

## Question 9.11

**Topic:** Monitor Ranges for Units with Low NO<sub>x</sub> Burners

**Question:** Are low NO<sub>x</sub> burners installed at coal fired power plants considered to be add-on emission control devices? Would utilities with low NO<sub>x</sub> burners in use be allowed to remove the high range of 0 – 1,000 ppm?

**Answer:** Low NO<sub>x</sub> burners (LNB) are not considered add-on emission controls. However, as noted in Section 2.1.2.5(a) of Appendix A, installation of a low-NO<sub>x</sub> burner is an example of a change that may require a span and range adjustment. To determine whether a new span and range are needed following the installation of a LNB, the owner or operator should examine the subsequent NO<sub>x</sub> emission data in light of the guideline in Section 2.1 of Appendix A. Specifically, Section 2.1 states: "select the range such that the majority of the readings obtained during typical unit operation are kept, to the extent practicable, between 20.0 and 80.0 percent of the full scale range of the instrument."

If the NO<sub>x</sub> concentration readings do not consistently meet this guideline, then the span and range should be adjusted accordingly. If a span adjustment is necessary, base the maximum potential concentration (MPC) used to determine the new span value on the historical CEMS data (720 hours minimum) collected since the installation of the LNB. If the span and range are changed, provide a monitoring plan update according to Section 2.1.2.5 of Appendix A. For daily calibration and linearity tests, calibration gases must be used that are consistent with the new span value. A diagnostic linearity check is required when a span value is changed, if the change is so significant that the concentrations of the calibration gases currently in use are unsuitable for use with the new span value.

**References:** Appendix A, Sections 2.1, 2.1.2.4, and 2.1.2.5

**History:** First published in July 1995, Update #6; revised in October 1999 Revised Manual; revised in October 2003 Revised Manual; revised in 2013 Manual