

Summary of FFD Program Performance Reports for 2006

Since the fitness-for-duty (FFD) rule (10 CFR Part 26) was published, licensees have submitted program performance reports to the NRC as required by 10 CFR 26.71(d). In the past, the NRC published a summary and analysis of calendar year data submitted by the licensee in an annual volume of NUREG/CR-5758, "Fitness for Duty in the Nuclear Power Industry - Annual Summary of Program Performance Reports." The tables below provide the information for calendar year 2006 and summarize data from 1990 to 2005.

Table 1
2006 Test Results for Each Test Category

TEST CATEGORY	NUMBER OF TESTS	POSITIVE TESTS	PERCENT POSITIVE
Pre-Access	79,980	747	0.93
Random	52,557	132	0.25
For-Cause	1,621	109	6.72
Follow-Up	4,766	37	0.78
Other	1,305	66	5.06
TOTAL*	140,229	1,091	0.78
TOTAL without OTHER Category	138,924	1,025	0.64

*These totals were calculated using Other test category. This category includes results from the periodic testing done by some reporting units during annual physicals or similar periodic activities. Although some reporting units specified the nature of the Other tests (e.g., return to work), most reporting units did not give this information.

Table 2
Test Results for Each Test Category and Work Category

(January through December 2006)

TEST CATEGORY	LICENSEE EMPLOYEES	LONG-TERM CONTRACTORS	SHORT-TERM CONTRACTORS	TOTAL
Pre-Access				
Number Tested	9,336	528	70,116	79,980
Number Positive	24	7	716	747
Percent Positive	0.26%	1.33%	1.02%	0.93%
Random				
Number Tested	34,818	1,437	16,302	52,557
Number Positive	55	5	72	132
Percent Positive	0.16%	0.35%	0.44%	0.25%
For-Cause				
Number Tested	701	45	875	1,621
Number Positive	25	2	82	109
Percent Positive	3.57%	4.44%	9.37%	6.72%
Follow-Up				
Number Tested	2,364	57	2,345	4,766
Number Positive	14	0	23	37
Percent Positive	0.59%	0.00%	0.98%	0.78%
Other				
Number Tested	714	58	533	1,305
Number Positive	9	1	56	66
Percent Positive	1.26%	1.72%	10.51%	5.06%
TOTAL				
Number Tested	47,933	2,125	90,171	140,229
Number Positive	127	15	949	1,091
Percent Positive	0.26%	0.71%	1.05%	0.78%
TOTAL without OTHER Category				
Number Tested	47,219	2,067	89,638	138,924
Number Positive	118	14	893	1,025
Percent Positive	0.25%	0.68%	1.00%	0.74%

Table 3
2006 Test Results by Test Category

(January through December 2006)

TEST CATEGORY	FIRST SIX MONTHS	SECOND SIX MONTHS	YEAR
Pre-Access			
Number Tested	39,977	40,003	79,980
Number Positive	344	403	747
Percent Positive	0.86%	1.01%	0.93%
Random			
Number Tested	26,811	25,746	52,557
Number Positive	60	72	132
Percent Positive	0.22%	0.28%	0.25%
For-Cause			
<i>Observed Behavior</i>			
Number Tested	372	344	716
Number Positive	45	59	104
Percent Positive	12.10%	17.15%	14.53%
<i>Post-Accident</i>			
Number Tested	471	434	905
Number Positive	3	2	5
Percent Positive	0.64%	0.46%	0.55%
Follow-Up			
Number Tested	2,391	2,375	4,766
Number Positive	22	15	37
Percent Positive	0.92%	0.63%	0.78%
Other			
Number Tested	604	701	1,305
Number Positive	38	28	66
Percent Positive	6.29%	3.99%	5.06%
TOTAL			
Number Tested	70,626	69,603	140,229
Number Positive	512	579	1,091
Percent Positive	0.72%	0.83%	0.78%
TOTAL without OTHER Category			
Number Tested	70,022	68,902	138,924
Number Positive	474	551	1,025
Percent Positive	0.68%	0.80%	0.74%

Table 4
2006 Test Results for Licensee Employees and Contractor Personnel

(January through December 2006)

TEST CATEGORY	LICENSEE EMPLOYEES			LONG-TERM CONTRACTORS			SHORT-TERM CONTRACTORS		
	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year
Pre-Access									
Number Tested	5,338	3,998	9,336	233	295	528	34,406	35,710	70,116
Number Positive	10	14	24	4	3	7	330	386	716
Percent Positive	0.19%	0.35%	0.26%	1.72%	1.02%	1.33%	0.96%	1.08%	1.02%
Random									
Number Tested	17,780	17,038	34,818	701	736	1,437	8,330	7,972	16,302
Number Positive	26	29	55	3	2	5	31	41	72
Percent Positive	0.15%	0.17%	0.16%	0.43%	0.27%	0.35%	0.37%	0.51%	0.44%
For-Cause									
<i>Observed Behavior</i>									
Number Tested	145	177	322	10	11	21	217	156	373
Number Positive	6	18	24	0	2	2	39	39	78
Percent Positive	4.14%	10.17%	7.45%	0.00%	18.18%	9.52%	17.97%	25.00%	20.91%
<i>Post-Accident</i>									
Number Tested	215	164	379	10	14	24	246	256	502
Number Positive	0	1	1	0	0	0	3	1	4
Percent Positive	0.00%	0.61%	0.26%	0.00%	0.00%	0.00%	1.22%	0.39%	0.80%
Follow-Up									
Number Tested	1,156	1,208	2,364	41	16	57	1,194	1,151	2,345
Number Positive	8	6	14	0	0	0	14	9	23
Percent Positive	0.69%	0.50%	0.59%	0.00%	0.00%	0.00%	1.17%	0.78%	0.98%

