FENOC

FirstEnergy Nuclear Operating Company

Perry Nuclear Power Plant
10 Center Road
Perry, Ohio 44081

Mark B. Bezilla
Vice President

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January 24, 2011
L-11-015

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, 2010, 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 2010

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 2010

RUN TIME FOR 2010 (HOURS)														
	Jan.	**Feb.**	**Mar.**	**Apr.**	**May**	**Jun.**	**Jul.**	**Aug.**	**Sep.**	**Oct.**	**Nov.**	**Dec.**	**YTD**	
Diesels														
Div I	2.5	6.9	2.1	1.8	2.0	2.0	1.7	1.6	1.7	3.5	5.4	0.0	**31.022**	
Div II	1.9	1.7	2.1	1.7	4.2	1.6	1.9	1.8	1.8	2.0	6.2	2.8	**29.611**	
Div III	1.7	1.5	1.4	1.8	1.7	2.2	1.5	1.4	7.9	1.8	2.2	1.9	**26.857**	
Totals	**6.1**	**10.1**	**5.5**	**5.3**	**7.9**	**5.7**	**5.0**	**4.8**	**11.3**	**7.3**	**13.8**	**4.7**	**87.49**	
Aux Boiler 'A'	0.0	0.0	0.0	0.0	0.0	0.0	2.9	0.0	0.0	0.0	0.0	0.0	**2.9**	
Aux Boiler 'B'	1.9	0.0	0.0	0.0	154.0	0.0	0.0	0.9	4.4	0.0	0.0	0.0	**161.3**	
FUEL USUAGE (GALLONS PER MONTH)														
Diesels (Gal)	**Jan.**	**Feb.**	**Mar.**	**Apr.**	**May**	**Jun.**	**Jul.**	**Aug.**	**Sep.**	**Oct.**	**Nov.**	**Dec.**	**YTD**	
Div I	569	3001	621	334	528	559	484	674	640	2085	1317	0	**10812**	
Div II	579	600	618	655	613	731	686	700	701	342	2814	1160	**10199**	
Div III	178	202	517	149	360	202	209	200	1184.7	331	380	499	**4411.7**	
Totals	**1326**	**3803**	**1756**	**1138**	**1501**	**1492**	**1379**	**1574**	**2525.7**	**2758**	**4511**	**1659**	**25422.7**	
Aux Boilers (Gal)	12500	0	0	0	47661	0	0	0	5000	0	0	0	**65161**	
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)														6.356
Div I	0.125	0.658	0.136	0.073	0.116	0.123	0.106	0.148	0.140	0.457	0.289	0.000	2.371	
Div II	0.127	0.132	0.135	0.144	0.134	0.160	0.150	0.153	0.154	0.075	0.617	0.254	2.236	
Div III	0.039	0.044	0.113	0.033	0.079	0.044	0.046	0.044	0.260	0.073	0.083	0.109	0.967	
Totals	**0.291**	**0.834**	**0.385**	**0.250**	**0.329**	**0.327**	**0.302**	**0.345**	**0.554**	**0.605**	**0.989**	**0.364**	**5.574**	
Aux Boiler (TPY)	0.150	0.000	0.000	0.000	0.572	0.000	0.000	0.000	0.060	0.000	0.000	0.000	**0.782**	
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)														0.284
Div I	0.001	0.006	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.004	0.003	0.000	0.022	
Div II	0.001	0.001	0.001	0.001	0.001	0.002	0.001	0.001	0.001	0.001	0.006	0.002	0.021	
Div III	0.000	0.000	0.001	0.000	0.001	0.000	0.000	0.000	0.002	0.001	0.001	0.001	0.009	
Totals	**0.003**	**0.008**	**0.004**	**0.002**	**0.003**	**0.003**	**0.003**	**0.003**	**0.005**	**0.006**	**0.009**	**0.003**	**0.053**	
Aux Boiler (TPY)	0.044	0.000	0.000	0.000	0.169	0.000	0.000	0.000	0.018	0.000	0.000	0.000	**0.231**	
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)														1.643
Div I	0.033	0.175	0.036	0.019	0.031	0.033	0.028	0.039	0.037	0.121	0.077	0.000	0.630	
Div II	0.034	0.035	0.036	0.038	0.036	0.043	0.040	0.041	0.041	0.020	0.164	0.068	0.594	
Div III	0.010	0.012	0.030	0.009	0.021	0.012	0.012	0.012	0.069	0.019	0.022	0.029	0.257	
Totals	**0.077**	**0.221**	**0.102**	**0.066**	**0.087**	**0.087**	**0.080**	**0.092**	**0.147**	**0.161**	**0.263**	**0.097**	**1.481**	

Emissions for 2010

Aux Boiler (TPY)	0.031	0.000	0.000	0.000	0.119	0.000	0.000	0.000	0.013	0.000	0.000	0.000	0.163	
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)														0.239
Div I	0.004	0.021	0.004	0.002	0.004	0.004	0.003	0.005	0.004	0.014	0.009	0.000	0.074	
Div II	0.004	0.004	0.004	0.004	0.004	0.005	0.005	0.005	0.005	0.002	0.019	0.008	0.070	
Div III	0.001	0.001	0.004	0.001	0.002	0.001	0.001	0.001	0.008	0.002	0.003	0.003	0.030	
Totals	0.009	0.026	0.012	0.008	0.010	0.010	0.009	0.011	0.017	0.019	0.031	0.011	0.174	
Aux Boiler (TPY)	0.013	0.000	0.000	0.000	0.048	0.000	0.000	0.000	0.005	0.000	0.000	0.000	0.065	
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)														0.165
Div I	0.004	0.019	0.004	0.002	0.003	0.003	0.003	0.004	0.004	0.013	0.008	0.000	0.067	
Div II	0.004	0.004	0.004	0.004	0.004	0.005	0.004	0.004	0.004	0.002	0.017	0.007	0.063	
Div III	0.001	0.001	0.003	0.001	0.002	0.001	0.001	0.001	0.007	0.002	0.002	0.003	0.027	
Totals	0.008	0.023	0.011	0.007	0.009	0.009	0.009	0.010	0.016	0.017	0.028	0.010	0.157	
Aux Boiler (TPY)	0.002	0.000	0.000	0.000	0.006	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.008	
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.)														