



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402-2801

February 29, 2008

10 CFR 26.71(d)

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

Gentlemen:

In the Matter of )  
Tennessee Valley Authority )

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50-296 50-390  
50-391

**TENNESSEE VALLEY AUTHORITY (TVA) - FITNESS FOR DUTY (FFD) PROGRAM  
PERFORMANCE DATA: JULY - DECEMBER 2007**

In accordance with 10 CFR 26.71(d), enclosed is TVA's FFD Program Performance Data for the six-month period of July 1 - December 31, 2007. Enclosure 1 summarizes the testing results under TVA's FFD Program that occurred during this reporting period. Enclosures 2 - 4 contain the performance data and summary of TVA management actions for TVA's nuclear plant sites (Browns Ferry, Sequoyah, and Watts Bar, respectively). Enclosure 5 consolidates the data for TVA's nuclear corporate organization (primarily Chattanooga and Knoxville Corporate offices). There were no FFD events reported to the NRC pursuant to 10 CFR 26.73 during the six-month period.

The random testing rate of drug and alcohol use is in accordance with the requirements prescribed in 10 CFR 26.24(a)(2).

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If you have any questions concerning this information, please contact  
Fred Mashburn at (423) 751-8817.

Sincerely,

A handwritten signature in cursive script that reads "Beth A. Wetzel".

Beth A. Wetzel  
Manager, Corporate Nuclear Licensing  
and Industry Affairs

cc : See page 3

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FCM:RPS

Enclosures

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2600 Igou Ferry Road  
Soddy Daisy, Tennessee 37379-3624

NRC Senior Resident Inspector  
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1260 Nuclear Plant Road  
Spring City, Tennessee 37381-4696

## ENCLOSURE 1

### TENNESSEE VALLEY AUTHORITY (TVA) FITNESS FOR DUTY (FFD) PERFORMANCE DATA JULY 1 – DECEMBER 31, 2007

The following summarizes testing results under TVA's FFD Program that occurred during this reporting period:

#### I. TVA's "Re-screening of Specimens"

Reference: TVA's policy to re-screen specimens with a creatinine level less than 20 mg/dl, which was addressed in the February 28, 1997, FFD Performance Report.

##### Summary

During this reporting period, TVA Nuclear Power Group (NPG) screened 169 specimens at the lower cutoff for marijuana. There was one positive test identified from this group.

#### II. Trends

The confirmed positive test rate for all categories (pre-employment, pre-access, for-cause, post-accident, random, follow-up, and other) for this reporting period was 0.37 percent (15 positive tests) which is 0.07 percent lower than the last reporting period. The rate of random confirmed positives was 0.24 percent (4 positive tests) which is 0.03 percent higher than the last reporting period.

## ENCLOSURE 2

### SUMMARY OF MANAGEMENT ACTIONS FOR BROWNS FERRY NUCLEAR PLANT

In the **pre-access** test category, one contract employee (CE) tested positive. The CE was denied access, removed from site, returned to the contract company, and restricted from TVA (NPG) work for three years. The CE requested that split specimen testing be performed. The split specimen test reconfirmed the positive test results.

In the **for-cause (observed behavior/reasonable suspicion)** test category, one CE tested positive and was also detected attempting to subvert the Fitness for Duty testing process by substitution. The CE initially presented an out-of-temperature follow-up specimen that tested negative and a subsequent for-cause observed specimen that tested positive. The CE was denied access, removed from site, returned to the contract company, and permanently restricted from TVA NPG work. The CE requested that split specimen testing be performed. The split specimen test reconfirmed the positive test results. A review of the CE's work did not identify any deficiencies.

In the **random** test category, one licensee employee (LE) and two CEs tested positive. The LE's and CEs' unescorted access was revoked. The LE was removed from site, suspended for a minimum of 14 days, referred to the Employee Assistance Program, returned to work during this reporting period, and was placed in the follow-up alcohol and drug testing program. The CEs were removed from site, returned to the contract company, and restricted from TVA NPG work for three years. The LE requested that split specimen testing be performed. The split specimen test reconfirmed the positive test results. One CE requested that a confirmatory blood alcohol test be performed. The blood alcohol test reconfirmed the positive test results. Reviews of the LE's and CEs' work did not identify any deficiencies.

