**Table 3-23 New Source Review (NSR) Settlements in EPA Platform v6**

| **Company and Plant** | **State** | **Unit** | **Settlement Actions** | | | | | | | | | | | | | | | | **Notes** | **Reference** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Retire/Repower** | | **SO2 control** | | | **NOx Control** | | | **PM or Mercury Control** | | | | | **Allowance Retirement** | **Allowance Restriction** |  |
| **Action** | **Effective Date** | **Equipment** | **Percent Removal or Rate** | **Effective Date** | **Equipment** | **Rate** | **Effective Date** | **Equipment** | | **Rate** | | **Effective Date** | **Retirement** | **Restriction** | **Effective Date** |
| **Alabama Power** | | | | | | | | | | | | | | | | | | | | |
| James H. Miller | Alabama | Unit 3 |  |  | Install and operate FGD continuously | 95% | 12/31/11 | Operate existing SCR continuously | 0.1 | 05/01/08 |  | | 0.03 | | 12/31/06 | Within 45 days of settlement entry, APC must retire 7,538 SO2 emission allowances. | APC shall not sell, trade, or otherwise exchange any Plant Miller excess SO2 emission allowances outside of the APC system | 1/1/21 | 1) Settlement requires 95% removal efficiency for SO2 or 90% in the event that the unit combust a coal with sulfur content greater than 1% by weight. 2) The settlements require APC to retire $4,900,000 of SO2 emission allowances within 45 days of consent decree entry. 3) EPA assumed a retirement of 7, 538 SO2 allowances based on a current allowance price of $650. | http://www2.epa.gov/enforcement/alabama-power-company-clean-air-act-settlement |
| Alabama | Unit 4 |  |  | Install and operate FGD continuously | 95% | 12/31/11 | Operate existing SCR continuously | 0.1 | 05/01/08 |  | | 0.03 | | 12/31/06 | 1/1/21 |
| **Minnkota Power Cooperative** | | | | | | | | | | | | | | | | | | | | |
|  | | | Beginning 1/01/2006, Minnkota shall not emit more than 31,000 tons of SO2/year, no more than 26,000 tons beginning 2011, no more than 11,500 tons beginning 1/01/2012. If Unit 3 is not operational by 12/31/2015, then beginning 1/01/2014, the plant wide emission shall not exceed 8,500. | | | | | | | | | | | | | | | |  |  |
| Milton R. Young | North Dakota | Unit 1 |  |  | Install and continuously operate FGD | 95% if wet FGD, 90% if dry | 12/31/11 | Install and continuously operate Over-fire AIR, or equivalent technology with emission rate < 0.36 | 0.36 | 12/31/09 |  | | 0.03 if wet FGD, .015 if dry FGD | |  | Plant will surrender 4,346 allowances for each year 2012 – 2015, 8,693 allowances for years 2016 – 2018, 12,170 allowances for year 2019, and 14,886 allowances/year thereafter if Units 1 – 3 are operational by 12/31/2015. If only Units 1 and 2 are operational by12/31/2015, the plant shall retire 17,886 units in 2020 and thereafter. | Minnkota shall not sell or trade NOx allowances allocated to Units 1, 2, or 3 that would otherwise be available for sale or trade as a result of the actions taken by the settling defendants to comply with the requirements |  | 1) Settlement requires 95% removal efficiency for SO2 at Unit 1 if a wet FGD is installed, or 90% if a dry FGD is installed. The FGD for Units 1 and 2 and the NOx control for Unit 1 are modeled as emission constraints in EPA Platform v6, the NOx control for Unit 2 is hardwired into EPA Platform v6. 2) Beginning 12/31/2010, Unit 2 will achieve a phase II average NOx emission rate established through its NOx BACT determination. Beginning 12/31/2011, Unit 1 will achieve a phase II NOx emission rate established by its BACT determination. | http://www2.epa.gov/enforcement/minnkota-power-cooperative-and-square-butte-electric-cooperative-settlement |
| North Dakota | Unit 2 |  |  | Design, upgrade, and continuously operate FGD | 90% | 12/31/10 | Install and continuously operate over-fire AIR, or equivalent technology with emission rate < 0.36 | 0.36 | 12/31/07 |  | | 0.03 | | Before 2008 |  |
| **SIGECO** | | | | | | | | | | | | | | | | | | | | |
| FB Culley | Indiana | Unit 1 | Repower to natural gas (or retire) | 12/31/06 |  |  |  |  |  |  |  | |  | |  | The provision did not specify an amount of SO2 allowances to be surrendered. It only provided that excess allowances resulting from compliance with NSR settlement provisions must be retired. |  |  |  | http://www2.epa.gov/enforcement/southern-indiana-gas-and-electric-company-sigeco-fb-culley-plant-clean-air-act-caa |
| Indiana | Unit 2 |  |  | Improve and continuously operate existing FGD (shared by Units 2 and 3) | 95% | 06/30/04 |  |  |  |  | |  | |  |  |  |  |
| Indiana | Unit 3 |  |  | Improve and continuously operate existing FGD (shared by Units 2 and 3) | 95% | 06/30/04 | Operate Existing SCR Continuously | 0.1 | 09/01/03 | Install and continuously operate a Baghouse | | 0.015 | | 06/30/07 |  |  |  |
| **PSEG FOSSIL** | | | | | | | | | | | | | | | | | | | | |
| Bergen | New Jersey | Unit 2 | Repower to combined cycle | 12/31/02 |  |  |  |  |  |  |  | |  | |  | The provision did not specify an amount of SO2 allowances to be surrendered. It only provided that excess allowances resulting from compliance with NSR settlement provisions must be retired. |  |  |  | http://www2.epa.gov/enforcement/pseg-fossil-llc-settlement |
| Hudson | New Jersey | Unit 2 |  |  | Install Dry FGD (or approved alt. technology) and continually operate | 0.15 | 12/31/10 | Install SCR (or approved tech) and continually operate | 0.1 | 12/31/10 | Install Baghouse (or approved technology) | | 0.015 | | 12/31/10 |  |  | The settlement requires coal with monthly average sulfur content no greater than 2% at units operating FGD -- this limit is modeled as a coal choice exception in EPA Platform v6. |
| Mercer | New Jersey | Unit 1 |  |  | Install Dry FGD (or approved alt. technology) and continually operate | 0.15 | 12/31/10 | Install SCR (or approved tech) and continually operate | 0.1 | 01/01/07 | Install Baghouse (or approved technology) w/activated carbon injection for Hg control | | 0.015 | | 12/31/10 |  |  |  | The settlement requires coal with monthly average sulfur content no greater than 2% at units operating FGD -- this limit is modeled as a coal choice exception in EPA Platform v6. Limits are consistent with recent Title V permits. | http://www2.epa.gov/enforcement/pseg-fossil-llc-settlement |
| New Jersey | Unit 2 |  |  | Install Dry FGD (or approved alt. technology) and continually operate | 0.15 | 12/31/10 | Install SCR (or approved tech) and continually operate | 0.1 | 01/31/07 | Install Baghouse (or approved technology) w/activated carbon injection for Hg control | | 0.015 | | 12/31/10 |  |  | The settlement requires coal with monthly average sulfur content no greater than 2% at units operating FGD -- this limit is modeled as a coal choice exception in EPA Platform v6. |
| **TECO** | | | | | | | | | | | | | | | | | | | | |
| Big Bend | Florida | Unit 1 |  |  | Existing Scrubber (shared by Units 1 & 2) | 95% (95% or .25) | 09/1/00 (01/01/13) | Install SCR | 0.12 | 06/01/08 |  | | 0.03 | |  | The provision did not specify an amount of SO2 allowances to be surrendered. It only provided that excess allowances resulting from compliance with NSR settlement provisions must be retired. |  |  |  | http://www2.epa.gov/enforcement/tampa-electric-company-teco-clean-air-act-caa-settlement |
| Florida | Unit 2 |  |  | Existing Scrubber (shared by Units 1 & 2) | 95% (95% or .25) | 09/1/00 (01/01/13) | Install SCR | 0.12 | 06/01/09 |  | | 0.03 | |  |  |  |
| Florida | Unit 3 |  |  | Existing Scrubber (shared by Units 3 & 4) | 93% if Units 3 & 4 are operating | 2000  (01/01/10) | Install SCR | 0.12 | 06/01/10 |  | | 0.03 | |  |  |  |
| Florida | Unit 4 |  |  | Existing Scrubber (shared by Units 3 & 4) | 93% if Units 3 & 4 are operating | 06/22/05 | Install SCR | 0.1 | 07/01/07 |  | |  | |  |  |  |
| Gannon | Florida | Six units | Retire all six coal units and repower at least 550 MW of coal capacity to natural gas | 12/31/04 |  |  |  |  |  |  |  | |  | |  |  |  |  |
| **WEPCO** | | | | | | | | | | | | | | | | | | | | |
|  | | | WEPCO shall comply with the following system wide average NOx emission rates and total NOx tonnage permissible: by 1/1/2005 an emission rate of 0.27 and 31,500 tons, by 1/1/2007 an emission rate of 0.19 and 23,400 tons, and by 1/1/2013 an emission rate of 0.17 and 17, 400 tons. For SO2 emissions, WEPCO will comply with: by 1/1/2005 an emission rate of 0.76 and 86,900 tons, by 1/1/2007 an emission rate of 0.61 and 74,400 tons, by 1/1/2008 an emission rate of 0.45 and 55,400 tons, and by 1/1/2013 an emission rate of 0.32 and 33,300 tons. | | | | | | | | | | | | | | | |  | http://www2.epa.gov/enforcement/wisconsin-electric-power-company-wepco-clean-air-act-civil-settlement |
| Presque Isle | Michigan | Units  1 – 4 | Retire or install SO2 and NOx controls | 12/31/12 | Install and continuously operate FGD (or approved equiv. tech) | 95% or 0.1 | 12/31/12 | Install SCR (or approved tech) and continually operate | 0.1 | 12/31/12 |  | |  | |  | The provision did not specify an amount of SO2 allowances to be surrendered. It only provided that excess allowances resulting from compliance with NSR settlement provisions must be retired. |  |  |  |
