9.4.1 Appendix D

Appendix D to Part 75 includes missing data procedures for fuel flow rate, fuel sulfur content, GCV and density. The Appendix D missing data algorithms are considerably less complex than the CEMS missing data routines.

The standard Appendix D missing data algorithms for fuel flow rate are the most sophisticated, in that they are fuel-specific and load-based. However, the substitute data value for each hour is simply an arithmetic average of the data in the corresponding load bin, based on a lookback through 720 hours of quality-assured data69.

Appendix D requires missing data substitution for fuel sulfur content, GCV and density whenever a required periodic sample for any of these parameters is not taken, or when the results of a sample analysis are missing or invalid. The missing data approach is quite simple, in that the maximum potential value of the parameter is reported for each hour of the missing data period. Fuel-specific maximum potential values for sulfur content, GCV and density are defined in Table D-6 of Appendix D. In some cases, a conservatively high default value is prescribed (e.g., 1.0% sulfur for diesel fuel). In other cases, a multiplier is applied to the highest value in a lookback through recent fuel sampling results (e.g., 1.5 times the highest sulfur content from the previous 30 daily gas samples).