# Fitness for Duty Program Performance Data Personnel Subject to 10 CFR 26

TENNESSEE VALLEY AUTHORITY		DECEMBER 31, 2007	
Company		6 Months Ending	
BROWNS FERRY NUCLEAR PLANT			
Location			
REBECCA A. CHRISTNER		(423) 751-8822	
Contact Name		Phone (include area code)	
Cut-offs: Screen/Confirmation		<input checked="" type="checkbox"/> Appendix A to 10 CFR 26 * 50 ng/ml initial cut-off	
Marijuana*	/	Amphetamines	/
Cocaine	/	Phencyclidine	/
Opiates	/	Alcohol(%BAC)	/

\*Specimens with a creatinine level less than 20 mg/dl are evaluated using a 20 ng/ml cutoff on the initial marijuana screen and the limit of quantitation as a cutoff on the GC/MS for marijuana metabolite.

Testing Results		Licensee Employees		Long-Term *** Contractor Personnel		Short-Term Contractor Personnel	
Average Number with Unescorted Access		1,306				812	
Categories		# Tested	# Positive	# Tested	# Positive	# Tested	# Positive
Pre-Access		107	0	N/A	N/A	382	1
For Cause	Post-accident	0	0	N/A	N/A	3	0
	Observed behavior	0	0	N/A	N/A	2	1
Random		383	1	N/A	N/A	280	2
Follow-up		49	0	N/A	N/A	7	0
Other **		1	0	N/A	N/A	0	0
Total		540	1	N/A	N/A	674	4

\*\*The other test category includes: return-to-work-(1).

\*\*\*Both long-term and short-term contractors are included in the "Short-Term Contractor Personnel" category.

### Breakdown of Confirmed Positive Tests for Specific Substances

	Marijuana	Cocaine	Opiates	Amphetamine	Phencyclidine	Alcohol	Refusal to test	1	2	3	4
Licensee Employees	1	0	0	0	0	0	0	0	0	0	0
Long-Term Contractors	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Short-Term Contractors	2	1	0	0	0	1	0	0	0	0	0
Total	3*	1	0	0	0	1	0	0	0	0	0

\* One specimen from this category tested negative at the 50 ng/ml cutoff limit; but positive using the 20 ng/ml cutoff limit.

### Cutoff Levels of Additional Drugs

DRUG NUMBER	SUBSTANCE	Cut-off Level (ng/ml)	
		Screen	Confirmation
1	Barbiturates	300	300
2	Benzodiazepines	300	300
3	Methadone	300	300
4	Propoxyphene	300	300

## ENCLOSURE 3

### SUMMARY OF MANAGEMENT ACTIONS FOR SEQUOYAH NUCLEAR PLANT

In the **pre-access** test category, five CEs tested positive. The CEs were denied access, removed from site, and returned to the contract company. Four CEs were restricted from TVA NPG work for three years. One CE was permanently restricted from TVA NPG work because of previous positive test results. Four CEs requested that split specimen testing be performed. The split specimen tests reconfirmed the positive test results.

In the **random** test category, one LE tested positive. The LE's unescorted access was revoked. The LE was removed from site, suspended for a minimum of 14 days, referred to the Employee Assistance Program, returned to work during this reporting period, and was placed in the follow-up alcohol and drug testing program. The LE requested that a confirmatory blood alcohol test be performed. The blood alcohol test reconfirmed the positive test results. A review of the LE's work did not identify any deficiencies.



# Fitness for Duty Program

## Performance Data

### Personnel Subject to 10 CFR 26

TENNESSEE VALLEY AUTHORITY		DECEMBER 31, 2007	
Company		6 Months Ending	
SEQUOYAH NUCLEAR PLANT			
Location			
REBECCA A. CHRISTNER		(423) 751-8822	
Contact Name		Phone (include area code)	
Cut-offs: Screen/Confirmation		<input checked="" type="checkbox"/> Appendix A to 10 CFR 26 * 50 ng/ml initial cut-off	
Marijuana*	/	Amphetamines	/
Cocaine	/	Phencyclidine	/
Opiates	/	Alcohol(%BAC)	/

\*Specimens with a creatinine level less than 20 mg/dl are evaluated using a 20 ng/ml cutoff on the initial marijuana screen and the limit of quantitation as a cutoff on the GC/MS for marijuana metabolite.

