

Clean Power Plan Savings in Kentucky

In June 2014, the EPA introduced a proposal to reduce carbon pollution from existing power plants—a critical step to address climate change in the U.S. The proposal, dubbed the Clean Power Plan, asks each state to design its own strategy to achieve carbon reduction targets by 2030. It offers states a great opportunity not just to fight climate change, but to lower electricity bills. The EPA expects to finalize the rule August 2015.

Rep. Whitfield and Sen. McConnell Claim to Protect Ratepayers by Opposing the Clean Power Plan

Rep. Ed. Whitfield (R-Ky.) and **Sen. Mitch McConnell** (R-Ky.) have emerged as key opponents of the Clean Power Plan. **Rep. Whitfield** introduced H.R. 2042, the so-called "Ratepayer Protection Act," which would let state governors opt out of the Clean Power Plan at will by claiming to protect ratepayers from rate hikes or reliability problems.¹

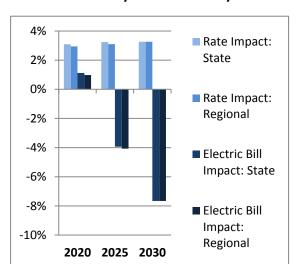
Sen. McConnell is an original co-sponsor of S. 1324, the Affordable Reliable Energy Now (ARENA) Act, introduced by Sen. Kelly Moore Capito (R-W.Va.). The ARENA Act contains a "just say no" provision similar to that in the Ratepayer Protection Act, plus other provisions that effectively block the EPA from curbing carbon pollution from power plants.²

The Clean Power Plan Can Cut Kentucky Electricity Bills by \$104 by 2030

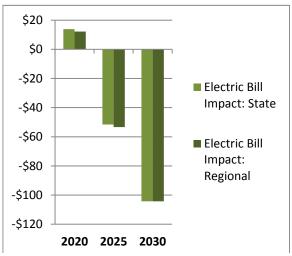
A Public Citizen analysis of EPA and Energy Information Administration (EIA) data projects that by 2030 **Kentucky electricity bills will be 7.7 percent lower under the Clean Power Plan than under a business-as-usual scenario, saving the average household \$104 annually**.

Although electricity *rates* will rise modestly under the plan, consumers will use less electricity as the state improves efficiency measures to help meet its carbon-reduction target. The net effect is a reduction in actual *bills*. We project that

Estimated CPP Impacts on Retail Rates and Electricity Bills in Kentucky



Projected Change in Annual Household Electric Bills in Kentucky Under the CPP



electricity bills will rise very slightly in 2020—by less than rates—then decline sharply in 2025 and 2030. The figures above and the table provide rate and bill projections for two scenarios, one in which Kentucky complies individually, and one in which it complies in a regional group.

		Rate	Rate	Bill	Bill	Bill	Bill				
		Impact:	Impact:	Impact:	Impact:	Impact:	Impact:	Bills:	Bills: CPP	Bills: CPP	
		State	Regional	State	Regional	State	Regional	Baseline	State	Regional	
	2020	3.1%	2.9%	1.1%	1.0%	\$13.85	\$12.12	\$1,240.52	\$1,254.37	\$1,252.64	
	2025	3.2%	3.1%	-3.9%	-4.1%	-\$51.62	-\$53.34	\$1,310.90	\$1,259.29	\$1,257.57	
	2030	3.3%	3.3%	-7.7%	-7.7%	-\$104.24	-\$104.24	\$1,361.32	\$1,257.08	\$1,257.08	

Methodology

We estimate business-as-usual household electricity consumption by scaling EPA's business-as-usual electricity sales projections for Kentucky to the relative size reflected in EIA's household consumption data for the state.³

We then estimate household consumption under the Clean Power Plan—meaning after the effects of energy efficiency measures—by subtracting from the baseline consumption figures the EPA's projections for Kentucky's cumulative energy efficiency savings.⁴

We estimate household bills for each year and compliance scenario by multiplying each set of household consumption estimates by the electricity prices that the EPA projects for that year and scenario. The EPA provides price projections by Electricity Market Module (EMM) region,⁵ and Kentucky encompasses portions of two different regions. We weight the pricing data from each EMM region to reflect that region's proportion of state electricity sales.

ENDNOTES

¹ See H.R. 2042, Ratepayer Protection Act § 3, https://www.congress.gov/bill/114th-congress/house-bill/2042.

² See S. 1324, Affordable Reliable Energy Now (ARENA) Act § 4(c), https://www.congress.gov/bill/114th-congress/senate-bill/1324.

³ The EPA's sales data are in the tab labeled "Intermediate Data" in the spreadsheet entitled, *Scenario 1: 1.5% savings target*, 0.20%/year ramp rate, and 3% real discount rate, at http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OAR-2013-0602-0153. For the EPA's methodology, see EPA, BACKGROUND AND DRAFT METHODOLOGY FOR ESTIMATING ENERGY IMPACTS OF EE/RE POLICIES (2014) http://epa.gov/statelocalclimate/documents/pdf/EPA%20background%20and%20methodology%20EE_RE_02122014.pdf. The EIA data are in EIA, ELECTRIC SALES, REVENUE, AND AVERAGE PRICE, Table 5A, at http://www.eia.gov/electricity/sales_revenue_price/.

⁴ These projections are on the tab labeled "Opt 1 - Cum Savings %" on the spreadsheet entitled *Data File: GHG Abatement Measures Appendix 5-4 (XLS)*, at https://www2.epa.gov/carbon-pollution-standards/clean-power-plan-proposed-rule-technical-documents.

⁵ See EPA, REGULATORY IMPACT ANALYSIS FOR THE PROPOSED CARBON POLLUTION GUIDELINES FOR EXISTING POWER PLANTS AND EMISSION STANDARDS FOR MODIFIED AND RECONSTRUCTED POWER PLANTS 3-40–3-42 (2014) (hereinafter RIA).