Part 75 and Part 60 Comparisons

Test	Part 75	Part 60
Initial 7-day Calibration Drift Test	Performed for 7 consecutive unit on-line operating days. Performance Specifications: NOx ≤2.5% of span SO2 ≤2.5% of span CO2 and O2 ≤0.5% difference Flow ≤3.0% of span Alternate Performance Specifications for ranges ≤200 ppm NOx and SO2 ≤5.0 ppm difference There is an exemption from the 7-day drift that applies to units that qualify as a peaker per definition in §72.2. An exemption is allowed for SO2/NOx analyzers with ranges ≤50 ppm. Most state agencies don't allow the exemption.	The performance specifications have an either/or statement on test condition. Cal drift to be performed once every 24 hours (as practical) for 7 consecutive calendar days (no wordage on whether process has to be on or off-line). Or, cal drift to be performed for 7 consecutive unit operating days (to bring in line with Part 75 for dual reporting systems). Performance Specifications: NOx ≤2.5% of span SO2 ≤2.5% of span CO ≤5.0% of span CO2 and O2 ≤0.5% difference Flow ≤3.0% of span No exemptions or alternate criteria.
Calibration Drift for on-going QA/QC	Per Part 75 all calibrations must be on-line. The PS limits should be used as the warning limit that the analyzer needs to be looked at and tweaked back into cal before the OOC limit is reached. Out-of-Control = 2 times the PS from initial certification: NOx and SO2 ≤5.0% of span OOC CO2 and O2 ≤1.0% difference OOC Flow ≤6.0% of span OOC Alternate OOC Specifications based on range: Ranges ≤50 ppm, NOx/SO2 ≤5.0 ppm difference OOC Ranges >50 ppm by ≤200 ppm, NOx/SO2 ≤10 ppm difference OOC	Part 60 doesn't differentiate on-line and off-line cals. The PS limits should be used as the warning limit before the OOC limit is reached. 2 Part Out-of-Control based on PS: 2 times PS for 5 consecutive days: NOx and SO2 ≤5.0% of span OOC CO ≤10.0% of span OOC CO2 and O2 ≤1.0% difference OOC 4 times PS in a 24-hr period: NOx and SO2 ≤10.0% of span OOC CO ≤20.0% of span OOC CO2 and O2 ≤2.0% difference OOC

Test	Part 75	Part 60
3-Point Linearity, initial certification and quarterly audits	Performed in all 4 operating quarters. Exempt in quarters with <168 operating hours. There is an upper limit of three consecutive calendar quarters in which the linearity exemption can be used. A linearity check must be performed at a minimum once every four calendar quarters. NOx and SO2 ranges ≤30 ppm are exempt from linearity. Note that some state agencies may not allow the exemption and will require either the 3-point linearity or a 2-point CGA in place of the Part 75 range exemption. If a quarterly linearity is missed then a 168 operating hour grace period is allowed in the following quarter to perform the linearity. Two linearities are then performed, one representing the missed test from the previous quarter and the 2nd representing the normal current quarter QA test. Each linearity test must be separated by 30 calendar days. Performance specification: NOx, SO2, CO2, O2 ≤5.0% of reference value Alternate specification: NOX and SO2 ≤5.0 ppm difference CO2 and O2 ≤0.5% difference	NA

Test	Part 75	Part 60
Quarterly 2-Point Calibration Gas Audit or CGA	NA	Not performed as part of initial certification. Performed in 3 out of 4 quarters with RATA performed in the 4th quarter. A CGA must be performed at least 60 calendar days apart from the previous test. CGA is exempt only in a quarter with zero operating time. Preference is to perform during process on-line conditions but an off-line CGA is acceptable. Performance Specification: NOx, SO2, CO, CO2, O2 ≤15.0% of reference value. Alternate PS: NOx, SO2, CO ≤5.0 ppm difference
Initial Certification Cycle/Response Time	Performed during process on-line conditions. Performed as a remote or at-the-probe cal gas injection. Performed as a flue gas to cal gas injection, single run each direction: Flue gas to span gas (upscale) Flue gas to zero gas (downscale) Performance Specification: NOx, SO2, CO2, O2 ≤15 minutes	Not required for NOx, SO2, O2, CO2. Required for "low emitter" CO systems where permit limit is equivalent to 200 ppm or less (reference PS-4A). Performed as a direct or local injection to the analyzer. Performed on both ranges of a dual-range analyzer. Performed as a cal gas to cal gas injection, 3 runs each direction: Zero gas to span gas (upscale) Span gas to zero gas (downscale) Performance Specification: CO ≤90 seconds