Testing Results		Licensee Employees		Long-Term *** Contractor Personnel		Short-Term Contractor Personnel	
Average Number with Unescorted Access		1,138		N/A		598	
Categories		# Tested	# Positive	# Tested	# Positive	# Tested	# Positive
Pre-Access		80	0	N/A	N/A	1,182	5
For Cause	Post-accident	2	0	N/A	N/A	7	0
	Observed behavior	0	0	N/A	N/A	0	0
Random		290	1	N/A	N/A	193	0
Follow-up		6	0	N/A	N/A	15	0
Other **		1	0	N/A	N/A	1	0
Total		379	1	N/A	N/A	1,398	5

\*\*The other test category includes: return-to-work-(1) TVA; program integrity clearance (FFD Program Administration)-(1) contract.

\*\*\*Both long-term and short-term contractors are included in the "Short-Term Contractor Personnel" category.

### Breakdown of Confirmed Positive Tests for Specific Substances

	Marijuana	Cocaine	Opiates	Amphe- tamines	Phency- clidine	Alcohol	Refusal to test	1	2	3	4	
Licensee Employees	0	0	0	0	0	1	0	0	0	0	0	
Long-Term Contractors	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Short-Term Contractors	4	1	0	0	0	0	0	0	0	0	0	
Total	4	1	0	0	0	1	0	0	0	0	0	6

### Cutoff Levels of Additional Drugs

DRUG NUMBER	SUBSTANCE	Cut-off Level (ng/ml)	
		Screen	Confirmation
1	Barbiturates	300	300
2	Benzodiazepines	300	300
3	Methadone	300	300
4	Propoxyphene	300	300

## ENCLOSURE 4

### SUMMARY OF MANAGEMENT ACTIONS FOR WATTS BAR NUCLEAR PLANT

In the **pre-access** test category, two CEs tested positive. The CEs were denied access, removed from site, returned to the contract company, and restricted from TVA NPG work for three years. One CE requested that a confirmatory blood alcohol test be performed. The blood alcohol test reconfirmed the positive test results. One CE requested that split specimen testing be performed. The split specimen test reconfirmed the positive test results.

In the **for-cause (observed behavior/reasonable suspicion)** test category, one CE tested positive and was also detected attempting to subvert the Fitness for Duty testing process by substitution. The CE initially presented an out-of-temperature pre-access specimen that tested negative and a subsequent for-cause observed specimen that tested positive. The CE was denied access, removed from site, returned to the contract company, and permanently restricted from TVA NPG work. Review of the CE's work was deemed unnecessary because the CE had not been granted unescorted access and because the CE had not performed any work that could impact nuclear quality or safety.

In the **follow-up** test category, one LE tested positive. The LE's unescorted access was revoked. The LE was removed from site, terminated, and permanently restricted from TVA NPG employment because of previous positive test results. A review of the LE's work did not identify any deficiencies.

# Fitness for Duty Program

## Performance Data

### Personnel Subject to 10 CFR 26

TENNESSEE VALLEY AUTHORITY		DECEMBER 31, 2007	
Company		6 Months Ending	
WATTS BAR NUCLEAR PLANT			
Location			
REBECCA A. CHRISTNER		(423) 751-8822	
Contact Name		Phone (include area code)	
Cut-offs: Screen/Confirmation		<input checked="" type="checkbox"/> Appendix A to 10 CFR 26 * 50 ng/ml initial cut-off	
Marijuana*	/	Amphetamines	/
Cocaine	/	Phencyclidine	/
Opiates	/	Alcohol(%BAC)	/

\*Specimens with a creatinine level less than 20 mg/dl are evaluated using a 20 ng/ml cutoff on the initial marijuana screen and the limit of quantitation as a cutoff on the GC/MS for marijuana metabolite.

