



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

JUL 24 2008

OFFICE OF
AIR AND RADIATION

The Honorable Henry A. Waxman
Chairman
Committee on Oversight and Government Reform
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Chairman:

Thank you for your June 9, 2008, letter to in which you ask several questions regarding analysis of an upcoming U.S. Environmental Protection Agency (EPA) rulemaking entitled "Prevention of Significant Deterioration (PSD), Nonattainment New Source Review (NSR), and New Source Performance Standards (NSPS): Emissions Test for Electric Generating Units." I am responding on behalf of Administrator Johnson to provide you information on our model and supporting documentation.

Your letter asks specifically whether EPA has analyzed the impact of the Emissions Test for Electric Generating Units ("NSR EGU") rule on greenhouse gas (GHG) emissions from power plants. As we prepared the analysis of the rule's possible effects on regulated air pollutants in our supplemental proposal, we ran a model known as the Integrated Planning Model (IPM), which produces output files that include not only emissions of regulated pollutants, but also of carbon dioxide (CO₂). We modeled a base case and two hypothetical scenarios to assess the impacts of the proposed rule. We included the three raw IPM runs, including the CO₂ emissions, in the docket for this rulemaking, and we are attaching a copy of these three raw IPM run outputs for your convenience. Using the three raw IPM outputs, we calculated the change in national CO₂ emissions, the number of counties with CO₂ emission increases and decreases, and the largest county level CO₂ emission decreases and increases under the two scenarios. In response to your request, we are attaching the documents containing the summary data and calculations, which consist of several spreadsheets and charts. We have not generated any other documents responsive to your request. We have not yet determined what additional analyses, if any, we will do in connection with GHGs from EGUs.

Again, thank you for your letter. If you have further questions please contact me, or your staff may call Cheryl Mackay in EPA's Office of Congressional and Intergovernmental Relations at (202) 564-2023.

Sincerely

A handwritten signature in black ink, appearing to read "Robert J. Meyers". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Robert J. Meyers
Principal Deputy Assistant Administrator

Enclosures

Table X.X National EGU Emissions Under NSR Availability Scenario Compared to CAIR/CAMR/CAVR 2020 (tpy)

	Total Emissions Under CAIR/CAMR/CAVR	Total Emissions Under NSR Availability	Emissions Change Under NSR Availability Compared to CAIR/CAMR/CAVR
CO ₂	2,621,144,000	2,695,109,000	73,965,000

TableX.X Changes in County-level CO₂ Emissions NSR Availability Scenario Compared to CAIR/CAMR/CAVR 2020

Emissions Change	Number of Counties
Total # of counties with decreases in EGU Emissions	259
# of counties with EGU emissions decreases between 1,000,000 and 5,466,154 tpy	6
# of counties with EGU emissions decreases between 100,000 and 1,000,000 tpy	38
# of counties with EGU emissions decreases between 10,000 and 100,000 tpy	79
# of counties with EGU emissions decreases between 1,000 and 10,000 tpy	83
# of counties with EGU emissions decreases up to 1,000 tpy	53
# of counties with no change in EGU emissions	505
# of counties with EGU emissions increases up to 1,000 tpy	8
# of counties with EGU emissions increases between 1,000 and 10,000 tpy	48
# of counties with EGU emissions increases between 10,000 and 100,000 tpy	129
# of counties with EGU emissions increases between 100,000 and 1,000,000 tpy	220
# of counties with EGU emissions increases between 1,000,000 and 1,458,485 tpy	14
Total # of counties with increases in EGU Emissions	419

Table X.X Largest County-level Decreases and Increases of CO₂ Under NSR Availability Scenario (tpy)