Table 4
2006 Test Results for Licensee Employees and Contractor Personnel Continued

(January through December 2006)

TEST CATEGORY	LICENSEE EMPLOYEES			LONG-TERM CONTRACTORS			SHORT-TERM CONTRACTORS		
	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year	First Six Months	Second Six Months	Year
Other									
Number Tested	341	373	714	32	26	58	231	302	533
Number Positive	6	3	9	0	1	1	32	24	56
Percent Positive	1.76%	0.80%	1.26%	0.00%	3.85%	1.72%	13.85%	7.95%	10.51%
TOTAL									
Number Tested	24,975	22,958	47,933	1,027	1,098	2,125	44,624	45,547	90,171
Number Positive	56	71	127	7	8	15	449	500	949
Percent Positive	0.22%	0.31%	0.26%	0.68%	0.73%	0.71%	1.01%	1.10%	1.05%
TOTAL w/o OTHER Category									
Number Tested	24,634	22,585	47,219	995	1,072	2,067	44,393	45,245	89,638
Number Positive	50	68	118	7	7	14	417	476	893
Percent Positive	0.20%	0.30%	0.25%	0.70%	0.65%	0.68%	0.94%	1.05%	1.00%

Table 5
2006 Number of Confirmed Positives by Substance

(January through December 2006)

TYPE OF SUBSTANCE	FIRST SIX MONTHS		SECOND SIX MONTHS		TOTAL	
	Number	Percent	Number	Percent	Number	Percent
Marijuana	232	48.13%	214	39.27%	446	43.43%
Cocaine	119	24.69%	188	34.50%	307	29.89%
Opiates	5	1.04%	9	1.65%	14	1.36%
Amphetamines	24	4.98%	29	5.32%	53	5.16%
Phencyclidine	0	0.00%	1	0.18%	1	0.10%
Alcohol	102	21.16%	104	19.08%	206	20.06%
TOTAL	482		545		1027	

Table 6
2006 Confirmed Positive Test Results by Substance and Work Category

(January through December 2006)

TYPE OF SUBSTANCE	LICENSEE EMPLOYEES		CONTRACTORS (Long-Term/Short-Term)	
	Number	Percent	Number	Percent
Marijuana	32	26.23%	414	45.75%
Cocaine	27	22.13%	280	30.94%
Opiates	2	1.64%	12	1.33%
Amphetamines	7	5.74%	46	5.08%
Phencyclidine	0	0.00%	1	0.11%
Alcohol	54	44.26%	152	16.80%
TOTAL	122		905	

Table 7
Significant Fitness-for-Duty Events (1990 - 2006)

Type of Event	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Reactor Operators	19	16	18	8	7	8	8	9	5	5	103
Licensee Supervisors	26	18	22	25	11	16	19	16	10	2	165
Contract Supervisors	12	24	28	16	11	10	8	10	10	12	141
FFD Program Personnel	1	5	0	0	1	0	2	0	3	2	14
Substances Found	6	8	6	2	0	5	5	4	0	2	38
Adulterated Specimen											0
Total	64	71	74	51	30	39	42	39	28	23	461

Table 7
Significant Fitness-for-Duty Events (1990 - 2006) Continued

Type of Event	2000	2001	2002	2003	2004	2005	2006	Total
Reactor Operators	5	4	3	6	9	5	3	35
Licensee Supervisors	11	9	3	3	7	13	6	52
Contract Supervisors	8	12	12	8	4	14	6	64
FFD Program Personnel	0	0	3	0	0	1	0	4
Substances Found	3	0	1	2	9	9	2	26
Adulterated Specimen				9	23	29	60	121
Total	27	25	22	28	52	71	77	302

