (2022-2024) and do not lower overall goals

Where Does EE Fit In State Plans?

- EE's involvement will vary depending on type of plan
- Mass Standard
 - EE does not receive credits for sale to affected sources, except under CEIP
 - EE may benefit from higher power prices due to CO2 costs on generators
 - State Measures plan option could rely on EE programs
- Rate Standard
 - EE, along with renewables, new nuclear, and other sources, may receive credits (ERCs) for sale to affected sources
 - EE ERCs likely cannot cross state lines, should state go forward with trading
- Federal Plan – Mass or Rate?
 - Federal Plan does not provide ERCs for EE under Rate proposal, but is taking comment on inclusion

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