Third, the evaluation fails to properly address differences in typical unit operating variability by combining stack test data with PM CEMS data. Stack test data represent unit performance at a discrete point in time under full load conditions, whereas PM CEMS data provide a more comprehensive assessment of unit operating variability under all load and process conditions. These are two different data sets and should be treated independently. This is reflected in EPA's performance specification for PM CEMS, which only requires the readings to be within +/-25% of actual stack testing values two-thirds of the time (with the other one-third of the time not having any accuracy constraint) to be considered as valid readings.[34] EPA fails to explain how using such an error prone data set is justified for establishing an emissions standard. The evaluation fails to recognize that PM CEMS is not constrained to a linear correlation with direct emissions. In cases where non-linear correlations are used, an allowable +/-25% error from the correlated value could have a much larger deviation from the actual measured emissions compared to when a linear correlation is used.[35] Any emissions analysis based upon PM CEMS readings must attempt to compare unit performance in the allowable error band.

Further, any unit using a PM CEMS to demonstrate compliance with the emissions limit also must conduct annual emissions measurements under steady-state conditions, which are utilized in either a Response Correlation Audit ("RCA") or Relative Response Audit ("RRA"). The tested unit must show compliance in the short-term via stack testing measurement values and in the long-term via PM CEMS 30-day average values. For these purposes, PM CEMS data and the PM testing measurements should be treated separately and not merged as a data set. Failing to address these differences is especially problematic because EPA is proposing to require PM CEMS as the sole compliance demonstration method, as discussed further below. EPA should thus revise its current "apples-to-oranges" comparison to establish consistently achievable baseline emissions for each unit by using all available data *and* by accounting for any bias related to operating variability.

Fourth, the evaluation fails to take into consideration different control configurations — specifically, the variation in PM removal efficiencies. Some PM control technology, such as hot-side electrostatic precipitators ("ESPs"), inherently have higher particulate emissions. Similarly, depending on the coal combusted, units that utilize hydrated lime as a control technology for minimizing $SO_2$ and acid gases inherently have higher variability in particulate emissions. Wet flue gas desulfurization ("WFGD") controls, like Colstrip's venturi wet scrubbers, also may result in higher variability in particulate emissions. EPA should factor in these specific control configurations. EPA also should analyze more comprehensive data sets across a longer time frame — rather than using a snapshot of EGUs "demonstrating" the proposed limit during selected quarters prior to concluding that continuous compliance with the proposed limit is achievable.

Fifth, the evaluation fails to recognize that some units have converted to natural gas co-firing. Since these units continue to have the capability to combust coal, all of their emissions data is reported as subject to MATS. However, co-firing natural gas inherently results in significantly

[34] *See* Appendix F, 40 C.F.R. Part 60, Procedure 2.
[35] *See* Appendix B, 40 C.F.R. Part 60, Performance Specification 11.