Summary of FFD Program Performance Reports for 2005

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 2005 and summarize data from 1990 to 2004.

Table 1 - 2005 Test Results for Each Test category

TEST CATEGORY	NUMBER OF TESTS	POSITIVE TESTS	PERCENT POSITIVE
Pre-Access Random For-Cause Follow-Up Other	79,005 50,286 1,161 4,057 1,193	648 147 106 31 47	0.82% 0.29% 9.13% 0.76% 3.94%
TOTAL*	135,702	979	0.72%
TOTAL without OTHER Category	134,509	932	0.69%

^{*}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

TEST CATEGORY	LICENSEE EMPLOYEES	LONG-TERM CONTRACTORS	SHORT-TERM CONTRACTORS	TOTAL
Pre-Access Number Tested Number Positive Percent Positive	8,210	767	70,028	79,005
	28	12	608	648
	0.34%	1.56%	0.87%	0.82%
Random Number Tested Number Positive Percent Positive	33,587 60 0.18%	1,533 5 0.33%	15,166 82 0.54%	50,286 147 0.29%
For-Cause Number Tested Number Positive Percent Positive	509 19 3.73%	59 2 3.39%	593 85 14.33%	1,161 106 9.13%
Follow-Up Number Tested Number Positive Percent Positive	2,099	79	1,879	4,057
	15	0	16	31
	0.71%	0.00%	0.85%	0.76%
Other Number Tested Number Positive Percent Positive	548	87	558	1,193
	2	0	45	47
	0.36%	0.00%	8.06%	3.94%
TOTAL Number Tested Number Positive Percent Positive	44,953	2,525	88,224	135,702
	124	19	836	979
	0.28%	0.75%	0.95%	0.72%
TOTAL without OTHER Category Number Tested Number Positive Percent Positive	44,405	2,438	87,666	134,509
	122	19	791	932
	0.27%	0.78%	0.90%	0.69%

Table 3 - 2005 Test Results Test Category

TEST CATEGORY	FIRST SIX MONTHS	SECOND SIX MONTHS	YEAR
Pre-Access Number Tested Number Positive Percent Positive	45,885	33,120	79,005
	373	275	648
	0.81%	0.83%	0.82%
Random Number Tested Number Positive Percent Positive	26,866 70 0.26%	23,420 77 0.33%	50,286 147 0.29%
For-Cause Observed Behavior Number Tested Number Positive Percent Positive	352	319	671
	68	37	105
	19.32%	11.60%	15.65%
Post-Accident Number Tested Number Positive Percent Positive	233	257	490
	0	1	1
	0.00%	0.39%	0.20%
Follow-Up Number Tested Number Positive Percent Positive	2,114	1,943	4,057
	15	16	31
	0.71%	0.82%	0.76%
Other Number Tested Number Positive Percent Positive	545 20 3.67%	648 27 4.17%	1,193 47 3.94%
TOTAL Number Tested Number Positive Percent Positive	49,129	36,287	85,416
	476	356	832
	0.97%	0.98%	0.97%
TOTAL without OTHER Category Number Tested Number Positive Percent Positive	75,450	59,059	134,509
	526	406	932
	0.70%	0.69%	0.69%

Table 4 - 2005 Test Results for Licensee Employees and Contractor Personnel

	LICENSEE	EMPLOYEE	(00		RM CONTRAC	•	SHORT-TEI	RM CONTRACT	ORS
TEST CATEGORY	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 Number Positive Percent Positive	4,827 19 0.39%	3,383 9 0.27%	8,210 28 0.34%	404 5 1.24%	363 7 1.93%	767 12 1.56%	40,654 349 0.86%	29,374 259 0.88%	70,028 608 0.87%
Random Number Tested Number Positive Percent Positive	17,897 30 0.17%	15,690 30 0.19%	33,587 60 0.18%	753 2 0.27%	780 3 0.38%	1,533 5 0.33%	8,216 38 0.46%	6,950 44 0.63%	15,166 82 0.54%
For-Cause Observed Behavior Number Tested Number Positive Percent Positive	155 11 7.10%	154 8 5.19%	309 19 6.15%	8 0 0.00%	8 2 25.00%	16 2 12.50%	189 57 30.16%	157 27 17.20%	346 84 24.28%
Post-Accident Number Tested Number Positive Percent Positive	106 0 0.00%	94 0 0.00%	200 0 0.00%	20 0 0.00%	23 0 0.00%	43 0 0.00%	107 0 0.00%	140 1 0.71%	247 1 0.40%
Follow-Up Number Tested Number Positive Percent Positive	1,054 6 0.57%	1,045 9 0.86%	2,099 15 0.71%	39 0 0.00%	40 0 0.00%	79 0 0.00%	1,021 9 0.88%	858 7 0.82%	1,879 16 0.85%
Other Number Tested Number Positive Percent Positive	281 1 0.36%	267 1 0.37%	548 2 0.36%	36 0 0.00%	51 0 0.00%	87 0 0.00%	228 19 8.33%	330 26 7.88%	558 45 8.06%
TOTAL Number Tested Number Positive Percent Positive	24,320 67 0.28%	20,633 57 0.28%	44,953 124 0.28%	1,260 7 0.56%	1,265 12 0.95%	2,525 19 0.75%	50,415 472 0.94%	37,809 364 0.96%	88,224 836 0.95%
TOTAL w/o OTHER Category Number Tested Number Positive Percent Positive	24,039 66 0.27%	20,366 56 0.27%	44,405 122 0.27%	1,224 7 0.57%	1,214 12 0.99%	2,438 19 0.78%	50,187 453 0.90%	37,479 338 0.90%	87,666 791 0.90%