| Michigan | Units 5, 6 |  |  |  |  |  | Install and operate low NOx burners |  | 12/31/03 |  | |  | |  |  |  |  |
| Michigan | Units 7, 8 |  |  |  |  |  | Operate existing low NOx burners |  | 12/31/05 | Install Baghouse | |  | |  |  |  |  |
| Michigan | Unit 9 |  |  |  |  |  | Operate existing low NOx burners |  | 12/31/06 | Install Baghouse | |  | |  |  |  |
| Pleasant Prairie | Wisconsin | Unit 1 |  |  | Install and continuously operate FGD (or approved control tech) | 95% or 0.1 | 12/31/06 | Install and continuously operate SCR (or approved tech) | 0.1 | 12/31/06 |  | |  | |  |  |  |  |
| Wisconsin | Unit 2 |  |  | Install and continuously operate FGD (or approved control tech) | 95% or 0.1 | 12/31/07 | Install and continuously operate SCR (or approved tech) | 0.1 | 12/31/03 |  | |  | |  |  |  |
| Oak Creek | Wisconsin | Units 5, 6 |  |  | Install and continuously operate FGD (or approved control tech) | 95% or 0.1 | 12/31/12 | Install and continuously operate SCR (or approved tech) | 0.1 | 12/31/12 |  | |  | |  |  |  |  |
| Wisconsin | Unit 7 |  |  | Install and continuously operate FGD (or approved control tech) | 95% or 0.1 | 12/31/12 | Install and continuously operate SCR (or approved tech) | 0.1 | 12/31/12 |  | |  | |  |  |  |  |
| Wisconsin | Unit 8 |  |  | Install and continuously operate FGD (or approved control tech) | 95% or 0.1 | 12/31/12 | Install and continuously operate SCR (or approved tech) | 0.1 | 12/31/12 |  | |  | |  |  |  |
| Port Washington | Wisconsin | Units  1 – 4 | Retire | 12/31/04 for Units 1 – 3. Unit 4 by entry of consent decree |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Valley | Wisconsin | Boilers  1 – 4 | converted to natural gas | 2016 |  |  |  | Operate existing low NOx burner | 0.08 | 12/31/15 |  | |  | |  |  |  |  |
| **VEPCO** | | | | | | | | | | | | | | | | | | | | |
|  | | | The Total Permissible NOx Emissions (in tons) from VEPCO system are: 104,000 in 2003, 95,000 in 2004, 90,000 in 2005, 83,000 in 2006, 81,000 in 2007, 63,000 in 2008 – 2010, 54,000 in 2011, 50,000 in 2012, and 30,250 each year thereafter. Beginning 1/1/2013 they will have a system wide emission rate no greater than 0.15 lbs/MMBtu. | | | | | | | | | | | | | | | |  | http://www2.epa.gov/enforcement/virginia-electric-and-power-company-vepco-clean-air-act-caa-settlement |
| Mount Storm | West Virginia | Units  1 – 3 |  |  | Construct or improve FGD | 95% or 0.15 | 01/01/05 | Install and continuously operate SCR | 0.11 | 01/01/08 |  | |  | |  | On or before March 31 of every year beginning in 2013 and continuing thereafter, VEPCO shall surrender 45,000 SO2 allowances. |  |  |  |
| Chesterfield | Virginia | Unit 4 |  |  | Install and continuously operate FGD |  |  | Install and continuously operate SCR | 0.1 | 01/01/13 |  | |  | |  |  |  |  |
| Virginia | Unit 5 |  |  | Construct or improve FGD | 95% or 0.13 | 10/12/12 | Install and continuously operate SCR | 0.1 | 01/01/12 |  | |  | |  |  |  |  |
| Virginia | Unit 6 |  |  | Construct or improve FGD | 95% or 0.13 | 01/01/10 | Install and continuously operate SCR | 0.1 | 01/01/11 |  | |  | |  |  |  |  |
| Chesapeake Energy | Virginia | Units 3, 4 | Retire | 12/1/2014 |  |  |  | Install and continuously operate SCR | 0.1 | 01/01/13 |  | |  | |  |  |  |  |
| Clover | Virginia | Units 1, 2 |  |  | Improve FGD | 95% or 0.13 | 09/01/03 |  |  |  |  | |  | |  |  |  |  |  |
| Possum Point | Virginia | Units 3, 4 | Retire and repower to natural gas | 05/02/03 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |
| **Santee Cooper** | | | | | | | | | | | | | | | | | | | | |
|  | | | Santee Cooper shall comply with the following system wide averages for NOx emission rates and combined tons for emission of: by 1/01/2005 facility shall comply with an emission rate of 0.3 and 30,000 tons, by 1/1/2007 an emission rate of 0.18 and 25,000 tons, by 1/1/2010 and emission rate of 0.15 and 20,000 tons. For SO2 emission the company shall comply with system wide averages of: by 1/1/2005 an emission rate of 0.92 and 95,000 tons, by 1/1/2007 and emission rate of 0.75 and 85,000 tons, by 1/1/2009 an emission rate of 0.53 and 70 tons, and by 1/1/2011 and emission rate of 0.5 and 65 tons. | | | | | | | | | | | | | | | |  | http://www2.epa.gov/enforcement/south-carolina-public-service-authority-santee-cooper-settlement |
| Cross | South Carolina | Unit 1 |  |  | Upgrade and continuously operate FGD | 95% | 06/30/06 | Install and continuously operate SCR | 0.1 | 05/31/04 |  | |  | |  | The provision did not specify an amount of SO2 allowances to be surrendered. It only provided that excess allowances resulting from compliance with NSR settlement provisions must be retired. |  |  |  |
| South Carolina | Unit 2 |  |  | Upgrade and continuously operate FGD | 87% | 06/30/06 | Install and continuously operate SCR | 0.11/0.1 | 05/31/04 and 05/31/07 |  | |  | |  |  |  |  |
| Winyah | South Carolina | Unit 1 |  |  | Install and continuously operate FGD | 95% | 12/31/08 | Install and continuously operate SCR | 0.11/0.1 | 11/30/04 and 11/30/04 |  | |  | |  |  |  |  |
| South Carolina | Unit 2 |  |  | Install and continuously operate FGD | 95% | 12/31/08 | Install and continuously operate SCR | 0.12 | 11/30/04 |  | |  | |  |  |  |  |
| South Carolina | Unit 3 |  |  | Upgrade and continuously operate existing FGD | 90% | 12/31/08 | Install and continuously operate SCR | 0.14/0.12 | 11/30/2005 and 11/30/08 |  | |  | |  |  |  |  |
| South Carolina | Unit 4 |  |  | Upgrade and continuously operate existing FGD | 90% | 12/31/07 | Install and continuously operate SCR | 0.13/0.12 | 11/30/05 and 11/30/08 |  | |  | |  |  |  |  |
| Grainger | South Carolina | Unit 1 |  |  |  |  |  | Operate low NOx burner or more stringent technology |  | 06/25/04 |  | |  | |  |  |  |  |
| South Carolina | Unit 2 |  |  |  |  |  | Operate low NOx burner or more stringent technology |  | 05/01/04 |  | |  | |  |  |  |  |
| Jeffries | South Carolina | Units 3, 4 | Retire | 2012 |  |  |  | Operate low NOx burner or more stringent technology |  | 06/25/04 |  | |  | |  |  |  |  |
| **OHIO EDISON** | | | | | | | | | | | | | | | | | | | | |
|  | | | Ohio Edison shall achieve reductions of 2,483 tons NOx between 7/1/2005 and 12/31/2010 using any combination of: 1) low sulfur coal at Burger Units 4 and 5, 2) operating SCRs currently installed at Mansfield Units 1 – 3 during the months of October through April, and/or 3) emitting fewer tons than the Plant-Wide Annual Cap for NOx required for the Sammis Plant. Ohio Edison must reduce 24,600 tons system-wide of SO2 by 12/31/2010. | | | | | | | | | | | | | | | |  | http://www2.epa.gov/enforcement/ohio-edison-company-wh-sammis-power-station-clean-air-act-2005-settlement-and-2009 |
|  | | | No later than 8/11/2005, Ohio Edison shall install and operate low NOx burners on Sammis Units 1, 2,4,5,6, and 7 and overfired air on Sammis Units 1,2,3,6, and 7. No later than 12/1/2005, Ohio Edison shall install advanced combustion control optimization with software to minimize NOx emissions from Sammis Units 1 – 5. | | | | | | | | | | | | | | | |  |
| W.H. Sammis Plant | Ohio | Unit 1 |  |  | Install Induct Scrubber (or approved equiv. control tech) | 50% removal or 1.1 lbs/MMBtu | 12/31/08 | Install SNCR (or approved alt. tech) & operate continuously | 0.25 | 10/31/07 |  | |  | |  | Beginning on 1/1/2006, Ohio Edison may use, sell or transfer any restricted SO2 only to satisfy the Operational Needs at the Sammis, Burger and Mansfield Plant, or new units within the FirstEnergy System that comply with a 96% removal for SO2. For calendar year 2006 through 2017, Ohio Edison may accumulate SO2 allowances for use at the Sammis, Burger, and Mansfield plants, or FirstEnergy units equipped with SO2 Emission Control Standards. Beginning in 2018, Ohio Edison shall surrender unused restricted SO2 allowances. |  |  | Plant-wide NOx Annual Caps: 11,371 tons 7/1/2005 – 12/31/2005; 21,251 tons 2006; 20,596 tons 2007; 18,903 tons 2008; 17,328 tons 2009 – 2010; 14,845 tons 2011; 11,863 2012 onward. Sammis Plant-Wide Annual SO2 Caps: 58,000 tons SO2 7/1/2005-12/31/2005; 116,000 tons 1/1/2006 – 12/31/2007; 114,000 tons 1/1/2008-12/31/2008; 101,500 tons 1/1/2009 – 12/31/2010; 29,900 tons 1/1/2011 onward. Sammis Units 1 – 5 are also subject to the following SO2 Monthly Caps if Ohio Edison installs the improved SO2 control technology (Unit 5's option A): 3,242 tons May, July, and August 2010; 3,137 tons June and September 2010. Ohio Edison has installed the required SO2 technology (Unit 5's option B), so the Monthly Caps are: 2,533 tons May, July, and August 2010; 2,451 tons June and September 2010. Add'l Monthly Caps are: 2,533 tons May, July, and August 2011; 2,451 tons June and September 2011 thereafter. |
| Ohio | Unit 2 |  |  | Install Induct Scrubber (or approved equiv. control tech) | 50% removal or 1.1 lbs/MMBtu | 12/31/08 | Operate existing SNCR continuously | 0.25 | 02/15/06 |  | |  | |  |  |  |
| Ohio | Unit 3 |  |  | Install Induct Scrubber (or approved equiv. control tech) | 50% removal or 1.1 lbs/MMBtu | 12/31/08 | Operate low NOx burners and overfire air by 12/1/05; install SNCR (or approved alt. tech) & operate continuously by 12/31/07 | 0.25 | 12/01/05  and 10/31/07 |  | |  | |  |  |  |