5 counties with largest decrease in CO₂ emissions under the NSR Availability Scenario					
State	County	County-level Emissions			Variations in unit-level data that would explain the increase
		NSR Availability	CAIR/CAMR/CAVR 2020	Decrease	
AL	Jackson	7,941,111	13,407,265	5,466,154	
NV	Clark	19,948,729	22,190,620	2,241,891	
OH	Montgomery	43,580	2,159,576	2,115,996	
TN	Rusk	19,519,624	20,560,166	1,040,542	
TN	Roane	11,400,794	12,429,527	1,028,733	
5 counties with largest increase in CO₂ emissions under the NSR Availability Scenario					
State	County	County-level Emissions			Variations in unit-level data that would explain the increase
		NSR Availability	CAIR/CAMR/CAVR 2020	Increase	
OH	Jefferson	32,340,220	30,881,735	1,458,485	
NM	San Juan	31,423,446	30,009,492	1,413,954	
OH	Gallia	29,909,460	28,560,762	1,348,698	
NC	Person	27,371,473	26,136,997	1,234,476	
GA	Bartow	27,344,523	26,111,481	1,233,042	

Table X.X National EGU Emissions Under NSR Efficiency Scenario Compared to CAIR/CAMR/CAVR 2020 (tpy)			
	Total Emissions Under CAIR/CAMR/CAVR	Total Emissions Under NSR Efficiency	Emissions Change Under NSR Efficiency Compared to CAIR/CAMR/CAVR
CO ₂	2,621,144,000	2,615,800,000	(5,344,000)

Table X.X Changes in County-level CO₂ Emissions NSR Efficiency Scenario Compared to CAIR/CAMR/CAVR 2020	
Emissions Change	Number of Counties
Total # of counties with decreases in EGU Emissions	325
# of counties with EGU emissions decreases between 100,000 and 930,591 tpy	71
# of counties with EGU emissions decreases between 10,000 and 100,000 tpy	108
# of counties with EGU emissions decreases between 1,000 and 10,000 tpy	79
# of counties with EGU emissions decreases up to 1,000 tpy	67
# of counties with no change in EGU emissions	576
# of counties with EGU emissions increases up to 1,000 tpy	192
# of counties with EGU emissions increases between 1,000 and 10,000 tpy	36
# of counties with EGU emissions increases between 10,000 and 100,000 tpy	31
# of counties with EGU emissions increases between 100,000 and 1,000,000 tpy	20
# of counties with EGU emissions increases between 1,000,000 and 7,036,783 tpy	3
Total # of counties with increases in EGU Emissions	282

