



Chapter 2: Affected Units

Under the Acid Rain Program (ARP) and Clean Air Interstate Rule (CAIR) SO₂ and NO_x annual programs, emission reductions generally apply to large electricity generating units (EGUs) — boilers, turbines, and combined cycle units that primarily burn fossil fuels to generate electricity for sale. The CAIR NO_x ozone season program includes EGUs and, in some states, large industrial units which produce power for primarily internal use and have been carried over from the NO_x Budget Trading Program (NBP). This section covers units affected in 2013, and does not include programs not being implemented in 2013 (NBP, CSAPR).

Analysis and Background Information

When Phase II of the ARP began in 2000, the ARP encompassed over 2,000 units. The ARP affects EGUs with an output capacity greater than 25 megawatts that burn coal, oil, or gas as well as all new EGUs. The ARP NO_x program affects boilers at mostly coal-fired power plants.

The CAIR SO₂ and NO_x annual programs generally applied to large EGUs that primarily burn fossil fuels to generate electricity for sale. EGUs in the CAIR programs cover a range of unit types, including units that operate year-round to provide baseload power to the electric grid as well as units that provide power only on peak demand days.

In addition to large EGUs that generate electricity for sale, the CAIR NO_x ozone season program included some facilities that were carried over from the NBP and which produce electricity mostly for internal use. Such facilities may include large industrial units, such as boilers and turbines at heavy manufacturing facilities, including paper mills, petroleum refineries, and iron and steel production facilities. These units also include some steam plants at institutions such as large universities or hospitals.

Key Points

Acid Rain Program (ARP)

- In 2013, the ARP SO₂ requirements applied to the 3,609 fossil fuel-fired combustion units at 1,237 facilities across the country; 847 units at 350 facilities were subject to the ARP NO_x program.

Clean Air Interstate Rule (CAIR)

- In 2013, there were 3,239 affected EGUs at 935 facilities in the CAIR SO₂ annual program. Of those, 2,554 (79 percent) were also covered by the ARP.
- In 2013, there were 3,239 affected EGUs at 935 facilities in the CAIR NO_x annual program and 3,177 EGUs and industrial units at 928 facilities in the CAIR NO_x ozone season program.

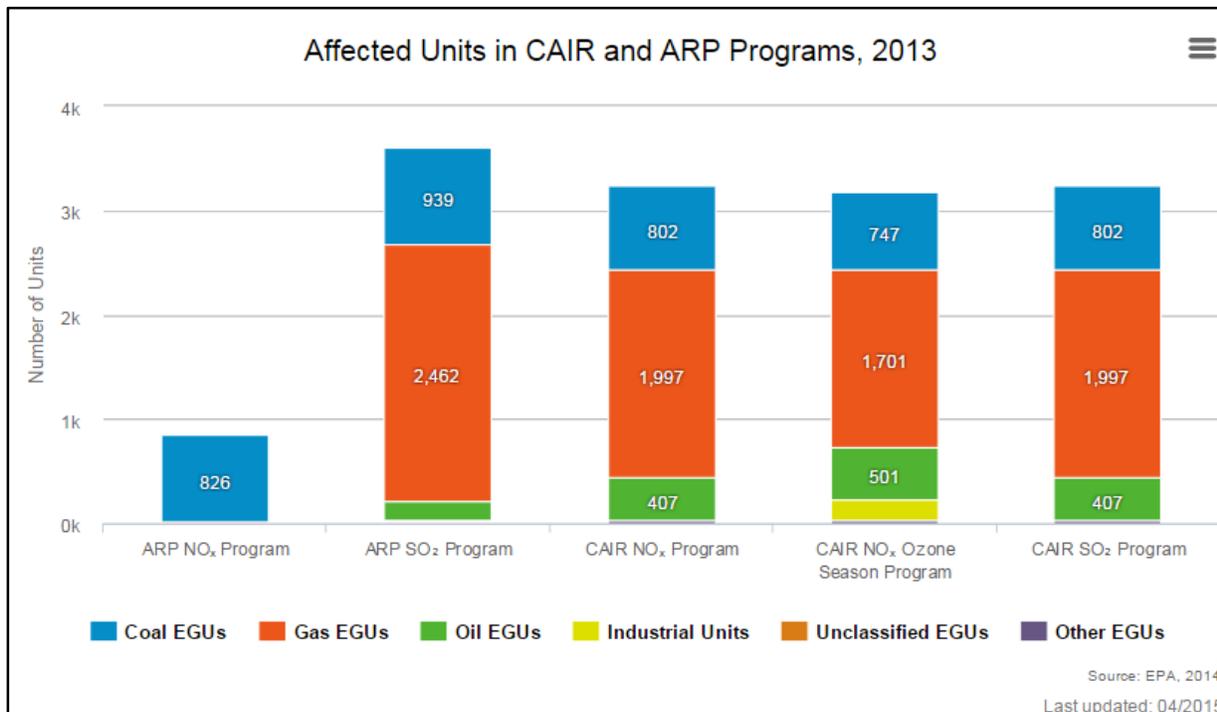
More Information

Acid Rain Program (ARP) <http://www.epa.gov/airmarkets/programs/arp/index.html>

Clean Air Interstate Rule (CAIR) <http://www.epa.gov/airmarkets/programs/cair/index.html>



Figures



Notes:

- “Unclassified” units have not submitted a fuel type in their monitoring plan and did not report emissions.
- “Other” fuel refers to units that burn waste, wood, petroleum coke, tire-derived fuel, etc.

Figure 1. Affected Units in CAIR and ARP Programs, 2013



Affected Units in the CAIR and ARP Programs, 2013

Fuel	ARP NO _x Program	ARP SO ₂ Program	CAIR NO _x Program	CAIR NO _x Ozone Season Program	CAIR SO ₂ Program
Coal EGUs	826	939	802	747	802
Gas EGUs	17	2462	1997	1701	1997
Oil EGUs	0	173	407	501	407
Industrial Units	0	4	0	196	0
Unclassified EGUs	0	12	4	1	4
Other EGUs	4	19	29	31	29
Total Units	847	3609	3239	3177	3239

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Source EPA, 2014

Last updated: 4/2015

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Figure 2. Affected Units in the CAIR and ARP Programs, 2013