Test	Part 75	Part 60
Relative Accuracy Test Audit or RATA	Performed on a semiannual or annual basis, dependant on the results of the previous RATA (Part 75 incentive program). Gas analyzer RATAs must be performed while process is operating at the designated normal operating load level as listed in the unit's Part 75 monitoring plan. Flow RATAs must be performed at 3 operating load levels; low, mid, and high. RATAs are exempted in quarters with <168 operating hours. The exclusion of calendar quarters is limited. The deadline for the next RATA shall be no more than 8 calendar quarters after the quarter in which a RATA was last performed. If RATA is not performed in the due quarter then a 720 operating hour grace period in the following quarter can be used. If a RATA is conducted during a grace period, the next test is due in three operating quarters if the grace period RATA qualifies for a reduced (annual, incentive program) frequency. If the grace period RATA qualifies for the standard (semiannual) frequency then the next RATA is due in two operating quarters. See following table for RATA incentive performance specification limits.	RATAs are performed on an annual basis. Gas and flow monitor RATAs are performed while process is operating at 50% or greater load conditions. Performance Specifications: NOx/SO2 ≤20% of reference method mean or ≤10% of the applicable standard (permit limit) CO2/O2 ≤1% difference CO ≤10% of reference method or 5% of applicable standard (permit limit). Alternately in accordance with PS-4A (for systems that comply with low emission standards, <200 ppm), CO ≤5.0 ppm calculated as the absolute average difference between the RM and CEMS plus the 2.5% confidence coefficient. Flow ≤20% of reference method or 10% of applicable standard.

Part 75 RATA Incentive Table

RATA	Semiannual[1]	Annual[1]
SO_2 or NO_X[3]	7.5% < RA ≤ 10% or ±15 ppm[2, 4]	RA ≤ 7.5% or ±12 ppm[2, 4]
SO_2/diluent	7.5% < RA ≤ 10% or ±0.030 lb/mmBtu[2, 4]	RA ≤ 7.5% or ±0.025 lb/mmBtu[2, 4]
NO_X/diluent	7.5% < RA ≤ 10% or ±0.020 lb/mmBtu[2, 4]	RA ≤ 7.5% or ±0.015 lb/mmBtu[2, 4]
CO_2/O_2	7.5% < RA ≤ 10% or ±1.0% CO_2/O_2[2]	RA ≤ 7.5% or ±0.7% CO_2/O_2[2]
Moisture	7.5% < RA ≤ 10% or ±1.5% H_2O[2]	RA ≤ 7.5% or ±0.1.0% H_2O[2]
Flow	7.5% < RA ≤ 10% or ±2.0 fps[2]	RA ≤ 7.5% or ±1.5 fps[2]

[1] – The deadline for the next RATA is the end of the second (if semiannual) or fourth (if annual) successive QA operating quarters following the quarter in which the CEMS was last tested. Exclude calendar quarters with fewer than 168 operating hours (or, for common stacks and bypass stacks, exclude quarters with fewer than 168 stack operating hours) in determining the RATA deadline. For SO_2 monitors, QA operating quarters in which only very low sulfur fuel as defined in § 72.2, is combusted may also be excluded. However, the exclusion of calendar quarters is limited as follows: the deadline for the next RATA shall be no more than 8 calendar quarters after the quarter in which a RATA was last performed.

[2] – The difference between monitor and reference method mean values applies to moisture monitors, CO_2, and O_2 monitors, low emitters, or low flow, only.

[3] – A NO_X concentration monitoring system used to determine NO_X mass emissions under § 75.71.

[4] – If average reading of NO_X is ≤0.20 lb/mmBtu then use the ±0.02 lb/mmBtu semiannual and ±0.015 lb/mmBtu annual alternate criteria. If average reading of SO_2 is ≤0.50 lb/mmBtu then use the ±0.03 lb/mmBtu semiannual and ±0.025 lb/mmBtu annual alternate criteria. If average NO_X or SO_2 reading is ≤250 ppm then use the ±15 ppm semiannual and ±12 ppm annual alternate criteria.