| Ohio | Unit 4 |  |  | Install Induct Scrubber (or approved equiv. control tech) | 50% removal or 1.1 lbs/MMBtu | 06/30/09 | Install SNCR (or approved alt. tech) & operate continuously | 0.25 | 10/31/07 |  | |  | |  |  |  |
| Ohio | Unit 5 |  |  | Install Flash Dryer Absorber or ECO2 (or approved equiv. control tech) & operate continuously | 50% removal or 1.1 lbs/MMBtu | 06/29/09 | Install SNCR (or approved alt. tech) & Operate Continuously | 0.29 | 03/31/08 |  | |  | |  |  |  |  |
| Ohio | Unit 6 |  |  | Install FGD3 (or approved equiv. control tech) & operate continuously | 95% removal or 0.13 lbs/MMBtu | 06/30/11 | Install SNCR (or approved alt. tech) & operate continuously | "Minimum Extent Practicable" | 06/30/05 | Operate Existing ESP Continuously | | 0.03 | | 01/01/10 |  |  | In addition to SNCR, settlement requires installation of first SCR (or approved alt tech) on either Unit 6 or 7 by 12/31/2010; second installation by 12/31/2011. Both SCRs must achieve 90% Design Removal Efficiency by 180 days after installation date. Each SCR must provide a 30-Day Rolling average. NOx Emission Rate of 0.1 lbs/MMBtu starting 180 days after installation dates above. |
| Ohio | Unit 7 |  |  | Install FGD (or approved equiv. control tech) & operate continuously | 95% removal or 0.13 lbs/MMBtu | 06/30/11 | Operate existing SNCR Continuously | "Minimum Extent Practicable" | 08/11/05 | Operate Existing ESP Continuously | | 0.03 | | 01/01/10 |  |  |
| Mansfield Plant | Pennsylvania | Unit 1 |  |  | Upgrade existing FGD | 95% | 12/31/05 |  |  |  |  | |  | |  |  |  | Additional Mansfield Plant-wide SO2 reductions are as follows: 4,000 tons in 2006, 8,000 tons in 2007, and 12,000 tons/yr for every year after. Settlement allows relinquishment of SO2 requirement upon shutdown of unit, after which the SO2 reductions must be made by another plant(s). |
| Pennsylvania | Unit 2 |  |  | Upgrade existing FGD | 95% | 12/31/06 |  |  |  |  | |  | |  |  |  |
| Pennsylvania | Unit 3 |  |  | Upgrade existing FGD | 95% | 10/31/07 |  |  |  |  | |  | |  |  |  |
| Eastlake | Ohio | Unit 5 |  |  |  |  |  | Install low NOx  burners, over-fired air and SNCR & operate continuously | "Minimize Emissions to the Extent Practicable" | 12/31/06 |  | |  | |  |  |  | Settlement requires Eastlake Plant to achieve additional reductions of 11,000 tons of NOx per year commencing in calendar year 2007, and no less than 10,000 tons must come from this unit. The extra 1,000 tons may come from this unit or another unit in the region. Upon shutdown of Eastlake, another plant must achieve these reductions. |
| Burger | Ohio | Unit 4 | Repower with at least 80% biomass fuel, up to 20% low sulfur coal OR Retire by 12/31/2010 | 12/31/11 |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Ohio | Unit 5 | 12/31/11 |  |  |  |  |  |  |  | |  | |  |  |  |
| **MIRANT1,6** | | | | | | | | | | | | | | | | | | | | |
|  |  |  | System-wide NOx Emission Annual Caps: 36,500 tons 2004; 33,840 tons 2005; 33,090 tons 2006; 28,920 tons 2007; 22,000 tons 2008; 19,650 tons 2009; 16,000 tons 2010 onward. System-wide NOx Emission Ozone Season Caps: 14,700 tons 2004; 13,340 tons 2005; 12,590 tons 2006; 10,190 tons 2007; 6,150 tons 2008 – 2009; 5,200 tons 2010 thereafter. Beginning on 5/1/2008, and continuing for each and every Ozone Season thereafter, the Mirant System shall not exceed a System-wide Ozone Season Emission Rate of 0.150 lbs/MMBtu NOx. | | | | | | | | | | | | | | | |  | http://www2.epa.gov/enforcement/mirant-clean-air-settlement |
| Potomac River Plant | Virginia | Unit 1 | Retire | 12/21/2012 |  |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Virginia | Unit 2 |  |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Virginia | Unit 3 |  |  |  | Install low NOx burners (or more effective tech) & operate continuously |  | 05/01/04 |  |  | |  | |  |  |  | Settlement requires installation of Separated Overfire Air tech (or more effective technology) by 5/1/2005. Plant-wide Ozone Season NOx Caps: 1,750 tons 2004; 1,625 tons 2005; 1,600 tons 2006 – 2009; 1,475 tons 2010 thereafter. Plant-wide annual NOx Caps are 3,700 tons in 2005 and each year thereafter. |
| Virginia | Unit 4 |  |  |  | Install low NOx burners (or more effective tech) & operate continuously |  | 05/01/04 |  |  | |  | |  |  |  |
| Virginia | Unit 5 |  |  |  | Install low NOx burners (or more effective tech) & operate continuously |  | 05/01/04 |  |  | |  | |  |  |  |
| Morgantown Plant | Maryland | Unit 1 |  |  |  |  |  | Install SCR  (or approved  alt. tech) &  operate continuously | 0.1 | 05/01/07 |  | |  | |  |  |  |  |  |
| Maryland | Unit 2 |  |  |  |  |  | Install SCR  (or approved  alt. tech) &  operate continuously | 0.1 | 05/01/08 |  | |  | |  |  |  |  |  |
| Chalk Point | Maryland | Unit 1 |  |  | Install and continuously operate FGD (or equiv. technology) | 95% | 06/01/10 |  |  |  |  | |  | |  | For each year after Mirant commences FGD operation at Chalk Point, Mirant shall surrender the number of SO2 Allowances equal to the amount by which the SO2 Allowances allocated to the Units at the Chalk Point Plant are greater than the total amount of SO2 emissions allowed under this Section XVIII. |  |  | Mirant must install and operate FGD by 6/1/2010 if authorized by court to reject ownership interest in Morgantown Plant, or by no later than 36 months after they lose ownership interest of the Morgantown Plant. [Installed] |
| Maryland | Unit 2 |  |  | Install and continuously operate FGD (or equiv. technology) | 95% | 06/01/10 |  |  |  |  | |  | |  |  |  |
| **ILLINOIS POWER** | | | | | | | | | | | | | | | | | | | | |
|  | | | System-wide NOx Emission Annual Caps: 15,000 tons 2005; 14,000 tons 2006; 13,800 tons 2007 onward. System-wide SO2 Emission Annual Caps: 66,300 tons 2005 – 2006; 65,000 tons 2007; 62,000 tons 2008 – 2010; 57,000 tons 2011; 49,500 tons 2012; 29,000 tons 2013 onward. | | | | | | | | | | | | | | | |  | http://www2.epa.gov/enforcement/illinois-power-company-and-dynegy-midwest-generation-settlement |
| Baldwin | Illinois | Unit 1 |  |  | Install wet or dry FGD (or approved equiv.  alt. tech) & operate continuously | 0.1 | 12/31/11 | Operate OFA & existing SCR continuously | 0.1 | 08/11/05 | Install & continuously operate Baghouse | | 0.015 | | 12/31/10 | By year end 2008, Dynegy will surrender 12,000 SO2 emission allowances, by year end 2009 it will surrender 18,000, by year end 2010 it will surrender 24,000, any by year end 2011 and each year thereafter it will surrender 30,000 allowances. If the surrendered allowances result in insufficient remaining allowances allocated to the units comprising the DMG system, DMG can request to surrender fewer SO2 allowances. |  |  |  |
| Illinois | Unit 2 |  |  | Install wet or dry FGD (or approved equiv.  alt. tech) & operate continuously | 0.1 | 12/31/11 | Operate OFA & existing SCR continuously | 0.1 | 08/11/05 | Install & continuously operate Baghouse | | 0.015 | | 12/31/10 |  |  |  |
| Illinois | Unit 3 |  |  | Install wet or dry FGD (or approved equiv.  alt. tech) & operate continuously | 0.1 | 12/31/11 | Operate OFA and/or low NOx burners | 0.12 until 12/30/12; 0.1 from 12/31/12 | 08/11/05  and 12/31/12 | Install & continuously operate Baghouse | | 0.015 | | 12/31/10 |  |  |  |
| Havana | Illinois | Unit 6 |  |  | Install wet or dry FGD (or approved equiv.  alt. tech) & operate continuously | 1.2 lbs/MMBtu until 12/30/2012; 0.1 lbs/MMBtu from 12/31/2012 onward | 08/11/05  and 12/31/12 | Operate OFA and/or low NOx burners & operate existing SCR continuously | 0.1 | 08/11/05 | Install & continuously operate Baghouse, then install ESP or alt. PM equip | | For Bag-house: .015 lbs/MMBtu; For ESP: .03 lbs/MMBtu | | For Baghouse: 12/31/12; For ESP: 12/31/05 |  |  |  |
| Hennepin | Illinois | Unit 1 |  |  |  | 1.2 | 07/27/05 | Operate OFA and/or low NOx burners | "Minimum Extent Practicable" | 08/11/05 | Install ESP (or equiv. alt. tech) & continuously operate ESPs | | 0.03 | | 12/31/06 |  |  | Settlement requires first installation of ESP at either Unit 1 or 2 on 12/31/2006; and on the other by 12/31/2010. |
| Illinois | Unit 2 |  |  |  | 1.2 | 07/27/05 | Operate OFA and/or low NOx burners | "Minimum Extent Practicable" | 08/11/05 | Install ESP (or equiv. alt. tech) & continuously operate ESPs | | 0.03 | | 12/31/06 |  |  |  |
| Vermilion | Illinois | Unit 1 |  |  |  | 1.2 | 01/31/07 | Operate OFA and/or low NOx burners | "Minimum Extent Practicable" | 08/11/05 | Install ESP (or equiv. alt. tech) & continuously operate ESPs | | 0.03 | | 12/31/10 |  |  |  |
| Illinois | Unit 2 |  |  |  | 1.2 | 01/31/07 | Operate OFA and/or low NOx burners | "Minimum Extent Practicable" | 08/11/05 | Install ESP (or equiv. alt. tech) & continuously operate ESPs | | 0.03 | | 12/31/10 |  |  |  |
| Wood River | Illinois | Unit 4 |  |  |  | 1.2 | 07/27/05 | Operate OFA and/or low NOx burners | "Minimum Extent Practicable" | 08/11/05 | Install ESP (or equiv. alt. tech) & continuously operate ESPs | | 0.03 | | 12/31/05 |  |  | Settlement requires first installation of ESP at either Unit 4 or 5 on 12/31/2005; and on the other by 12/31/2007. |
