

From: [Koerner, Jeff](#)
To: [Scearce, Lynn](#)
Subject: RE: FPL Sanford Power Plant, Combustor Hot Gas Path Upgrade Project, Final Permit No. 1270009-022-AC
Date: Friday, November 18, 2011 1:48:47 PM
Attachments: [Final 1270009-022-AC - Appendix.pdf](#)
[Final 1270009-022-AC - Final Determination.pdf](#)
[Final 1270009-022-AC - Permit - Signed.pdf](#)

Lynn,

I electronically signed this permit package. It's ready for clerking.

Thanks!

Jeff

-----Original Message-----

From: Holtom, Jonathan
Sent: Friday, November 18, 2011 10:47 AM
To: Koerner, Jeff
Cc: Wong, Robert
Subject: FPL Sanford Combustor Hot Path Upgrade Project, Final Permit No. 1270009-022-AC

Attached is the final minor air construction permit for the Units 4 and 5 GE combustion turbine upgrades at the FPL Sanford Plant during a planned maintenance outage. The permit allows the improvement of the performance of the eight General Electric (GE) Model 7 FA.03 combustion turbine electrical generators (CT) with more advanced parts that are characteristic of the newer CT known as the GE Model 7FA.04. This permit allows changes to increase the efficiency and power output of each CT by installing new GE Model 7FA.04 hot gas path components (including combustion liners and flow sleeves) and new control software to increase firing temperature. As noted in the technical evaluation, there may or may not be a small increase in short-term mass emission rates of NOX due to the increase in the heat input rate. However, Units 4 and 5 are expected to continue to meet the more stringent BACT emission limits, and will therefore comply with 40 CFR 60, Subpart GG, so NSPS applicability is not an issue.

The permit conditions required are:

- A description and authorization of the improvement project – replacement of hot gas path components with upgraded parts;
- A requirement that the permittee report emissions pursuant to Rule 62-212.300(1)(e), F.A.C., to determine in the future whether the project has triggered PSD; and
- A requirement that the permittee conduct tests in accordance with 40 CFR 60, Appendix C (using CEMS) and submit the data with a preliminary inference whether the emission rates after the change are greater than before the change with 95% confidence and whether Subpart KKKK applies. In addition, this permit changes the excess emissions provisions contained in permit No. 1270009-008-AC/PSD-FL-270A to allow for excess emissions due to dry low NOX (DLN) tuning and full speed no load (FSNL) testing. Pursuant to Rules 62-210.200(220) and 62-213.410(2), F.A.C., this change in the PSD-established excess emissions provisions is considered an operating change that does not require a Title V permit revision, since it does not contravene an applicable requirement for the source and does not constitute a modification. The provisions of this condition supersede the excess emissions provisions established in permit No. 1270009-018-AV and will be incorporated into the Title V permit as an applicable requirement at the next opportunity.

Comments on the draft permit were resolved with the applicant through a pre-draft review. There were no additional comments received from the applicant, the public, or from EPA in response to the Public Notice.

I recommend your signature and approval of the cover letter and final permit notification letter.

JH/rw

Attachments

Jon Holtom, P.E., CPM, Administrator

Power Plant Section

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