Testing Results		Licensee Employees		Long-Term *** Contractor Personnel		Short-Term Contractor Personnel	
Average Number with Unescorted Access		858		N/A		489	
Categories		# Tested	# Positive	# Tested	# Positive	# Tested	# Positive
Pre-Access		145	0	N/A	N/A	405	2
For Cause	Post-accident	0	0	N/A	N/A	2	0
	Observed behavior	0	0	N/A	N/A	4	1
Random		206	0	N/A	N/A	147	0
Follow-up		8	1	N/A	N/A	2	0
Other**		2	0	N/A	N/A	1	0
Total		361	1	N/A	N/A	561	3

\*\* The other test category includes: return-to-work.

\*\*\* Both long-term and short-term contractors are included in the "Short-Term Contractor Personnel" category.

### Breakdown of Confirmed Positive Tests for Specific Substances

	Marijuana	Cocaine	Opiates	Amphe- tamines	Phency- clidine	Alcohol	Refusal to test	1	2	3	4	
Licensee Employees	0	0	0	0	0	1	0	0	0	0	0	
Long-Term Contractors	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Short-Term Contractors	2	0	0	0	0	1	0	0	0	0	0	
Total	2	0	0	0	0	2	0	0	0	0	0	4

### Cutoff Levels of Additional Drugs

DRUG NUMBER	SUBSTANCE	Cut-off Level (ng/ml)	
		Screen	Confirmation
1	Barbiturates	300	300
2	Benzodiazepines	300	300
3	Methadone	300	300
4	Propoxyphene	300	300

## ENCLOSURE 5

### SUMMARY OF MANAGEMENT ACTIONS FOR CORPORATE TVA NUCLEAR POWER GROUP (NPG) OFFICES

There were no positive tests in the Corporate TVA NPG offices during this reporting period.

# Fitness for Duty Program

## Performance Data

### Personnel Subject to 10 CFR 26

TENNESSEE VALLEY AUTHORITY		DECEMBER 31, 2007	
Company		6 Months Ending	
CORPORATE OFFICES (CHATTANOOGA, KNOXVILLE, AND OTHER)			
Location			
REBECCA A. CHRISTNER		(423) 751-8822	
Contact Name		Phone (include area code)	
Cut-offs: Screen/Confirmation		<input checked="" type="checkbox"/> Appendix A to 10 CFR 26 * 50 ng/ml initial cut-off	
Marijuana*	/	Amphetamines	/
Cocaine	/	Phencyclidine	/
Opiates	/	Alcohol(%BAC)	/

\*Specimens with a creatinine level less than 20 mg/dl are evaluated using a 20 ng/ml cutoff on the initial marijuana screen and the limit of quantitation as a cutoff on the GC/MS for marijuana metabolite.

Testing Results		Licensee Employees		Long-Term *** Contractor Personnel		Short-Term Contractor Personnel	
Average Number with Unescorted Access		N/A		N/A		N/A	
Categories		# Tested	# Positive	# Tested	# Positive	# Tested	# Positive
Pre-Access**		N/A	N/A	N/A	N/A	N/A	N/A
For Cause	Post-accident	0	0	N/A	N/A	0	0
	Observed behavior	0	0	N/A	N/A	0	0
Random		129	0	N/A	N/A	40	0
Follow-up		9	0	N/A	N/A	4	0
Other ****		5	0	N/A	N/A	3	0
Total		143	0	N/A	N/A	47	0

\*\* Persons assigned to corporate locations, but with unescorted access at a TVA nuclear power plant site, are included in the average for the site or sites where they hold the unescorted access authorization.

\*\*\* Both long-term and short-term contractors are included in the "Short-Term Contractor Personnel" category.

\*\*\*\*The other test category includes: assignment to emergency response duties - (4) TVA, (1) contract; program integrity clearance (FFD Program Administration)- (1) TVA, (2) contract.

### Breakdown of Confirmed Positive Tests for Specific Substances

	Marijuana	Cocaine	Opiates	Amphe- tamines	Phency- clidine	Alcohol	Refusal to test	1	2	3	4
Licensee Employees	0	0	0	0	0	0	0	0	0	0	0
Long-Term Contractors	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Short-Term Contractors	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0

### Cutoff Levels of Additional Drugs

DRUG NUMBER	SUBSTANCE	Cut-off Level (ng/ml)	
		Screen	Confirmation
1	Barbiturates	300	300
2	Benzodiazepines	300	300
3	Methadone	300	300
4	Propoxyphene	300	300