| Illinois | Unit 5 |  |  |  | 1.2 | 07/27/05 | Operate OFA and/or low NOx burners | "Minimum Extent Practicable" | 08/11/05 | Install ESP (or equiv. alt. tech) & continuously operate ESPs | | 0.03 | | 12/31/05 |  |  |  |
| **Kentucky Utilities Company** | | | | | | | | | | | | | | | | | | | | |
| EW Brown Generating Station | Kentucky | Unit 3 |  |  | Install FGD | 97% or 0.100 | 12/31/10 | Install and continuously operate SCR by 12/31/2012, continuously operate low NOx boiler and OFA. | 0.07 | 12/31/12 | Continuously operate ESP | | 0.03 | | 12/31/10 | KU must surrender 53,000 SO2 allowances of 2008 or earlier vintage by March 1, 2009. All surplus NOx allowances must be surrendered through 2020. | SO2 and NOx allowances may not be used for compliance, and emissions decreases for purposes of complying with the Consent Decree do not earn credits. |  | Annual SO2 cap is 31,998 tons through 2010, then 2,300 tons each year thereafter. Annual NOx cap is 4,072 tons. | http://www2.epa.gov/enforcement/kentucky-utilities-company-clean-air-act-settlement |
| **Salt River Project Agricultural Improvement and Power District (SRP)** | | | | | | | | | | | | | | | | | | | | |
| Coronado Generating Station | Arizona | Unit 1 or Unit 2 |  |  | Immediately begin continuous operation of existing FGDs on both units, install new FGD. | 95% or 0.08 | New FGD installed by 1/1/2012 | Install and continuously operate low NOx burner and SCR | 0.32 prior to SCR installation, 0.080 after | LNB by 06/01/2009, SCR by 06/01/2014 | Optimization and continuous operation of existing ESPs. | | 0.03 | | Optimization begins immediately, rate limit begins 01/01/12 (date of new FGD installation) | Beginning in 2012, all surplus SO2 allowances for both Coronado and Springville Unit 4 must be surrendered through 2020. The allowances limited by this condition may, however, be used for compliance at a prospective future plant using BACT and otherwise specified in par. 54 of the consent decree. | SO2 and NOx allowances may not be used for compliance, and emissions decreases for purposes of complying with the Consent Decree do not earn credits. |  | Annual plant-wide NOx cap is 7,300 tons after 6/1/2014. | [http://www2.epa.gov/enforcement/salt-river-project-agriculture-improvement-and-power-district-settlement](%20http://www2.epa.gov/enforcement/salt-river-project-agriculture-improvement-and-power-district-settlement%20) |
| Arizona | Unit 1 or Unit 2 |  |  | Install new FGD | 95% or 0.08 | 01/01/13 | Install and continuously operate low NOx burner | 0.32 | 06/01/11 | Optimization begins immediately, rate limit begins 01/01/13 (date of new FGD installation) |  |
| **American Electric Power** | | | | | | | | | | | | | | | | | | | | |
| Eastern System-Wide [Modified Limits for SO2] | | |  |  |  | Annual Cap (tons) | Year |  |  |  |  | |  | |  |  |  |  |  | <https://www.epa.gov/sites/production/files/2015-01/documents/aep-cdmod3.pdf> |
| 145,000 | 2016-2018 |
| 113,000 | 2019-2021 |
| 110,000 | 2022-2025 |
| 102,000 | 2026-2028 |
| 94,000 | 2029 and thereafter |
| Eastern System-Wide | | |  |  |  | Annual Cap (tons) | Year |  | Annual Cap (tons) | Year |  | |  | |  | NOx and SO2 allowances that would have been made available by emission reductions pursuant to the Consent Decree must be surrendered. | NOx and SO2 allowances may not be used to comply with any of the limits imposed by the Consent Decree. The Consent Decree includes a formula for calculating excess NOx allowances relative to the CSAPR Allocations, and restricts the use of some. See par. 74-79 for details. Reducing emissions below the Eastern System-Wide Annual Tonnage Limitations for NOx and SO2 earns super compliant allowances. |  |  | http://www2.epa.gov/enforcement/american-electric-power-service-corporation |
|  | 450,000 | 2010 | 96,000 | 2009 |
|  | 450,000 | 2011 | 92,500 | 2010 |
|  | 420,000 | 2012 | 92,500 | 2011 |
|  | 350,000 | 2013 | 85,000 | 2012 |
|  | 340,000 | 2014 | 85,000 | 2013 |
|  | 275,000 | 2015 | 85,000 | 2014 |
|  | 260,000 | 2016 | 75,000 | 2015 |
|  | 235,000 | 2017 | 72,000 | 2016 and thereafter |
|  | 184,000 | 2018 |  |  |
|  | 174,000 | 2019 and thereafter |  |  |
| At least 600MW from various units | West Virginia | Sporn  1 – 4 | Retire, retrofit, or re-power | 12/31/18 |  |  |  |  |  |  |  | |  | |  |  |  |  | Sporn 1-4 will be retired |  |
| Virginia | Clinch River  1 – 3 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| Indiana | Tanners Creek  1 – 3 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| West Virginia | Kammer  1 – 3 |  |  |  |  |  |  |  | |  | |  |  |  |  | Kammer 1-3 will be retired |  |
| Amos | West Virginia | Unit 1 |  |  | Install and continuously operate FGD |  | 12/31/09 | Install and continuously operate SCR |  | 01/01/08 |  | |  | |  |  |  |  |  |  |
| West Virginia | Unit 2 |  |  | Install and continuously operate FGD |  | 12/31/10 | Install and continuously operate SCR |  | 01/01/09 |  | |  | |  |  |  |  |  |  |
| West Virginia | Unit 3 |  |  | Install and continuously operate FGD |  | 12/31/09 | Install and continuously operate SCR |  | 01/01/08 |  | |  | |  |  |  |  |  |  |
| Big Sandy | Kentucky | Unit 1 |  |  | Burn only coal with no more than 1.75 lbs/MMBtu annual average |  | Date of entry | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Kentucky | Unit 2 |  |  | Install and continuously operate FGD |  | 12/31/15 | Install and continuously operate SCR |  | 01/01/09 |  | |  | |  |  |  |  |  |  |
| Cardinal | Ohio | Unit 1 |  |  | Install and continuously operate FGD |  | 12/31/08 | Install and continuously operate SCR |  | 01/01/09 | Continuously operate ESP | | 0.03 | | 12/31/09 |  |  |  |  |  |
| Ohio | Unit 2 |  |  | Install and continuously operate FGD |  | 12/31/08 | Install and continuously operate SCR |  | 01/01/09 | Continuously operate ESP | | 0.03 | | 12/31/09 |  |  |  |  |  |
| Ohio | Unit 3 |  |  | Install and continuously operate FGD |  | 12/31/12 | Install and continuously operate SCR |  | 01/01/09 |  | |  | |  |  |  |  |  |  |
| Clinch River | Virginia | Units  1 – 3 | Units 1 & 2: switch fuels to natural gas  ---------------  Unit 3: Retire | 2016  -------------  2015 |  | Plant-wide annual cap: 21,700 tons from 2010 to 2014, then 16,300 after 1/1/2015 | 2010 – 2014, 2015 and thereafter | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Conesville | Ohio | Unit 1 | Retire, retrofit, or re-power | Date of entry |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| Ohio | Unit 2 | Retire, retrofit, or re-power | Date of entry |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| Ohio | Unit 3 | Retire, retrofit, or re-power | 12/31/12 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| Ohio | Unit 4 |  |  | Install and continuously operate FGD |  | 12/31/10 | Install and continuously operate SCR |  | 12/31/10 |  | |  | |  |  |  |  |  |  |
| Ohio | Unit 5 |  |  | Upgrade existing FGD | 95% | 12/31/09 | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Ohio | Unit 6 |  |  | Upgrade existing FGD | 95% | 12/31/09 | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Gavin | Ohio | Unit 1 |  |  | Install and continuously operate FGD |  | Date of entry | Install and continuously operate SCR |  | 01/01/09 |  | |  | |  |  |  |  |  |  |
| Ohio | Unit 2 |  |  | Install and continuously operate FGD |  | Date of entry | Install and continuously operate SCR |  | 01/01/09 |  | |  | |  |  |  |  |  |  |
| Glen Lynn | Virginia | Units  1 – 3 | Retire | 6/1/15 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| Virginia | Units 5, 6 | Retire | 6/1/15 | Burn only coal with no more than 1.75 lbs/MMBtu annual average |  | Date of entry | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Kammer | West Virginia | Units  1 – 3 |  |  |  | Plant-wide annual cap: 35,000 | 01/01/10 | Continuously operate over-fire air |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Kanawha River | West Virginia | Units 1, 2 |  |  | Burn only coal with no more than 1.75 lbs/MMBtu annual average |  | Date of entry | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Mitchell | West Virginia | Unit 1 |  |  | Install and continuously operate FGD |  | 12/31/07 | Install and continuously operate SCR |  | 01/01/09 |  | |  | |  |  |  |  |  |  |
| West Virginia | Unit 2 |  |  | Install and continuously operate FGD |  | 12/31/07 | Install and continuously operate SCR |  | 01/01/09 |  | |  | |  |  |  |  |  |  |
| Mountaineer | West Virginia | Unit 1 |  |  | Install and continuously operate FGD |  | 12/31/07 | Install and continuously operate SCR |  | 01/01/08 |  | |  | |  |  |  |  |  |  |
| Muskingum River | Ohio | Units  1 – 4 | Retire, retrofit, or re-power | 12/31/15 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| Ohio | Unit 5 |  |  | Install and continuously operate FGD |  | 12/31/15 | Install and continuously operate SCR |  | 01/01/08 | Continuously operate ESP | | 0.03 | | 12/31/02 |  |  |  |  |  |