Table 5 - 2005 Number of Confirmed Positives by Substance

		RST SIX ONTHS		OND SIX ONTHS	TOTAL		
TYPE OF SUBSTANCE	Number	Percent	Number	Percent	Number	Percent	
Marijuana	240	44.86%	192	46.15%	432	45.43%	
Cocaine	140	26.17%	106	25.48%	246	25.87%	
Opiates	7	1.31%	9	2.16%	16	1.68%	
Amphetamines	40	7.48%	19	40.57%	59	6.20%	
Phencyclidine	1	0.19%	1	0.24%	2	0.21%	
Alcohol	107	20.00%	89	21.39%	196	20.61%	
TOTAL	535		416		951		

Table 6 - 2005 Confirmed Positive Test Results by Substance and Work Category

	LICENSEE E	MPLOYEES	CONTRACTORS (Long-Term/Short-Term)			
TYPE OF SUBSTANCE	Number	Percent	Number	Percent		
Marijuana	35	29.66%	397	47.66%		
Cocaine	22	18.64%	224	26.89%		
Opiates	3	2.54%	13	1.56%		
Amphetamines	6	5.08%	53	6.36%		
Phencyclidine	0	0.00%	2	0.24%		
Alcohol	52	44.07%	144	17.29%		
TOTAL	118		833			

Table 7 - Significant Fitness-for-Duty Events (1990-1999)

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 - Cont'd Significant Fitness-for-Duty Events (2000 - 2005)

Type of Event	2000	2001	2002	2003	2004	2005	Total
Reactor Operators	5	4	3	6	9	5	32
Licensee Supervisors	11	9	3	3	7	13	46
Contract Supervisors	8	12	12	8	4	14	58
FFD Program Personnel	0	0	3	0	0	1	4
Substances Found	3	0	1	2	9	9	24
Adulterated Specimen				9	23	29	61
Total	27	25	22	28	52	71	225

Table 8 - Trends in testing by test type (1990 - 1999)

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 - Cont'd Trends in testing by test type (2000 - 2005)

Type of Test	2000	2001	2002	2003	2004	2005	Total
Pre-Access							
Number Tested	68,333	63,744	73,155	72,988	76,119	79,005	433,344
Number Positive	965	720	805	757	737	648	4,632
Percent Positive	1.41%	1.13%	1.10%	1.04%	0.97%	0.82%	1.07%
Random							
Number Tested	51,955	50,080	49,741	49,402	51,239	50,286	302,703
Number Positive	204	148	114	132	127	147	871
Percent Positive	0.39%	0.30%	0.23%	0.27%	0.25%	0.29%	0.29%
For-Cause							
Number Tested	883	730	1,072	1,052	1,159	1,161	6,053
Number Positive	138	101	112	126	139	106	721
Percent Positive	15.67%	13.84%	10.45%	11.98%	11.99%	9.13%	11.91%
Followup							
Number Tested	2,861	2,649	2,892	3,142	3,752	4,057	19,314
Number Positive	49	35	21	42	31	31	209
Percent Positive	1.71%	1.32%	0.73%	1.34%	0.83%	0.76%	1.08%
TOTAL*							
Number Tested	124,032	118,730	128,321	127,785	132,269	134,509	764,701
Number Positive	1,356	1,036	1,091	1,094	1,034	932	6,538
Percent Positive	1.09%	0.87%	0.85%	0.86%	0.78%	0.69%	0.85%

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

Table 9 - Trends In Substances Identified (1990 - 1999)

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 - Cont'd Trends In Substances Identified (2000 - 2005)

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

^{*}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 - 2005)*

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%

^{*}Includes random, for-cause, testing results. The reduction in random test rate from 100% to 50% has been in effect since 1994.