Harmonization of Parts 60 and 75

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EPA's Turbine Initiative

- Beginning in the late 1990's and continuing to the present time, hundreds of new combustion turbines (CTs) have been constructed in the U.S.
  - The SO_2 and NO_x emissions from these turbines are regulated under NSPS Subpart GG

    (40 CFR §§60.330-60.335)
  - The vast majority of the turbines are also subject to the Acid Rain Program and must monitor and report SO_2, NO_x and CO_2 emissions under 40 CFR Part 75

EPA's Turbine Initiative (cont'd)

- Since these CTs are regulated for the same pollutants (SO_2 and NO_x) under both Parts 60 and 75, harmonization of the rules is desirable to simplify compliance
- In an August, 2001 Federal Register notice, EPA launched its "Turbine Initiative". The Agency requested comments from stakeholders on ways to achieve the desired harmonization of Subpart GG and Part 75
- Based on comments received, EPA proposed substantive revisions to Subpart GG on April 14, 2003

EPA's Turbine Initiative (cont'd)

- Amendments to Subpart GG were finalized on July 8, 2004. Significant changes to the rule include the following:
  - Amended Subpart GG allows data from a certified Part 75 NO_x monitoring system to be used for the initial performance test of the CT and to demonstrate on-going compliance with the Subpart GG NO_x emission limit
  - The requirement to monitor the total sulfur content of the fuel is waived for fuel that is documented to be natural gas, according to the criteria of Part 75, Appendix D
  - A Subpart GG turbine that combusts fuel oil may use the oil sampling and analysis methods of Part 75, Appendix D to demonstrate compliance with the Subpart GG sulfur-in-fuel limit

EPA's Turbine Initiative (cont'd)

- The revisions to Subpart GG simplify the "Part 60 vs. Part 75" compliance issues for new combustion turbines. However, the area of overlap between Parts 60 and 75 extends beyond CTs.
- Many utility and industrial boilers are regulated under both Part 75 and NSPS Subpart D, Da, Db or Dc.
- Commenters on the August, 2001 Federal Register notice pointed out a number of problem areas where consistency between the Part 60 and Part 75 regulations is lacking. In particular, the commenters requested that EPA address following issues:

EPA's Turbine Initiative (cont'd)

- Inconsistent definitions of operating hours
- Inconsistent data validation criteria
- Duplicative QA test requirements (e.g., both cylinder gas audits and linearity checks required)
- Lack of alternative calibration error and relative accuracy specifications in Part 60 for low-emitters
- Inconsistent span and range requirements for gas analyzers
- 7-day calibration drift/ calibration error test--- performed on 7 consecutive calendar days (Part 60), versus 7 consecutive operating days (Part 75)

February 28, 2005 Proposed Rule

- On February 28, 2005 EPA proposed amendments to the SO_2, NO_x, and PM emission limits in NSPS Subparts Da, Db and Dc.
- As part of the rule package, additional changes to Part 60 were proposed, to address the “Part 60 vs. Part 75” concerns of the stakeholders
- The following substantive changes tp Part 60 were proposed on February 28, 2005, to better harmonize with Part 75:

February 28, 2005 Proposed Rule (cont'd)

- Revisions to §60.13(h) of the NSPS General Provisions, to make the method of CEM data validation consistent with Part 75.
  - At least one valid data point would be required per 15-minute quadrant of the hour in which the unit operates, to validate the hour…except…..
  - For hours where required maintenance or QA tests are performed---for these hours, at least two data points in two different quadrants would be required
  - All valid CEM data would be used to calculate the hourly averages
  - Hours with a failed calibration error test would be invalid unless a subsequent calibration is passed in the same hour and sufficient valid data are captured to validate the hour after the passed calibration

February 28, 2005 Proposed Rule (cont'd)

- Confusing sections in Subparts Da and Db that seem to allow any hour to be validated based on only two data points would be removed
- The proposed changes to §60.13(h) are consistent with §75.10(d)(1) and with §60.334(b)(2) of revised Subpart GG

– Revisions to the CEMS certification and quality-assurance provisions in Appendices B and F of Part 60
  - Two new sections would be added to Appendix F
    – Proposed section 4.5 would allow sources subject to both Parts 60 and 75 to use the daily calibration error, calibration adjustment, and data validation procedures in Part 75, Appendix B in lieu of the "excessive CD and out-of-control" procedures in section 4.3 of Appendix F

February 28, 2005 Proposed Rule (cont'd)

- Proposed section 5.4 would allow sources subject to both Parts 60 and 75 to perform Part 75 linearity checks in lieu of the cylinder gas audits described in section 5.1.2 of Appendix F. The frequency of the linearity checks, data validation criteria and grace period provisions in Part 75, Appendix B would apply instead of the Appendix F criteria, for sources choosing this option
- As an alternative to the Appendix F requirements, proposed section 5.4 would also allow sources subject to both Parts 60 and 75 to perform RATAs at the frequency specified in Part 75, Appendix B, and to use the data validation criteria and grace period provisions in section 2.3 of Appendix B
- The proposed revisions to Appendix F are consistent with section 1.1 of Appendix F, which encourages affected sources to "develop and implement a more extensive QA program or continue with such programs where they already exist".

February 28, 2005 Proposed Rule (cont'd)

  - The proposed revisions also strengthen existing sections of Subparts Da, Db and GG, which allow Part 75-certified monitors to be used for Part 60 compliance demonstrations
- Proposed revisions to section 8.3.1 of Performance Specification 2 in Appendix B of Part 60 would allow the 7-day calibration drift test to be done on 7 consecutive operating days rather than 7 consecutive calendar days
  - This proposal is consistent with section 6.3.1 of Part 75, Appendix A and with §60.334(b)(1) of revised Subpart GG

– Revisions to the CEM span and range provisions of Part 60
- For sources subject to both Parts 60 and 75, proposed changes to key sections of Subparts D, Da, Db, and Dc would allow span values determined according to Part 75 to be used instead of the values prescribed by Part 60

February 28, 2005 Proposed Rule (cont'd)

- These changes are needed due to the substantial number of FGD and SCR additions on large coal-fired units in recent years--- a trend that is expected to continue with the promulgation of the CAIR and CAMR regulations. In many instances, the Part 60 SO_2 and (especially) NO_x span values are inappropriately high for units with add-on emission controls.

- On March 15, 2005, CAMD posted an announcement on its website, encouraging interested parties to provide comments on the proposed rule changes
- The comment period for the proposed rule revisions closed on April 29, 2005.