| Picway | Ohio | Unit 9 |  |  |  |  |  | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Rockport |  |  | Rockport Units 1 & 2 shall not exceed an Annual Tonnage Limit of 28 MTons of SO2 in 2016- 2017, 26 MTons in 2018-2019, 22 MTons in 2020-2025, 18 MTons in 2026-2028 and 10 MTons in 2029 and each year thereafter. | | | | | | | | | | | | | | | |  |  |
| Indiana | Unit 1 |  |  | Install DSI \_\_ Install and continuously operate FGD |  | 4/16/2015 \_\_ 12/31/2025 | Install and continuously operate SCR |  | 12/31/25 |  | |  | |  |  |  |  |  |  |
| Indiana | Unit 2 |  |  | Install DSI \_\_ Install and continuously operate FGD |  | 4/16/2015 \_\_ 12/31/2028 | Install and continuously operate SCR |  | 12/31/28 |  | |  | |  |  |  |  |  |  |
| Sporn | West Virginia | Unit 5 | Retire, retrofit, or re-power | 12/31/13 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |  |
| Tanners Creek | Indiana | Units  1 – 3 |  |  | Burn only coal with no more than 1.2 lbs/MMBtu annual average |  | Date of entry | Continuously operate low NOx burners |  | Date of entry |  | |  | |  |  |  |  |  |  |
| Indiana | Unit 4 |  |  | Burn only coal with no more than 1.2% sulfur content annual average |  | Date of entry | Continuously operate over-fire air |  | Date of entry |  | |  | |  |  |  |  |  |  |
| **East Kentucky Power Cooperative Inc.** | | | | | | | | | | | | | | | | | | | | |
| Dale Plant | Kentucky | Unit 1 | Retire | 2012 |  |  |  | Install and continuously operate low NOx burners by 10/31/2007 | 0.46 | 01/01/08 |  | |  | |  | EKPC must surrender 1,000 NOx allowances immediately under the ARP, and 3,107 under the NOx SIP Call. EKPC must also surrender 15,311 SO2 allowances. |  | Date of entry |  | http://www2.epa.gov/enforcement/east-kentucky-power-cooperative-settlement |
| Kentucky | Unit 2 | Retire | 2012 |  |  |  | Install and continuously operate low NOx burners by 10/31/2007 | 0.46 | 01/01/08 |  | |  | |  |  |  |
| System-wide | Kentucky |  | By 12/31/2009, EKPC shall choose whether to: 1) install and continuously operate NOx controls at Cooper 2 by 12/31/2012 and SO2 controls by 6/30/2012 or 2) retire Dale 3 and Dale 4 by 12/31/2012. | | | | | | | | | | | | | | | |  |
|  | | | 12-month rolling limit (tons) | Start of 12-month cycle |  | 12-month rolling limit (tons) | Start of 12-month cycle |  | |  | |  |  |  |  |  |
|  |  | System-wide 12-month rolling tonnage limits apply | 57,000 | 10/01/08 | All units must operate low NOx boilers | 11,500 | 01/01/08 | PM control devices must be operated continuously system-wide, ESPs must be optimized within 270 days of entry date, or EKPC may choose to submit a PM Pollution Control Upgrade Analysis. | | 0.03 | | 1 year from entry date | All surplus SO2 allowances must be surrendered each year, beginning in 2008. | SO2 and NOx allowances may not be used to comply with the Consent Decree. NOx allowances that would become available as a result of compliance with the Consent Decree may not be sold or traded. SO2 and NOx allowances allocated to EKPC must be used within the EKPC system. Allowances made available due to super compliance may be sold or traded. |  |  |
|  |  | 40,000 | 07/01/11 | 8,500 | 01/01/13 |  |  |
|  |  | 28,000 | 01/01/13 | 8,000 | 01/01/15 |  |  |
| Spurlock | Kentucky | Unit 1 |  |  | Install and continuously operate FGD | 95% or 0.1 | 6/30/2011 | Continuously operate SCR | 0.12 for Unit 1 until 01/01/2013, at which point the unit limit drops to 0.1. Prior to 01/01/2013, the combined average when both units are operating must be no more than 0.1 | 60 days after entry |  | |  | |  |  |  |  |  |
| Kentucky | Unit 2 |  |  | Install and continuously operate FGD by 10/1/2008 | 95% or 0.1 | 1/1/2009 | Continuously operate SCR and OFA | 0.1 for Unit 2, 0.1 combined average when both units are operating | 60 days after entry |  | |  | |  |  |  |  |  |
| Dale Plant | Kentucky | Unit 3 | Retire | 2014 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |
| Kentucky | Unit 4 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |
| Cooper | Kentucky | Unit 1 |  |  |  |  |  |  |  |  |  | |  | |  |  |  |  |  |
| Kentucky | Unit 2 |  |  | If EKPC opts to install controls rather than retiring Dale, it must install and continuously operate FGD or equiv. technology | 95% or 0.10 |  | If EKPC elects to install controls, it must continuously operate SCR or install equiv. technology | 0.08 (or 90% if non-SCR technology is used) | 12/31/12 |  | |  | |  |  |  |  | EKPC has installed a DFGD on this unit and Dale continues to operate. |
| **Nevada Power Company** | | | | | | | | | | | | | | | | | | | | |
|  | | | Beginning 1/1/2010, combined NOx emissions from Units 5, 6, 7, and 8 must be no more than 360 tons per year. | | | | | | | | | | | | | | | |  |  |
| Clark Generating Station | Nevada | Unit 5 | Units may only fire natural gas |  |  |  |  | Increase water injection immediately, then install and operate ultra-low NOx burners (ULNBs) or equivalent technology. In 2009, Units 5 and 8 may not emit more than 180 tons combined | 5ppm 1-hour average | 12/31/08 (ULNB installation), 01/30/09 (1-hour average) |  | |  | |  |  | Allowances may not be used to comply with the Consent Decree, and no allowances made available due to compliance with the Consent Decree may be traded or sold. |  |  | http://www2.epa.gov/enforcement/nevada-power-company-clean-air-act-caa-settlement |
| Nevada | Unit 6 |  |  |  |  | 5ppm 1-hour average | 12/31/09 (ULNB installation), 01/30/10 (1-hour average) |  | |  | |  |  |  |  |
| Nevada | Unit 7 |  |  |  |  | 5ppm 1-hour average | 12/31/09 (ULNB installation), 01/30/10 (1-hour average) |  | |  | |  |  |  |  |
| Nevada | Unit 8 |  |  |  |  | 5ppm 1-hour average | 12/31/08 (ULNB installation), 01/30/09 (1-hour average) |  | |  | |  |  |  |  |
| **Dayton Power & Light** | | | | | | | | | | | | | | | | | | | | |
|  | | | Non-EPA Settlement of 10/23/2008 | | | | | | | | | | | | | | | |  |  |
| Stuart Generating Station | Ohio | Station-wide |  |  | Complete installation of FGDs on each unit. | 96% or 0.10 | 07/31/09 | Owners may not purchase any new catalyst with SO2 to SO3 conversion rate greater than 0.5% | 0.17 station-wide | 30 days after entry |  | | 0.030 lbs per unit | | 07/31/09 |  | NOx and SO2 allowances may not be used to comply with the monthly rates specified in the Consent Decree. |  |  |  |
|  | 0.17 station-wide | 60 days after entry date |  | |  |  |  |
|  | 82% including data from periods of malfunctions | 7/31/09 through 7/30/11 | Install control technology on one unit | 0.10 on any single unit | 12/31/12 |  | | Install rigid-type electro-des in each unit's ESP | | 12/31/15 |  |  |  |
|  | 82% including data from periods of malfunctions | after 7/31/11 |  | 0.15 station-wide | 07/01/12 |  | |  |  |  |
| 0.10 station-wide | 12/31/14 |  | |  |  |  |
| **PSEG FOSSIL, Amended Consent Decree of November 2006** | | | | | | | | | | | | | | | | | | | | |
| Kearny | New Jersey | Unit 7 | Retire unit | 01/01/07 |  |  |  |  |  |  |  | |  | |  | Allowances allocated to Kearny, Hudson, and Mercer may only be used for the operational needs of those units, and all surplus allowances must be surrendered. Within 90 days of amended Consent Decree, PSEG must surrender 1,230 NOx Allowances and 8,568 SO2 Allowances not already allocated to or generated by the units listed here. Kearny allowances must be surrendered with the shutdown of those units. |  |  |  | http://www2.epa.gov/enforcement/pseg-fossil-llc-settlement |
| New Jersey | Unit 8 | Retire unit | 01/01/07 |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Hudson | New Jersey | Unit 2 |  |  | Install Dry FGD (or approved alt. technology) and continually operate | 0.15 | 12/31/10 | Install SCR (or approved tech) and continually operate | 0.1 | 12/31/10 | Install Baghouse (or approved technology) | | 0.015 | | 12/31/10 |  |  |  |
|  | Annual Cap (tons) | Year |  | Annual Cap (tons) | Year |  | |  | |  |
| 5,547 | 2007 | 3,486 | 2007 |
| 5,270 | 2008 | 3,486 | 2008 |
| 5,270 | 2009 | 3,486 | 2009 |
| 5,270 | 2010 | 3,486 | 2010 |
| Mercer | New Jersey | Unit 1 |  |  | Install Dry FGD (or approved alt. technology) and continually operate | 0.15 | 12/31/10 | Install SCR (or approved tech) and continually operate | 0.1 | 01/01/07 | Install Baghouse (or approved technology) | | 0.015 | | 12/31/10 |  |  |  |
| New Jersey | Unit 2 |  |  | Install Dry FGD (or approved alt. technology) and continually operate | 0.15 | 12/31/10 | Install SCR (or approved tech) and continually operate | 0.1 | 01/01/07 | Install Baghouse (or approved technology) | | 0.015 | | 12/31/10 |  |  |  |
| **Westar Energy** | | | | | | | | | | | | | | | | | | | | |
| Jeffrey Energy Center | Kansas | All units |  | | Units 1, 2, and 3 have a total annual limit of 6,600 tons of SO2 starting 2011   Units 1, 2, and 3 must all install FGDs by 2011 and operate them continuously.   FGDs must maintain a 30-Day Rolling Average Unit Removal Efficiency for SO2 of at least 97% or a 30-Day Rolling Average Unit Emission Rate for SO2 of no greater than 0.070 lbs/MMBtu. | | | Units 1-3 must continuously operate Low NOx Combustion Systems by 2012 and achieve and maintain a 30-Day Rolling Average Unit Emission Rate for NOx of no greater than 0.180 lbs/MMBtu.  One of the three units must install an SCR by 2015 and operate it continuously to maintain a 30-Day Rolling Average Unit Emission Rate for NOx of no greater than 0.080 lbs/MMBtu.  By 2013 Westar shall elect to either (a) install a second SCR on one of the other JEC Units by 2017 or (b) meet a 0.100 lbs/MMBtu Plant-Wide 12-Month Rolling Average Emission Rate for NOx by 2015 | | | Units 1, 2, and 3 must operate each ESP and FGD system continuously by 2011 and maintain a 0.030 lbs/MMBtu PM Emissions Rate.   Units 1 and 2’s ESPs must be rebuilt by 2014 in order to meet a 0.030 lbs/MMBtu PM Emissions Rate | | | | |  |  |  |  | http://www2.epa.gov/enforcement/westar-energy-inc-settlement |
