FENOC
FirstEnergy Nuclear Operating Company

Perry Nuclear Power Station
10 Center Road
Perry, Ohio 44081

Mark B. Bezilla
Vice President

440-280-5382
Fax: 440-280-8029

January 25, 2010
PY-CEI/OEPA-0523L

Mr. Ken Djukic
Ohio Environmental Protection Agency
Northeast District Office
Air Pollution Group
2110 East Aurora Road
Twinsburg, Ohio 44087

SUBJECT:
Perry Nuclear Power Plant Annual Emission Report, Facility ID: 02-43-12-0922

The Perry Nuclear Power Plant hereby submits this annual report for the period January 1 through December 31, 2009, in accordance with and specified by Permit To Operate No. 02-43-12-0922 B001 and B002.

If you have questions or require additional information, please contact Mr. Randall Killing at (440) 280-7370.

Sincerely,

Mark B. Bezilla

Attachment:
(1) Emissions for 2009

cc: NRC Region III
NRC Resident Inspector
NRR Project Manager
NRC Document Control Desk (Docket No. 50-440)
M. J. Jirousek

IE25
NRR

Emissions for 2009

RUN TIME FOR 2009 (HOURS)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
Diesels													
Div I	2.6	1.8	0.0	20.5	1.8	1.6	2.0	1.7	1.8	1.9	25.7	2.0	**63.32**
Div II	1.6	2.2	2.3	9.0	2.3	25.6	1.6	1.9	2.1	1.7	3.4	3.1	**56.73**
Div III	1.6	1.4	3.8	8.4	1.5	1.7	1.7	1.4	1.8	1.5	1.4	24.7	**50.84**
Totals	**5.8**	**5.4**	**6.1**	**37.9**	**5.6**	**28.8**	**5.3**	**5.0**	**5.7**	**5.0**	**30.5**	**29.8**	**170.89**
Aux Boiler 'A'	0.0	171.2	715.4	684.9	399.6	78.3	0.0	0.0	0.0	410.0	261.8	0.0	**2721.2**
Aux Boiler 'B'	0.0	50.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	3.7	0.0	**55.6**

FUEL USUAGE (GALLONS PER MONTH)

Diesels (Gal)	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	YTD
Div I	1274	899	0	3941	676	635	712	710	414	485	9592	997	**20335**
Div II	757	941	510	1142	579	10630	353	404	451	941	1060	592	**18360**
Div III	383	149	887	1036	411	331	178	202	171	331	178	4822	**9079**
Totals	**2414**	**1989**	**1397**	**6119**	**1666**	**11596**	**1243**	**1316**	**1036**	**1757**	**10830**	**6411**	**47774**
Aux Boilers (Gal)	0	25500	85000	72500	57509	12500	0	0	15000	85422.9	54549	0	**407980.9**

AIR EMISSION TRACKING FOR NITROUS OXIDES (NOx) IN TONS

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	YTD	Total NOx
Diesels (TPY)														15.370
Div I	0.279	0.197	0.000	0.864	0.148	0.139	0.156	0.156	0.091	0.106	2.103	0.219	4.458	
Div II	0.166	0.206	0.112	0.250	0.127	2.331	0.077	0.089	0.099	0.206	0.232	0.130	4.025	
Div III	0.084	0.033	0.194	0.227	0.090	0.073	0.039	0.044	0.037	0.073	0.039	1.057	1.991	
Totals	**0.529**	**0.436**	**0.306**	**1.342**	**0.365**	**2.542**	**0.273**	**0.289**	**0.227**	**0.385**	**2.374**	**1.406**	**10.474**	
Aux Boiler (TPY)	0.000	0.306	1.020	0.870	0.690	0.150	0.000	0.000	0.180	1.025	0.655	0.000	**4.896**	

NOx Emission Factor of 0.024 Lb/gal for Aux Boilers IAW AP-42 Table 1.3-1
NOx Emission Factor of 3.2 Lb/MMBtu for Diesels IAW AP-42 Table 3.4-1

AIR EMISSION TRACKING FOR SULFUR DIOXIDE (SO2) IN TONS

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	YTD	Total SO2
Diesels (TPY)														1.548
Div I	0.003	0.002	0.000	0.008	0.001	0.001	0.001	0.001	0.001	0.001	0.020	0.002	0.042	
Div II	0.002	0.002	0.001	0.002	0.001	0.022	0.001	0.001	0.001	0.002	0.002	0.001	0.038	
Div III	0.001	0.000	0.002	0.002	0.001	0.001	0.000	0.000	0.000	0.001	0.000	0.010	0.019	
Totals	**0.005**	**0.004**	**0.003**	**0.013**	**0.003**	**0.024**	**0.003**	**0.003**	**0.002**	**0.004**	**0.022**	**0.013**	**0.099**	
Aux Boiler (TPY)	0.000	0.091	0.302	0.257	0.204	0.044	0.000	0.000	0.053	0.303	0.194	0.000	**1.448**	

