Mitchell, Bruce

From:

Kosky, Ken [Ken_Kosky@golder.com]

Sent:

Wednesday, February 17, 2010 5:06 PM

To:

Mitchell, Bruce

Cc:

'Gianazza, N. Bert'; 'Norse, David M.'; Mohammad, Sal

Subject:

Application for the continuous usage of natural gas in SJRPP Units 1 and 2: Table 5 issues

regarding PM and PM10 - 0310045-029-AC/PSD-FL-010I.

Attachments: Table 5 Rev. 1 2-17-09.pdf

Bruce: Please find attached a revised Table 5 per our discussions. Please let me know if you have further questions. Thanks for your assistance on this project. Regards, Ken

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TABLE 5 (Rev. 1)
PSD APPLICABILITY - SJRPP UNITS 1 & 2
NATURAL GAS FIRING

Pollutant	Latest 2-Year (2007-2008) Average Emissions ^a (TPY)	Latest 2-Year (2007-2008) Average Heat Input ^a (MMBtu/yr)	Current Actual Emission Rates (lb/MMBtu)	Current Actual Emissions for Heat Input Potential of Natural Gas ^c (TPY)	Future Potential Emissions ^d (TPY)	Increase/Decrease in Emissions (Future – Current Actual) (TPY)	PSD Significan Emission Rates (TPY)
NO _x	19,282	91,727,403	0.42	2,578.0	1680.0	-898.0	40
CO	7,978	91,727,403	0.17	1,066.6	504.0	-562.6	100
SO ₂	10,943	91,727,403	0.24	1,463.1	3.6	-1459.5	40
VOC	.121	91,727,403	0.0026	16.1	33.0	16.9	40
PM ^e	144	91,727,403	0.0035	21.5	11.4	-10.1	25
PM ₁₀ f	76	91,727,403	0.0029	18.0	11.4	-6.6	15
SAM ⁹	NA	NA	NA	NA	0.3	0.3	7

^a Based on AOR data for 2003 - 2008, see Table 4.



^b Based on AOR data for 2003 - 2008, see Table 1.

^c See Table 2 for heat input potential for natural gas, which is the potential amount of current actual heat input to be replaced by natural gas.

^d Future potential emissions based on heat input potential of natural gas, see Table 2.

^e Current actual PM emission rate in lb/MMBtu is based on stack test data from 2003-2008 from FDEP ARMS database.

^f Current PM₁₀ emission rate in lb/MMBtu is based on the ratio of PM to PM₁₀ emission in Table 1.1-6 for dry bottom boilers with an ESP. Ratio is 0.054/0.064 = 84%.

⁹ SAM emissions data are not available (NA) in the AORs for 2003 - 2008.