| **Duke Energy** | | | | | | | | | | | | | | | | | | | | |
| Gallagher | Indiana | Units 1 & 3 | Retire or repower as natural gas | 1/1/2012 |  | | |  | | |  | | | | |  | | |  | http://www2.epa.gov/enforcement/duke-energy-gallagher-plant-clean-air-act-settlement |
| Units 2 & 4 |  |  | Install Dry sorbent injection technology | 80% | 1/1/2012 |  | | |  | | | | |  | | |  |
| **American Municipal Power** | | | | | | | | | | | | | | | | | | | | |
| Gorsuch Station | Ohio | Units 2 & 3 | Elected to Retire Dec 15, 2010 (must retire by Dec 31, 2012) | |  | | |  | | |  | | | | |  | | |  | http://www2.epa.gov/enforcement/american-municipal-power-clean-air-act-settlement |
| Units 1 & 4 |
| **Hoosier Energy Rural Electric Cooperative** | | | | | | | | | | | | | | | | | | | | |
| Ratts | Indiana | Units 1 & 2 |  | |  | | | Install & continually operate SNCRS | 0.25 | 12/31/2011 | Continuously operate ESP | | | | | Annually surrender any NOx and SO2 allowances that Hoosier does not need in order to meet its regulatory obligations | | |  | http://www2.epa.gov/enforcement/hoosier-energy-rural-electric-cooperative-inc-settlement | |
| Merom | Indiana | Unit 1 |  | | Continuously run current FGD for 90% removal and update FGD for 98% removal by 2012 | 98% | 2012 | Continuously operate existing SCRs | 0.12 |  | Continuously operate ESP and achieve PM rate no greater than 0.007 by 6/1/12 | | | | |  |
| Unit 2 | Continuously run current FGD for 90% removal and update FGD for 98% removal by 2014 | 98% | 2014 | Continuously operate ESP and achieve PM rate no greater than 0.007 by 6/1/13 | | | | |
| **Northern Indiana Public Service Co.** | | | | | | | | | | | | | | | | | | | | |
| Bailly | Indiana | Units 7 & 8 |  | | Upgrade existing FGD | 95% by 01/01/11 97% by 01/01/14 (95% if low sulfur coal only is burned) | | OFA & SCR | 0.15 lbs/MMBtu by 12/31/10 0.13 lbs/MMBtu by 12/31/13 0.12 lbs/MMBtu by 12/31/15 | |  | | 0.3 lbs/MMBtu (0.015 if a Baghouse is installed) | | 12/31/2010 |  | | |  | http://www2.epa.gov/enforcement/northern-indiana-public-service-company-clean-air-act-settlement |
| Michigan City | Indiana | Unit 12 |  | | FGD | 0.1 lbs/MMBtu | 12/31/2018 | OFA & SCR | 0.14 lbs/MMBtu by 12/31/10 0.12 lbs/MMBtu by 12/31/11 0.10 lbs/MMBtu by 12/31/13 | |  | | 0.3 lbs/MMBtu (0.015 if a Baghouse is installed) | | 12/31/2018 |  | | |  |
| Schahfer | Indiana | Unit 14 |  | | FGD | 0.08 lbs/MMBtu | 12/31/2013 | OFA & SCR | 0.14 lbs/MMBtu by 12/31/10 0.12 lbs/MMBtu by 12/31/12 0.10 lbs/MMBtu by 12/31/14 | |  | | 0.3 lbs/MMBtu (0.015 if a baghouse is installed) | | 12/31/2013 |  | | |  |
| Indiana | Unit 15 |  | | FGD | 0.08 lbs/MMBtu | 12/31/2015 | LNB/OFA | 0.16 | 3/31/2011 |  | | 0.3 lbs/MMBtu (0.015 if a baghouse is installed) | | 12/31/2015 |  | | |  |
| Either: SCR or SNCR | 0.08 | 12/31/2015 |  | |
| 0.15 | 12/31/2012 |  | |
| Indiana | Units 17 & 18 |  | | Upgrade existing FGD | 97% | 1/31/2011 | LNB/OFA | 0.2 | 3/31/2011 |  | | 0.3 lbs/MMBtu (0.015 if a baghouse is installed) | | 12/31/2010 |  | | |  |
| Dean H Mitchell | Indiana | Units 4, 5, 6, & 11 | Retire | 12/31/2010 |  | | |  | | |  | | | | |  | | |  |
| **Tennessee Valley Authority** | | | | | | | | | | | | | | | | | | | | |
| Colbert | Alabama | Units 1- 4 |  | | FGD |  | 6/30/2016 | SCR |  | 6/30/2016 |  | | | | | Shall surrender all calendar year NOx and SO2 Allowances allocated to TVA that are not needed for compliance with its own CAA reqts. Allocated allowances may be used for TVA’s own compliance with CAA reqts. | Shall not use NOx or SO2 Allowances to comply with any requirement of the Consent Decree,   Nothing prevents TVA from purchasing or otherwise obtaining NOx and SO2 allowances from other sources for its compliance with CAA reqts.  TVA may sell, bank, use, trade, or transfer any NOx and SO2 Super-Compliance” Allowances resulting from meeting System-wide limits. Except that reductions used to support new CC/CT will not be Super Allowances in that year and thereafter. | 2011 |  | <https://www.epa.gov/enforcement/tennessee-valley-authority-clean-air-act-settlement> |
| Unit 5 |  | | FGD |  | 12/31/15 | SCR |  | Effective Date |  | | | | |
| Widows Creek | Alabama | Units 1 - 6 | Retire 2 units 7/31/13 Retire 2 units 7/31/14 Retire 2 units 7/31/15 | |  | | |  | | |  | | | | |
| Unit 7 |  | | Continuously operate FGD | | | SCR |  | Effective Date |  | | | | |
| Unit 8 |  | | Continuously operate FGD | | | SCR |  | Effective Date |  | | | | |
| Paradise | Kentucky | Units 1 & 2 |  | | Upgrade FGD | 93% | 12/31/12 | SCR |  | Effective Date |  | | | | |
| Unit 3 |  | | Wet FGD |  | Effective Date | SCR |  | Effective Date |  | | | | |
| Shawnee | Kentucky | Units 1 & 4 |  | | FGD | 1.2 | 12/31/17 | SCR |  | 12/31/17 |  | | | | |
| Units 5 - 10 |  | |  | 1.2 | Effective Date |  | | |  | | | | |
| Allen | Tennessee | Units 1 - 3 |  | | FGD |  | 12/31/18 | Continuously operate SCR |  |  |  | | 0.03 PM Emissions Rate | | 12/31/18 |
| Bull Run | Tennessee | Unit 1 |  | | Wet FGD |  | Effective Date | Continuously operate SCR |  |  |  | | 0.03 PM Emissions Rate | | Effective Date |
| Cumberland | Tennessee | Units 1 & 2 |  | | Wet FGD |  | Effective Date | Continuously operate SCR |  |  |  | | | | |
| Gallatin | Tennessee | Units 1 - 4 |  | | FGD |  | 12/31/17 | SCR |  | 12/31/17 |  | | 0.03 PM Emissions Rate | | 12/31/17 |
| John Sevier | Tennessee | Units 1 & 2 | Retire 2 Units 12/31/12 and 12/31/15 | |  |  |  |  |  |  |  | |  | |  |
| Units 3 & 4 |  | | FGD |  | 12/31/15 | SCR |  | 12/31/15 |  | | | | |
| Johnsonville | Tennessee | Units 1 - 10 | Retire 6 Units 12/31/15 Retire 4 Units 12/31/17 | |  | | |  | | |  | | | | |
| Kingston | Tennessee | Units 1 - 9 |  | | FGD |  | Effective Date | SCR |  | Effective Date |  | | 0.03 PM Emissions Rate | | Effective Date |
| **Wisconsin Public Service** | | | | | | | | | | | | | | | | | | | | |
| Pulliam | Wisconsin | Units 5-6 | Retired | 6/1/2015 |  | 0.750 lbs/MMBtu | 1/1/2013 until retirement |  |  |  |  | |  | |  |  |  |  |  | http://www2.epa.gov/enforcement/wisconsin-public-service-corporation-settlement |
| Wisconsin | Units 7-8 |  |  |  | 0.750 lbs/MMBtu & plant-wide cap of 2100 tons starting 2016 | 1/1/2013 |  | 0.250 lbs/MMBtu & plant-wide cap of 1500 tons starting 2016 | 12/31/12 |  | |  | |  |  |  |  | The modeled SO2 rate in IPM is lower; only tonnage limitation imposed through a constraint. |
| Weston | Wisconsin | Unit 1 | Retired |  |  | 0.750 lbs/MMBtu | 1/1/2013 until retirement |  | 0.250 lbs/MMBtu | 12/31/2012 until retirement |  | |  | |  |  |  |  |  |
| Wisconsin | Units 2 | Repower as natural gas | 6/1/2015 |  | 0.750 lbs/MMBtu | 1/1/2013 until retirement |  | 0.280 lbs/MMBtu | 12/31/2012 until retirement |  | |  | |  |  |  |  |  |
| Wisconsin | Units 3 |  |  | ReACT by 12/31/2016 | 0.750 lbs/MMBtu until 2016 0.080 lbs/MMBtu 2016 onwards | 12/31/16 | ReACT by 12/31/2016 | 0.130 lbs/MMBtu until 2016 0.100 lbs/MMBtu 2016 onwards | 12/31/16 |  | |  | |  |  |  |  |  |
| Wisconsin | Units 4 |  |  | Continuously Operate the existing DFGD & burn only Powder River Basin Coal | 0.080 lbs/MMBtu | 2/31/2013 | Continuously Operate the existing SCR | 0.060 lbs/MMBtu | 2/31/2013 |  | |  | |  |  |  |  |  |
| **Louisiana Generating LLC** | | | | | | | | | | | | | | | | | | | | |
|  |  |  | Plant-Wide Annual Tonnage Limitations for SO2 is 18,950 tons in 2016 and thereafter | | | | | Plant-Wide Annual Tonnage Limitations for NOx is 8,950 tons in 2015 and thereafter | | |  | |  | |  |  |  |  |  |  |
| Big Cajun 2 | Louisiana | Unit 1 | Retirement, Refueling, Repowering, or Retrofit | 04/01/25 | install and Continuously Operate DSI \_\_   install and Continuously Operate Dry FGD | 0.380 lbs/MMBtu [2015] \_\_  0.070 lbs/MMBtu | 4/15/2015 [DSI] \_\_  4/1/2025 [DFGD] | install and Continuously Operate SNCR | 0.150 lbs/MMBtu | 05/01/14 | Continuously Operate each ESP | | 0.030 lbs/MMBtu | | 04/15/15 |  |  |  | May trade Super-Compliant Allowances, may buy external allowances to comply. “Commencing January 1, 2013, and continuing thereafter, Settling Defendant shall burn only coal with no greater sulfur content than 0.45 percent by weight on a dry basis at Big Cajun II Units 1 and 3. “ | http://www2.epa.gov/enforcement/louisiana-generating-settlement |
| Unit 2 | Refuel/convert to NG fired | 04/15/15 |  |  |  | install and Continuously Operate SNCR | 0.150 lbs/MMBtu | 05/01/14 |  | |  | |  |  |
| Unit 3 |  |  |  |  |  | install and Continuously Operate SNCR | 0.135 lbs/MMBtu | 05/01/14 | Continuously Operate each ESP | | 0.030 lbs/MMBtu | | 04/15/15 |  |