**Table 8
Trends in Testing by Test Type (1990 - 2006)**

Type of Test	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	Total
Pre-Access											
Number Tested	122,491	104,508	104,842	91,471	80,217	79,305	81,041	84,320	69,146	69,139	886,480
Number Positive	1,548	983	1,110	952	977	1,122	1,132	1,096	822	934	10,676
Percent Positive	1.26%	0.94%	1.06%	1.04%	1.22%	1.41%	1.40%	1.30%	1.19%	1.35%	1.20%
Random											
Number Tested	148,743	153,818	156,730	146,605	78,391	66,791	62,307	60,829	56,969	54,457	985,640
Number Positive	550	510	461	341	223	180	202	172	157	140	2,936
Percent Positive	0.37%	0.33%	0.29%	0.23%	0.28%	0.27%	0.32%	0.28%	0.28%	0.26%	0.30%
For-Cause											
Number Tested	732	727	696	751	758	763	848	722	720	736	7,453
Number Positive	214	167	178	163	122	139	138	149	100	120	1,490
Percent Positive	29.23%	22.97%	25.27%	21.70%	16.09%	18.22%	16.27%	20.64%	13.89%	16.30%	20.00%
Followup											
Number Tested	2,633	3,544	4,283	4,139	3,875	3,262	3,262	3,296	2,863	3,008	34,165
Number Positive	65	62	69	56	50	35	40	31	43	30	481
Percent Positive	2.47%	1.75%	1.61%	1.35%	1.29%	1.07%	1.23%	0.94%	1.50%	1.00%	1.41%
TOTAL*											
Number Tested	274,599	262,597	266,551	242,966	163,241	150,121	147,458	149,167	129,698	127,340	1,913,738
Number Positive	2,377	1,722	1,818	1,512	1,372	1,476	1,512	1,448	1,122	1,224	15,583
Percent Positive	0.87%	0.66%	0.68%	0.62%	0.84%	0.98%	1.03%	0.97%	0.87%	0.96%	0.81%

* Does not include test results from the "Other" test category.

Table 8
Trends in Testing by Test Type (2000 - 2006) Continued

Type of Test	2000	2001	2002	2003	2004	2005	2006	Total
Pre-Access								
Number Tested	68,333	63,744	73,155	72,988	76,119	79,005	79,980	513,324
Number Positive	965	720	805	757	737	648	747	5,679
Percent Positive	1.41%	1.13%	1.10%	1.04%	0.97%	0.82%	0.93%	1.09%
Random								
Number Tested	51,955	50,080	49,741	49,402	51,239	50,286	52,557	355,260
Number Positive	204	148	114	132	127	147	132	804
Percent Positive	0.39%	0.30%	0.23%	0.27%	0.25%	0.29%	0.25%	0.23%
For-Cause								
Number Tested	883	730	1,072	1,052	1,159	1,161	1,621	7,674
Number Positive	138	101	112	126	139	106	109	830
Percent Positive	15.67%	13.84%	10.45%	11.98%	11.99%	9.13%	6.72%	10.82%
Followup								
Number Tested	2,861	2,649	2,892	3,142	3,752	4,057	4,766	24,080
Number Positive	49	35	21	42	31	31	37	209
Percent Positive	1.71%	1.32%	0.73%	1.34%	0.83%	0.76%	0.78%	1.02%
TOTAL*								
Number Tested	124,032	118,730	128,321	127,785	132,269	134,509	138,924	903,625
Number Positive	1,356	1,036	1,091	1,094	1,034	932	1,025	7,563
Percent Positive	1.09%	1.004	0.85%	0.86%	0.78%	0.69%	0.74%	0.84%

* Does not include test results from the "Other" test category.

Table 9
Trends In Substances Identified (1990 - 2006)

Substance	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Marijuana	1,153	746	953	781	739	819	868	842	606	672
Cocaine	706	549	470	369	344	374	352	336	269	273
Alcohol	452	401	427	357	251	265	281	262	212	230
Amphetamines	69	31	31	51	54	61	53	49	46	40
Opiates	45	24	8	13	11	17	14	39	19	16
Phencyclidine	8	11	4	5	1	7	2	0	1	2
Total*	2,433	1,762	1,893	1,576	1,400	1,543	1,570	1,528	1,153	1,233

*These totals do not equal the total number of positives for each year because some positives were for multiple substances and for other substances than those listed above.

Table 9
Trends In Substances Identified (1990 - 2006)

Substance	2000	2001	2002	2003	2004	2005	2006
Marijuana	620	523	560	518	514	432	446
Cocaine	251	225	228	228	247	246	307
Alcohol	211	212	214	199	222	196	206
Amphetamines	50	50	47	64	60	59	53
Opiates	32	17	21	17	14	16	14
Phencyclidine	1	2	3	0	1	2	1
Total*	1,168	1,029	1,069	1,026	1,056	951	1,027

*These totals do not equal the total number of positives for each year because some positives were for multiple substances and for other substances than those listed above.

Table 10
Trends In Positive Test Rates For Workers With Unescorted Access (1990 - 2006)*

Year	Positive Test Rate
1990	0.54%
1991	0.47%
1992	0.44%
1993	0.37%
1994	0.48%
1995	0.50%
1996	0.57%
1997	0.54%
1998	0.50%
1999	0.50%
2000	0.70%
2001	0.53%
2002	0.46%
2003	0.56%
2004	0.51%
2005	0.49%
2006	0.44%
<p>*Includes random, for-cause, testing results. The reduction in random test rate from 100% to 50% has been in effect since 1994.</p>	