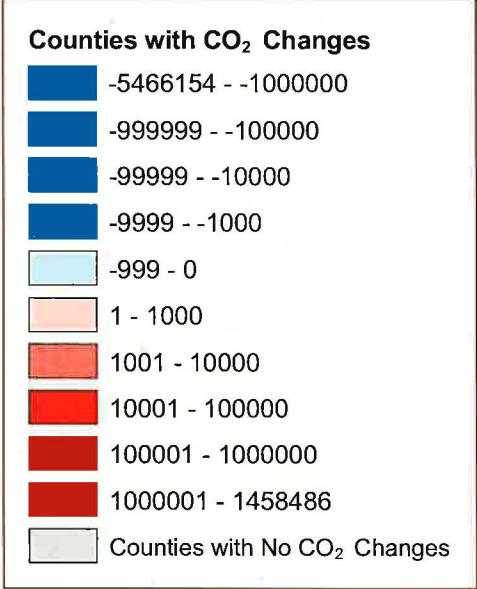
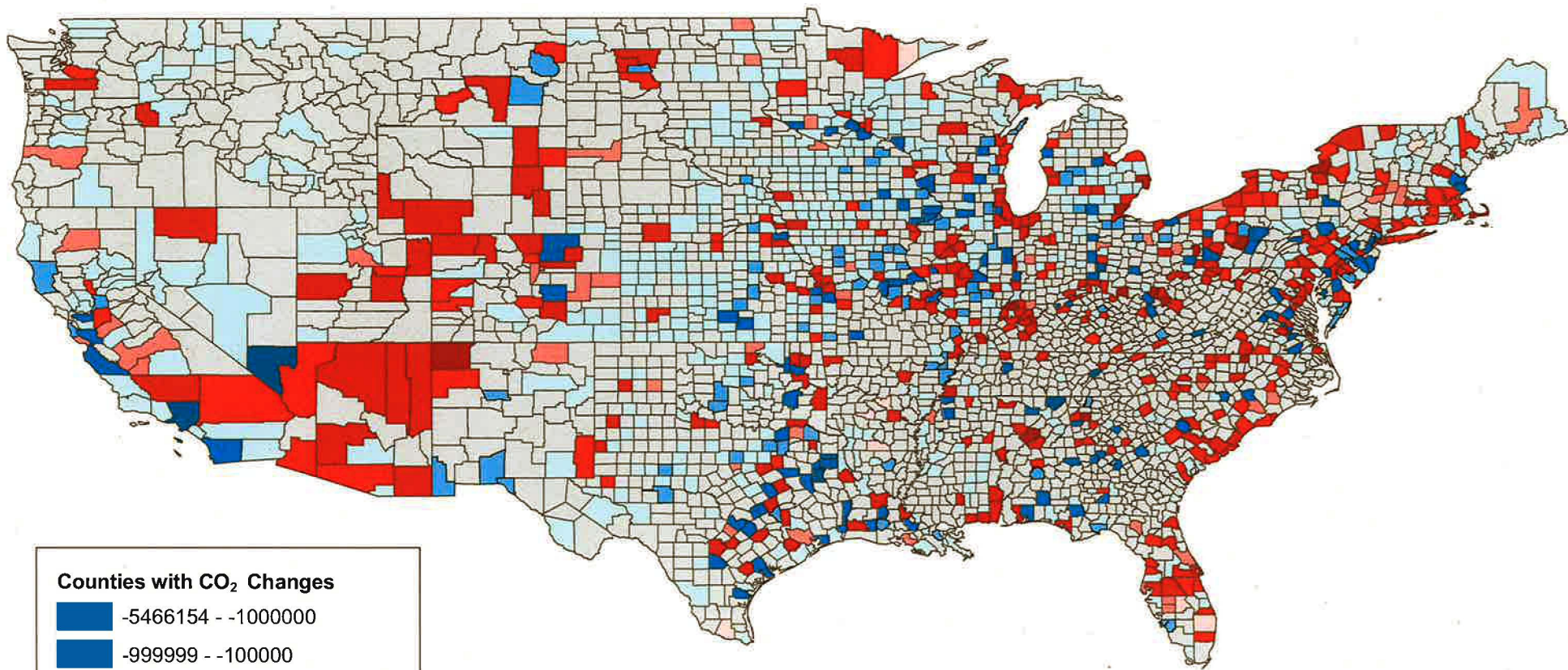
Table X.X Largest County-level Decreases and Increases of CO₂ Under NSR Efficiency Scenario (tpy)

5 counties with largest decrease in CO₂ emissions under the NSR Efficiency Scenario