| **Dairyland Power Cooperative** | | | | | | | | | | | | | | | | | | | | |
|  |  |  | Dairyland Power Cooperative shall not exceed an Annual Plant-wide Tonnage Limitation of 6800 tons of NOx in calendar years 2016, 3700 tons 2017-2019, and 3200 tons in 2020 and thereafter; and an Annual Plant-wide Tonnage Limitation of 6070 tons of SO2 in 2016, 6060 tons 2017-2019 and 4580 tons in 2020 and thereafter. | | | | | | | | | | | | | | | |  |  |
| Alma | Wisconsin | Unit 1 | Cease Burning Coal | 06/30/12 |  |  |  |  |  |  |  | |  | |  |  |  |  |  | http://www2.epa.gov/enforcement/dairyland-power-cooperative-settlement |
| Unit 2 | Cease Burning Coal | 06/30/12 |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Unit 3 | Cease Burning Coal | 06/30/12 |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Unit 4 | **Option 2**: Retrofit and Regulate both units more stringently | 12/31/14 | Install and continuously operate DFGD or DSI at Alma 4 | 1.00 lbs/MMBtu at Alma 4 And a joint cap of 3,737 tons until 2019, and 2,242 tons thereafter. In the event that one retires, Tonnage Cap of 2,136 tons for the remaining unit until 2019 and 1,282 tons thereafter | 12/31/2014 | Continuously Operate the existing Low NOx Combustion System (including OFA) and SNCR | 0.350 lbs/MMBtu  \_\_  Joint cap of 1308 tons for- until 2019, and 785 tons thereafter. In the event that one retires, Tonnage Cap of 746 tons for remaining unit until 2019 and 449 tons thereafter | 8/1/2012 \_\_  12/31/2014 | Continuously Operate an ESP or FF on Alma Unit 4 | | 0.030 lbs/MMBtu [with ESP]  0.015 lbs/MMBtu [with FF] at Alma 4. Joint cap of 112 tons until 2019, and 67 tons thereafter. In the event that one retires, Tonnage Cap of 64 tons for the remaining unit until 2019 and 39 tons thereafter | | 12/31/14 |  |  | Dairyland was provided with two options for compliance. It chose Option 2 and it is the one modeled in IPM. Details on Option 1 can be found in the settlement document referenced in the adjoining column. |
| Unit 5 |  |
| J.P. Madgett | Wisconsin | Unit 1 |  |  | Install and continuously operate DFGD | 0.090 lbs/MMBtu | 12/31/14 | Continuously Operate existing Low NOx Combustion System \_\_   Install an SCR | 0.30 lbs/MMBtu \_\_  0.080 lbs/MMBtu | 8/1/2012 \_\_  6/30/2016 | Continuously Operate the existing Baghouse | | 0.0150 lbs/MMBtu | | 07/01/13 |  |  |  |
| Genoa | Wisconsin | Unit 1 |  |  | Continuously Operate the FGD | 0.090 lbs/MMBtu | 12/31/12 | Continuously Operate existing Low NOx Combustion System including OFA \_\_   Install an SNCR | 0.14 lbs/MMBtu \_\_  Annual Tonnage Cap of 1,140 tons | 12/31/2014 \_\_  6/1/2015 | Continuously Operate the existing Baghouse | | 0.0150 lbs/MMBtu | | 07/01/13 |  |  |  |
| **Dominion Energy, Inc.** | | | | | | | | | | | | | | | | | | | | |
|  |  |  | In calendar year 2014, and in each calendar year thereafter, Kincaid shall not exceed a Plant-Wide Annual Tonnage Limitation of 3,500 tons of NOx & 4,400 tons of SO2, and Brayton Point shall not exceed a Plant-Wide Annual Tonnage Limitation of 4,600 tons of NOx & 4,100 tons of SO2. | | | | | | | | | | | | | | | |  |  |
| Brayton Point | Massachusetts | Unit 1 |  |  | Continuously Operate the existing dry FGD | 0.150 lbs/MMBtu | 06/01/13 | Continuously Operate the SCR, OFA, and LNB | 0.080 lbs/MMBtu | 05/01/13 | Install/Continuously Operate a Baghouse | | 0.015 lbs/MMBtu [PM by 2013]  0.01 lbs/MMBtu [PM post-2013] | | 06/01/13 |  |  |  |  | http://www2.epa.gov/enforcement/dominion-energy-inc |
| Unit 2 |  |  | Continuously Operate the LNB and OFA | 0.280 lbs/MMBtu | 05/02/13 |  |  |
| Unit 3 |  |  | Continuously Operate dry FGD | 0.080 lbs/MMBtu | 07/01/13 | Continuously Operate the SCR, OFA, and LNB | 0.080 lbs/MMBtu | 05/01/13 | Install/Continuously Operate a Baghouse | | 0.015 lbs/MMBtu [PM by 2013]  0.01 lbs/MMBtu [PM post-2013] | | 07/01/13 |  |  |  |  |  |
| Kincaid Power Station | Illinois | Unit 1 |  |  | Continuously Operate DSI | 0.100 lbs/MMBtu | 01/01/14 | Continuously Operate each SCR and OFA | 0.080 lbs/MMBtu | 05/01/13 | Continuously Operate the ESP | | 0.030 lbs/MMBtu [PM by 2013]  0.015 lbs/MMBtu [PM by post-2013] | | 06/01/13 |  |  |
| Unit 2 |  |  |  |  |
| State Line Power Station | Indiana | Unit 3 | Retire | 06/01/12 |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Unit 4 |  |  |  |  |  |  |  | |  |  |  |  |
| **Wisconsin Power and Light** | | | | | | | | | | | | | | | | | | | | |
|  |  |  |  |  | Edgewater 3-5- shall not exceed an Annual Tonnage Limitation of 2,500 tons of NOx in calendar years 2016-2018, and 1100 tons 2019 onwards & an Annual Tonnage Limitation of 12,500 tons of SO2 in 2016, 6000 tons 2017-2018 and 1100 tons 2019 onwards. Columbia 1 & 2 shall not exceed an Annual Tonnage Limitation of 5,600 tons of NOx in calendar years 2016-2018, and 4300 tons 2019 onwards & an Annual Tonnage Limitation of 3290 tons of SO2 in 2016 and thereafter. | | | | | | | | | | |  |  |  |  |  |
| Edgewater Generating Station | Wisconsin | Unit 3 | Retired | 12/31/15 |  | Unit-Specific Annual Tonnage Cap of 700 Tons of SO2 | 05/21/13 |  | Unit-Specific Annual Tonnage Cap of 250 tons of NOx | 05/21/13 |  | |  | |  |  |  |  |  | http://www2.epa.gov/enforcement/wisconsin-power-and-light-et-al-settlement |
| Unit 4 | Retire, Refuel, or Repower | 12/31/18 |  | 0.700 lbs/MMBtu | 05/21/13 | Operate SNCR and LNB | 0.150 lbs/MMBtu | 01/01/14 | Continuous Operation of the existing ESP | | 0.030 lbs/MMBtu | | 12/31/13 |  |  |  |
| Unit 5 |  |  | Install and continuously operate DFGD | 0.075 lbs/MMBtu | 12/31/16 | Install and continuously operate SCR | 0.070 lbs/MMBtu | 05/01/13 | Install and continuously operate Fabric Filter | | 0.015 lbs/MMBtu | | 12/31/16 |  |  |  |
| Columbia Generating Station | Wisconsin | Unit 1 |  |  | Install and continuously operate DFGD | 0.075 lbs/MMBtu | 01/01/15 | Operation of the Low NOx Combustion System | 0.150 lbs/MMBtu | 07/21/13 | Install and continuously operate Fabric Filter | | 0.015 lbs/MMBtu | | 12/31/14 |  |  |  |
| Unit 2 |  |  | 0.075 lbs/MMBtu | Operation of the Low NOx Combustion System \_\_  Install and continuously operate SCR | 0.150 lbs/MMBtu \_\_  0.070 lbs/MMBtu | 7/21/2013 \_\_  12/31/2018 | 0.015 lbs/MMBtu | | 12/31/14 |  |  |  |
| Nelson Dewey Generating Station | Wisconsin | Unit 1 | Retire, Refuel, or Repower | 12/31/15 | commence burning 100% Powder River Basin or equivalent fuel containing ≤ 1.00 lbs/MMBtu of SO2 | 0.800 lbs/MMBtu | 05/22/13 |  | 0.300 lbs/MMBtu | 04/22/13 |  | | 0.100 lbs/ MMBtu | | 04/22/13 |  |  | Cease Burning Pet coke and Commence Burning 100% PRB Coal or Equivalent at Nelson Dewey Units 1 and 2. |
| Unit 2 | Retire, Refuel, or Repower | 12/31/15 |  | |  |  |
| **Minnesota Power** | | | | | | | | | | | | | | | | | | | | |
| Boswell | Minnesota | Unit 1 | Retire/Repower | 12/31/18 | FGD | 0.70 lbs/MMBtu and 0.03 lb/MMBtu after 12/31/18 | 07/16/14 | Continuously Operate the ROFA and  SNCR | 0.20 lbs/MMBtu | 6/30/2014 | Continuously Operate Baghouses | | 0.015  lb/MMBtu | | 07/16/14 |  |  |  |  | http://www2.epa.gov/enforcement/minnesota-power-settlement |
| Minnesota | Unit 2 | Retire/Repower | 12/31/18 | FGD | 0.70 lbs/MMBtu and 0.03 lb/MMBtu after 12/31/18 | 07/16/14 | Continuously Operate the ROFA and  SNCR | 0.20 lbs/MMBtu | 6/30/2014 | Continuously Operate Baghouses | | 0.015  lb/MMBtu | | 07/16/14 |  |
| Minnesota | Unit 3 |  |  | FGD | 0.030 lbs/MMBtu | 12/31/18 | Continuously Operate the Low NOx Burners, OFA system and SCR control | 0.060 lbs/MMBtu | 07/16/14 | Continuously Operate Baghouses | | 0.015  lb/MMBtu | | 07/17/14 |  |
| Minnesota | Unit 4 |  |  | FGD | 0.03 | 05/31/16 | Continuously Operate the Low NOx Burners, OFA system and SCR | 0.120 lbs/MMBtu | 07/16/14 | Continuously Operate Baghouses | | 0.015  lb/MMBtu | | 05/31/16 |  |
| Taconite Harbor | Minnesota | Unit 1 |  |  |  | 0.30 lbs/MMBtu | 12/31/2015 | Continuously Operate the ROFA systems and SNCR | 0.160 lbs/MMBtu | 7/16/2014 | Continuously Operate ESP | | .03 lb/MMBtu | | 07/16/14 |  |  |
| Minnesota | Unit 2 |  |  |  |
| Minnesota | Unit 3 | Retire/Repower/Refueling | 12/31/2015 |  |  |  |  |  |  |  |
| Laskin | Minnesota | Unit 1 |  |  |  | 0.200 lb/MMBtu | 07/16/14 | Continuously Operate the Low NOx Burners, and OFA systems | 0.190 lbs/MMBtu | 07/16/14 |  | | 0.050 lb/MMBtu | | 07/16/14 |  |  |
| Minnesota | Unit 2 |  |  |  |  |
| **Consumer Energy** | | | | | | | | | | | | | | | | | | | | |
| Campbell | Michigan | Unit 1 |  |  | install and continuously operate DSI | 0.350 lb/MMBtu 30-Day Rolling Average ------- 0.290 lb/MMBtu 90- Day Rolling Average | 6/30/2016  -------  12/27/2016 | Continuously Operate the Low NOx Combustion System  (including OFA) | 0.220 lb/MMBtu  90-Day Rolling  Average | 11/4/2014 | Install and continuously operate Baghouse | | .015 lb/MMBtu | | 04/01/16 |  |  |  |  | <https://www.epa.gov/enforcement/consumers-energy-clean-air-act-settlement> |
| Michigan | Unit 2 |  |  | install and continuously operate DSI | 0.32 lb/MMBtu | 6/30/2017 | Continuously Operate an SCR | 0.080 lb/MMBtu  90-Day Rolling  Average | 5/3/2015 | Install and continuously operate Baghouse | | 0.015 lb/MMBtu | | 2/6/2015 |  |  |