SO2 Emission Factor of 0.142 Lb/gal for Aux Boilers IAW AP-42 Table 1.3-1
SO2 Emission Factor of 1.01 Lb/MMBtu for Diesels IAW AP-42 Table 3.4-1

AIR EMISSION TRACKING FOR CARBON MONOXIDES (CO) IN TONS

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	YTD	Total CO
Diesels (TPY)														3.802
Div I	0.074	0.052	0.000	0.230	0.039	0.037	0.041	0.041	0.024	0.028	0.559	0.058	1.184	
Div II	0.044	0.055	0.030	0.067	0.034	0.619	0.021	0.024	0.026	0.055	0.062	0.034	1.069	
Div III	0.022	0.009	0.052	0.060	0.024	0.019	0.010	0.012	0.010	0.019	0.010	0.281	0.529	
Totals	**0.141**	**0.116**	**0.081**	**0.356**	**0.097**	**0.675**	**0.072**	**0.077**	**0.060**	**0.102**	**0.631**	**0.373**	**2.782**	

Emissions for 2009

Aux Boiler (TPY)	0.000	0.064	0.213	0.181	0.144	0.031	0.000	0.000	0.038	0.214	0.136	0.000	**1.020**	

CO Emission Factor of 0.005 Lb/gal for Aux Boilers IAW AP-42 Table 1.3-1
CO Emission Factor of 0.85 Lb/MMBtu for Diesels IAW AP-42 Table 3.4-1

AIR EMISSION TRACKING FOR PARTICULATE MATTER (PM) IN TONS

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	YTD	Total PM
Diesels (TPY)														0.735
Div I	0.009	0.006	0.000	0.027	0.005	0.004	0.005	0.005	0.003	0.003	0.066	0.007	0.139	
Div II	0.005	0.006	0.003	0.008	0.004	0.073	0.002	0.003	0.003	0.006	0.007	0.004	0.126	
Div III	0.003	0.001	0.006	0.007	0.003	0.002	0.001	0.001	0.001	0.002	0.001	0.033	0.062	
Totals	**0.017**	**0.014**	**0.010**	**0.042**	**0.011**	**0.079**	**0.009**	**0.009**	**0.007**	**0.012**	**0.074**	**0.044**	**0.327**	
Aux Boiler (TPY)	0.000	0.026	0.085	0.073	0.058	0.013	0.000	0.000	0.015	0.085	0.055	0.000	**0.408**	

PM Emission Factor of 0.002 Lb/gal for Aux Boilers IAW AP-42 Table 1.3-1
PM Emission Factor of 0.1 Lb/MMBtu for Diesels IAW AP-42 Table 3.4-1

AIR EMISSION TRACKING FOR VOLATILE ORGANIC CARBON (VOC) IN TONS (Measured as Total Organics)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.	YTD	Total VOC
Diesels (TPY)														0.346
Div I	0.008	0.006	0.000	0.024	0.004	0.004	0.004	0.004	0.003	0.003	0.059	0.006	0.125	
Div II	0.005	0.006	0.003	0.007	0.004	0.066	0.002	0.002	0.003	0.006	0.007	0.004	0.113	
Div III	0.002	0.001	0.005	0.006	0.003	0.002	0.001	0.001	0.001	0.002	0.001	0.030	0.056	
Totals	**0.015**	**0.012**	**0.009**	**0.038**	**0.010**	**0.072**	**0.008**	**0.008**	**0.006**	**0.011**	**0.067**	**0.040**	**0.295**	
Aux Boiler (TPY)	0.000	0.003	0.011	0.009	0.007	0.002	0.000	0.000	0.002	0.011	0.007	0.000	**0.051**	

VOC Emissions are conservatively estimated based on TOC EF's of 0.000252 Lb/gal for Aux Boilers IAW AP-42 Table 1.3-3
VOC Emissions are conservatively estimated based on TOC EF's of 0.09 Lb/MMBtu for Diesels IAW AP-42 Table 3.4-1

Fuel Data
From Sample Analysis

Ash Weight	**0.015**	**%**
BTU/#**	**19300**	**BTU/#**
Sulfur % (Boiler)*	**0.05**	**%**
Part/MBTU	**0.0005**	**Part/MBTU**
#/Gallon**	**7.1**	**#/GAL**
Sulfur % (Diesels)*	**0.03**	**%**

* Based on sample analysis results
** Based on AP-42, Table 3.4-1, Note a

(There are 4 PBR qualified emissions units at the facility with minimal emissions annually, and until or unless SO2 emissions from B001 and B002 approach 20% of the major source (20 tpy) level, actual emissions won't be calculated.)