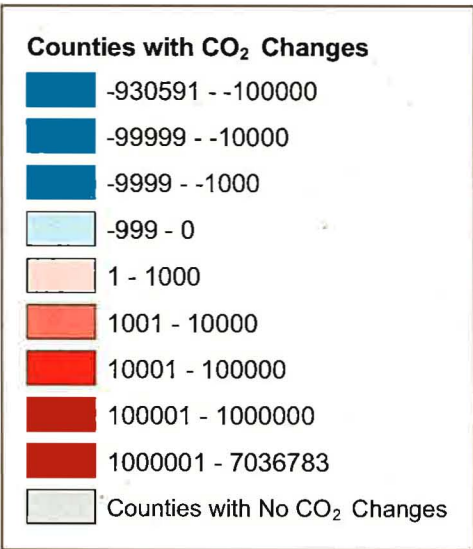
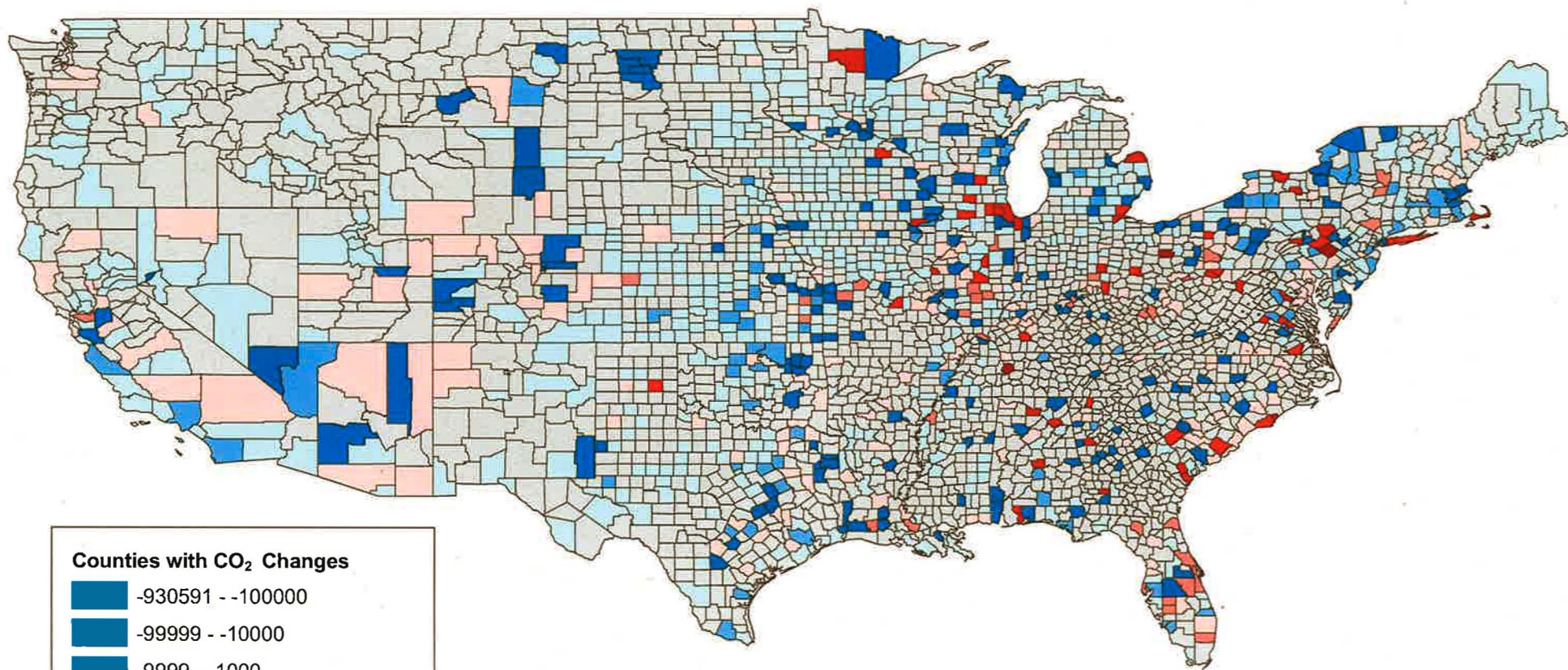
State	County	County-level Emissions			Variations in unit-level data that would explain the increase
		NSR Efficiency	CAIR/CAMR/CAVR 2020	Decrease	
MA	Essex	2,418,980	3,349,571	930,591	
PA	Clearfield	3,776,946	4,597,635	820,689	Shawville unit 1 retires under NSR Efficiency
TX	Rusk	19,749,615	20,560,166	810,550	
KS	Pottawatomie	17,995,391	18,745,063	749,672	
NV	Clark	21,622,897	22,190,620	567,723	

5 counties with largest increase in CO₂ emissions under the NSR Efficiency Scenario

State	County	County-level Emissions			Variations in unit-level data that would explain the increase
		NSR Efficiency	CAIR/CAMR/CAVR 2020	Increase	
TN	Humphreys	10,013,124	2,976,341	7,036,783	Johnsonville Units 1-8 retire under CAIR/CAMR/CAVR
PA	Berks	2,225,562	731,074	1,494,488	Coal units retire in CAIR/CAMR/CAVR, but not under NSR Efficiency
OH	Coshocton	14,183,664	12,965,110	1,218,555	Conesville units 1 & 2 retire under CAIR/CAMR/CAVR
MA	Barnstable	1,964,371	1,084,379	879,993	
NY	Yates	873,719	0	873,719	



2020 County-level CO₂ Emissions Changes With a 4% Increase in EGU Availability



2020 CO₂ County-level Emissions Changes With Efficiency Increase