| Michigan | Unit 3 |  |  | install and continuously operate FGD | 0.085  lb/MMBtu 30-Day Rolling Average -------- 0.07 lb/MMBtu 365- Day Rolling Average | 3/1/2017  --------  12/31/2017 | Continuously Operate an SCR | 0.080 lb/MMBtu  90-Day Rolling  Average | 2/6/2015 | Install and continuously operate Baghouse | | 0.015 lb/MMBtu | | 12/31/16 |  |  |
| Cobb | Michigan | Unit 7 | Retire | 04/15/16 |  |  |  |  |  |  |  | |  | |  |  | Unit will retire by 04/15/16 |
| Michigan | Unit 8 | Retire | 04/15/16 |  |  |  |  |  |  |  | |  | |  |  | Unit will retire by 04/15/16 |
| Karn | Michigan | Unit 1 |  |  | Install and continuously operate FGD | 0.075 lb/MMBtu | 12/31/2015 | Continuously Operate the  existing SCR | 0.080  lb/MMBtu | 60 Operating Days after the Date of Entry | Continuously Operate the existing Baghouse | | 0.015 lb/MMBtu | |  |  |  |
| Michigan | Unit 2 |  |  | Install and continuously operate FGD | 0.075 lb/MMBtu | 4/15/2016 | Continuously Operate the  existing SCR | 0.080  lb/MMBtu | 60 Operating Days after the Date of Entry | Continuously Operate the existing Baghouse | | 0.015 lb/MMBtu | |  |  |  |
| Weadock | Michigan | Unit 7 | Retire | 04/15/16 |  |  |  |  |  |  |  | |  | |  |  | Unit will retire by 04/15/16 |
| Michigan | Unit 8 | Retire | 04/15/16 |  |  |  |  |  |  |  | |  | |  |  | Unit will retire by 04/15/16 |
| Whiting | Michigan | Unit 1 | Retire | 04/15/16 |  |  |  |  |  |  |  | |  | |  |  | Unit will retire by 04/15/16 |
| Michigan | Unit 2 | Retire | 04/15/16 |  |  |  |  |  |  |  | |  | |  |  | Unit will retire by 04/15/16 |
| Michigan | Unit 3 | Retire | 04/15/16 |  |  |  |  |  |  |  | |  | |  |  | Unit will retire by 04/15/16 |
| **Interstate Power and Light** | | | | | | | | | | | | | | | | | | | | |
| For each calendar year as specified below, Defendant shall not exceed the corresponding Prairie Creek Annual Tonnage Limitation for SO2 specified below:  Each calendar year from 2016 through 2018: 5,500 tons per year  Each calendar year from 2019 to 2020: 3,500 tons per year  Each calendar year from 2021 through 2025: 3,000 tons per year  2026 and continuing each calendar year thereafter: 100 tons per year | | | | | | | | | | | | | | | | | | | |  |
| For each calendar year as specified below, Defendant’s System shall not exceed the corresponding System-Wide Annual Tonnage Limitation for SO2 specified below:  2015: 39,000 tons per year  2016: 23,500 tons per year  Each calendar year from 2017 through 2018: 14,100 tons per year  Each calendar year from 2019 through 2020: 12,000 tons per year  2021: 11,000 tons per year  Each calendar year from 2022 through 2025: 6,000 tons per year  2026 and continuing each calendar year thereafter: 3,250 tons per year | | | | | | | | | | | | | | | | | | | |
| For each calendar year as specified below, Defendant shall not exceed the corresponding Prairie Creek Annual Tonnage Limitation for NOx specified below:  Each calendar year from 2015 through 2018: 3,250 tons per year  Each calendar year from 2019 through 2025: 2,650 tons per year  2026 and continuing each calendar year thereafter: 1,500 tons per year | | | | | | | | | | | | | | | | | | | |
| For each calendar year as specified below, Defendant’s System shall not exceed the corresponding System-Wide Annual Tonnage Limitation for NOx specified below:  Each calendar year from 2015 through 2017: 11,500 tons per year  Each calendar year from 2018 through 2019: 10,500 tons per year  2020: 7,500 tons per year  2021: 7,250 tons per year  2022 and continuing each calendar year thereafter: 6,800 tons per year | | | | | | | | | | | | | | | | | | | |
| Lansing | Iowa | Unit 1 | Retire | 2016 |  |  |  |  |  |  |  | |  | |  |  |  |  |  |
| Iowa | Unit 2 | Retire | 2016 |  |  |  |  |  |  |  | |  | |  |
| Iowa | Unit 3 | Retire | 2016 |  |  |  |  |  |  |  | |  | |  |
| Iowa | Unit 4 |  |  | Continuous Operation of a DFGD | 0.075 lb/MMBtu | 12/31/2016 | Continuously Operate the existing SCR | 0.090 lb/MMBtu \_\_  0.080 lb/MMBtu | 01/31/2015 \_\_  12/30/2015 | Continuous Operation of a Baghouse | | 0.015 lb/MMBtu | | 12/31/2016 | https://www.epa.gov/sites/production/files/2015-07/documents/interstatepowerandlight-cd.pdf |
| Ottumwa | Iowa | Unit 1 |  |  | Continuous Operation of a DFGD | 0.075 lb/MMBtu | 12/31/2015 | Install an SCR | 0.160 lb/MMBtu \_\_  0.080 lb/MMBtu | 09/15/2015 \_\_  12/31/2019 | Continuous Operation of a Baghouse | | 0.015 lb/MMBtu | | 12/31/2015 |  |  |
| Milton L Kapp | Iowa | Unit 1 | Retire | 2016 |  |  |  |  |  |  |  | |  | |  |  |  |
| Iowa | Unit 2 | Retire or Refuel | 08/31/2015 |  | 0.750 lb/MMBtu | 09/15/2015 |  | 0.150 lb/MMBtu | 09/15/2015 |  | |  | |  |  |
| Sutherland | Iowa | Unit 1 | Retire or Repower | 06/01/2019 |  |  |  |  |  |  |  | |  | |  |  |  |
| Iowa | Unit 2 | Retire | 2016 |  |  |  |  |  |  |  | |  | |  |  |
| Iowa | Unit 3 | Retire or Repower | 06/01/2019 |  |  |  |  |  |  |  | |  | |  |  |
| Sixth Street | Iowa | Unit 1-5 | Retire | 2016 |  |  |  |  |  |  |  | |  | |  |  |  |
| Dubuque | Iowa | Unit 1 | Retire or Repower | 06/01/2019 |  |  |  |  |  |  |  | |  | |  |  |  |
| Iowa | Unit 5 | Refuel | 07/15/2015 |  |  |  |  |  |  |  | |  | |  |  |
| Iowa | Unit 6 | Retire or Repower | 06/01/2019 |  |  |  |  |  |  |  | |  | |  |  |
| Burlington | Iowa | Unit 1 | Retire or Refuel | 12/31/2021 |  | 0.750 lb/MMBtu | 09/15/2015 |  | 0.180 lb/MMBtu | 09/15/2015 | Continuously Operate the ESP | | 0.030 lb/MMBtu | | 01/15/2016 |  |  |
| Prairie Creek | Iowa | Unit 1 | Retire or Refuel | 12/31/2025 |  | 0.900 lb/MMBtu  (Unit 1 and Unit 2 combined) | 09/15/2015 |  | 0.600 lb/MMBtu | 09/15/2015 | Continuously Operate the ESP | | 0.030 lb/MMBtu  (Unit 1 and Unit 2 combined) | | 10/15/2015 |  |  |
| Iowa | Unit 2 | Retire or Refuel | 12/31/2025 |  | 0.600 lb/MMBtu | 09/15/2015 | Continuously Operate the ESP | |  |
| Iowa | Unit 3 | Retire or Refuel | 12/31/2025 |  | 0.700 lb/MMBtu | 09/15/2015 |  | 0.400 lb/MMBtu | 09/15/2015 | Continuously Operate the ESP | | 0.030 lb/MMBtu | | 10/15/2015 |  |
| Iowa | Unit 4 | Retire or Refuel | 06/01/2018 |  | 0.700 lb/MMBtu | 09/15/2015 |  | 0.400 lb/MMBtu | 09/15/2015 | Continuously Operate the ESP | | 0.030 lb/MMBtu | | 10/15/2015 |  |
| **Duke Energy** | | | | | | | | | | | | | | | | | | | | |
| Buck | North Carolina | Unit 3 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |  | Except as provided in this Consent Decree, beginning in calendar year 2016 and continuing each calendar year thereafter, Defendant shall not sell, bank, trade, or transfer its interest in any NOx or SO Allowances allocated to Allen Unit 1, Allen Unit 2, Buck Unit 3, Buck Unit 4, Buck Unit 5, Cliffside Unit 1, Cliffside Unit 2, Cliffside Unit 3, Cliffside Unit 4, Dan River Unit 3, Riverbend Unit 4, Riverbend Unit 6, and Riverbend Unit 7.  Beginning in calendar year 2016, and continuing each calendar year thereafter, Defendant shall Surrender all NOx and SO2 Allowances allocated to Allen Unit 1, Allen Unit 2, Buck Unit 3, Buck Unit 4, Buck Unit 5, Cliffside Unit 1, Cliffside Unit 2, Cliffside Unit 3, Cliffside Unit 4, Dan River Unit 3, Riverbend Unit 4, Riverbend Unit 6, and Riverbend Unit 7 for that calendar year that Defendant does not need to meet federal and/or state CAA regulatory requirements for those Units. |  |  | https://www.epa.gov/sites/production/files/2015-09/documents/duke-energy-consent-decree-civil-action-1cv1262\_0.pdf |
| North Carolina | Unit 4 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| North Carolina | Unit 5 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| Cliffside | North Carolina | Unit 1 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| North Carolina | Unit 2 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| North Carolina | Unit 3 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| North Carolina | Unit 4 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| Dan River | North Carolina | Unit 3 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| Riverbend | North Carolina | Unit 4 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| North Carolina | Unit 6 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| North Carolina | Unit 7 | Retire | 09/2015 |  |  |  |  |  |  |  | |  | |  |
| Allen | North Carolina | Unit 1 | Retire | 12/31/2024 | Continuously Operate the existing FGD | 0.120 lb/MMBtu | 01/2017 | Continuously Operate the existing SNCR | 0.250 lb/MMBtu \_\_  600 tons per year | 01/2017 \_\_  2016 |  | |  | |  |
| North Carolina | Unit 2 | Retire | 12/31/2024 | Continuously Operate the existing FGD | 0.120 lb/MMBtu | 01/2017 | Continuously Operate the existing SNCR | 0.250 lb/MMBtu \_\_  600 tons per year | 01/2017 \_\_  2016 |  | |  | |  |
| North Carolina | Unit 3 | Retire | 12/31/2024 |  |  |  |  |  |  |  | |  | |  |  |  |  |
| Arizona Public Service Company | | | | | | | | | | | | | | | | | | | | |
| Four Corners | New Mexico | 4 |  |  |  | 6800 tons per year | 2019 | Continuously Operate the SCR | 0.080 lb/MMBtu  ---------  4968 tpy | 2019 |  | |  | |  |  |  |  | https://www.epa.gov/sites/production/files/2015-06/documents/fourcorners-cd.pdf |  |