CAIR Annual Nitrogen Oxide (NOX) Allowance Allocation
Control Periods 2009 to 2011
Example of Calculations

- Louisiana Annual NOx Budget for 2009 – 2011 is 35,512 tons per year (tpy)
- The allowances calculated for control period 2009 are the same for control periods 2010 and 2011.

Non-LPSC regulated facility: Taft Cogeneration Facility

- This facility has 4units. The actual annual NOx emissions for the years 2002, 2003, and 2004 for each unit were averaged.

  Unit CT1 = 73 tpy (2002 actual) + 188 tpy (2003 actual) + 159 tpy (2004 actual)/3 = 140 tpy
  Unit CT2 = 96 tpy (2002 actual) + 165 tpy (2003 actual) + 178 tpy (2004 actual)/3 = 146 tpy
  Unit CT3 = 72 tpy (2002 actual) + 196 tpy (2003 actual) + 158 tpy (2004 actual)/3 = 142 tpy
  Unit 4 = 00 tpy (2002 actual) + 000 tpy (2003 actual) + 000 tpy (2004 actual)/3 = 000 tpy

  Total allowances for Taft Cogeneration Facility = 140 tpy + 146 tpy + 142 tpy +000 =428 tpy

- The allowances for all the non-LPSC unit in the state are calculated as above. The allowances for all non-LPSC regulated units are summed and subtracted from the Louisiana annual CAIR budget. For the 2009-2011 control periods, the Louisiana budget for each year minus the allowances to non-LPSC regulated facilities for each year was 29,779 tpy.

LPSC regulated facility: Perryville Power Station

- This facility has 3 units. The actual annual heat input in million British thermal units (MMBtu) for each unit for the years 2002, 2003, and 2004 was averaged and multiplied by the fuel adjustment factor to obtain the adjusted heat input for each unit.

  Unit 2CT = 28,058 MMBtu (2002 actual) + 46,290 MMBtu (2003 actual) + 102,816 MMBtu (2004 actual)/3 = 59,055 MMBtu X 0.4 = 23,622 MMBtu
  Unit CT1 = 2,173,910 MMBtu (2002 actual) + 3,071,465 MMBtu (2003 actual) + 6,339,447 MMBtu (2004 actual)/3 = 3,861,607 MMBtu X 0.4 = 1,544,643 MMBtu
  Unit CT2 = 3,544,553 MMBtu (2002 actual) + 3,071,599 MMBtu (2003 actual) + 6,594,656 MMBtu (2004 actual)/3 = 4,403,603 MMBtu X 0.4 = 1,761,441 MMBtu

- Using the percentage of the adjusted heat input for each unit compared to the total adjusted heat input for all LPSC regulated units (413,406,316 MMBtu), the allowances were calculated using the remaining Louisiana budget (29,799 tpy). For Perryville Power station the allowances were calculated as follows:

  Unit 2CT = 23,622 MMBtu (2002 adjusted heat input) /413,406,316 MMBtu (total of adjusted heat input) X 29,799 tpy (remaining Louisiana budget) =1.702 tpy = 2 tpy
  [Rounded to the nearest whole number]
  Unit CT1 = 1,544,643 MMBtu (2002 adjusted heat input) /413,406,316 MMBtu (total of adjusted heat input) X 29,799 tpy (remaining Louisiana budget) =111.342 tpy = 111 tpy
  [Rounded to the nearest whole number]
  Unit CT1 = 1,761,441 MMBtu (2002 adjusted heat input) /413,406,316 MMBtu (total of adjusted heat input) X 29,799 tpy (remaining Louisiana budget) =126.967 tpy = 127 tpy
  [Rounded to the nearest whole number]

CAIR Ozone Season Nitrogen Oxide (NOx) Allowance Allocation
Control Periods 2009 to 2011
Example of Calculations

- Louisiana Ozone Season Budget for 2009 – 2011 is 17,085 tons for May through September (5 months) of each year
- The allowances calculated for the ozone season in control period 2009 are the same for the ozone seasons in control periods 2010 and 2011.

Non-LPSC regulated facility: Taft Cogeneration Facility

- This facility has 4 units. The actual ozone season NOx emissions for the years 2002, 2003, and 2004 for each unit were averaged.

  Unit CT1 = 0 tons (2002 actual) + 82.5 tons (2003 actual) + 71.1 tons (2004 actual)/3 = 77 tons
  Unit CT2 = 0 tons (2002 actual) + 72.3 tons (2003 actual) + 61.9 tons (2004 actual)/3 = 67 tons
  Unit CT3 = 0 tons (2002 actual) + 87.0 tons (2003 actual) + 65.1 tons (2004 actual)/3 = 76 tons
  Unit 4 = 0 tons (2002 actual) + 00.0 tons (2003 actual) + 00.0 tons (2004 actual)/3 = 00 tons

  Total allowances for Taft Cogeneration Facility = 77 tons + 67 tons + 76 tons+ 0 =220 tons

- The ozone season allowances for all the non-LPSC unit in the state are calculated as above. The allowances for all non-LPSC regulated units are summed and subtracted from the Louisiana ozone season CAIR budget. For the 2009-2011 control periods, the Louisiana ozone season budget for each year's ozone season minus the allowances to non-LPSC regulated facilities is 14,405 tons.

LPSC regulated facility: Perryville Power Station

- This facility has 3 units. The actual ozone season heat input in million British thermal units (MMBtu) for each unit for the years 2002, 2003, and 2004 was averaged and multiplied by the fuel adjustment factor to obtain the ozone season adjusted heat input for each unit.

  Unit 2CT = 28,058 MMBtu (2002 actual) + 46,290 MMBtu (2003 actual) + 80,298 MMBtu (2004 actual)/3 = 51,549 MMBtu X 0.4 = 20,619 MMBtu
  Unit CT1 = 1,994,363 MMBtu (2002 actual) + 1,974,419 MMBtu (2003 actual) + 3,056,990 MMBtu (2004 actual)/3 = 2,341,924 MMBtu X 0.4 = 936,770 MMBtu
  Unit CT2 = 3,361,696 MMBtu (2002 actual) + 1,908,889 MMBtu (2003 actual) + 3,148,914 MMBtu (2004 actual)/3 = 2,806,500 MMBtu X 0.4 = 1,122,600 MMBtu

- Using the percentage of the ozone season adjusted heat input for each unit compared to the total ozone season adjusted heat input for all LPSC regulated units (189,779,210 MMBtu), the allowances are calculated using the remaining Louisiana budget (14,405 tons). For Perryville Power station the allowances were calculated as follows:

  Unit 2CT = 20,619 MMBtu (2002 adjusted heat input) /189,779,210 MMBtu (total of adjusted heat input) X 14,405 tons (remaining Louisiana budget) =1.565 tons = 2 tons [Rounded to the nearest whole number]
  Unit CT1 = 936,770 MMBtu (2002 adjusted heat input) /189,779,210 MMBtu (total of adjusted heat input) X 14,405 tons (remaining Louisiana budget) =71.104 tons = 71 tons [Round to the nearest whole number]
  Unit CT1 = 1,122,600 MMBtu (2002 adjusted heat input) /189,779,210 MMBtu (total of adjusted heat input) X 14,405 tpy (remaining Louisiana budget) =85.209 tons = 85 tons [Round to the nearest whole number]