



Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37379

February 18, 2000

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

Gentlemen:

In the Matter of) Docket Nos. 50-327
Tennessee Valley Authority) 50-328

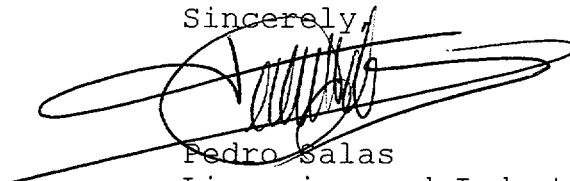
SEQUOYAH NUCLEAR PLANT (SQN) - 1999 ANNUAL REPORTS

Enclosed are the 1999 Annual Reports for SQN. These reports contain a summary of the following items: occupational exposure data and the reactor coolant system specific activity analysis.

These reports are being submitted to satisfy the requirements of Technical Specifications 6.9.1.4 and 6.9.1.5.

Please direct questions concerning this submittal to me at (423) 843-7170 or J. D. Smith at (423) 843-6672.

Sincerely,



Pedro Salas
Licensing and Industry Affairs Manager

Enclosure
cc: See page 2

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cc (Enclosure):

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TENNESSEE VALLEY AUTHORITY

SEQUOYAH NUCLEAR PLANT

UNITS 1 AND 2

ANNUAL REPORTS TO THE

NUCLEAR REGULATORY COMMISSION

JANUARY 1 - DECEMBER 31, 1999

DOCKET NUMBERS 50-327 AND 50-328

LICENSE NUMBERS DPR-77 AND DPR-79

SEQUOYAH NUCLEAR PLANT
1999 ANNUAL REPORTS

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**SEQUOYAH NUCLEAR PLANT (SQN)
UNITS 1 AND 2
1999 ANNUAL REPORTS**

OVERVIEW

Occupational Exposure Data

Attached is the exposure data for personnel at SQN that received greater than 100 millirem between January 1 and December 31, 1999. The numbers of personnel listed in the attached report are calculated fractions based on personnel and Radiation Work Permits code classifications. Changes made to these codes over the course of the calendar year give rise to the noninteger values on the report. Exposure data for special maintenance is based on the following activities:

- Dismantle and Remove 1C Charging Pump
- Pipe Support Modifications
- Valve Modifications
- Rewire Various System 43 (Sampling) Target Rock Valves
- Unit 2 Ice Condenser Floor Modifications
- Install Undercut Anchors on Wall and Ceiling in the Waste Packaging Area
- Thermo-Lag Upgrade
- Walkdowns in Preparation for Unit 1 Cycle 10 Essential Raw Cooling Water Piping Replacement
- Install Control Rod Drive Mechanism Transfer Switch in the Unit 2 Lower Containment
- Install Cable Drive Modification to the Unit 2 Fuel Transfer System
- Install Articulated Arms on Unit 2 Reactor Coolant Pumps for Seal Removal and Replacement
- Upgrades to the Unit 2 Secondary Chemistry Sampling Systems
- Modify or Repair Ladders and Safety Climbing Devices in Unit 1 and 2 Upper Containment
- Replace Degraded Spent Fuel Pit Skimmer Hoses
- Clean and Repair Unit 1 Incore Probe Withdrawal Limit Switch to Correct Stuck Incore Probe
- Power Entry to Unit 1 Reactor Coolant Pump 2 for Oil Addition
- Power Entry to Unit 1 Reactor Coolant Pump 3 for Oil Addition

Reactor Coolant System (RCS) Specific Activity Analysis (Specific Iodine Isotopic Activity Concentration and/or DEI-131 Determination)

During 1999, there were no specific iodine activity results of Unit 1 or Unit 2 RCSs exceeding the limits of Technical Specification (TS) 3.4.8.a (0.35 mCi/gm) during either power operation or reactor shutdown and/or start-up.

P.O. Box 2000
 Soddy Daisy, TN 37384-2000
 LICENSE: DPR-77 AND DPR-79

Regulatory Guide 1.16 Information
 End of Year Report 1999

Work and Job Function	Number of Personnel > 100 mrem			Total man-rem *		
	Station	Utility	Contractor	Station	Utility	Contractor
ROUTINE OPERATIONS AND SURVEILLANCE						
MAINTENANCE PERSONNEL	2.804	0.000	2.845	0.561	0.000	0.353
OPERATIONS PERSONNEL	8.076	1.109	0.000	0.998	0.118	0.000
HEALTH PHYSICS PERSONNEL	10.729	0.000	8.024	2.474	0.000	1.421
SUPERVISORY PERSONNEL	0.018	0.059	0.000	0.005	0.013	0.000
ENGINEERING PERSONNEL	0.410	0.014	0.007	0.112	0.003	0.002
ROUTINE PLANT MAINTENANCE						
MAINTENANCE PERSONNEL	36.198	0.769	168.711	7.906	0.093	40.858
OPERATIONS PERSONNEL	16.009	0.872	1.000	2.182	0.099	0.117
HEALTH PHYSICS PERSONNEL	17.094	0.265	43.374	5.454	0.064	10.657
SUPERVISORY PERSONNEL	4.990	1.490	0.000	1.348	0.261	0.000
ENGINEERING PERSONNEL	4.515	0.149	0.889	0.747	0.058	0.281
INSERVICE INSPECTION						
MAINTENANCE PERSONNEL	3.562	0.000	24.154	1.012	0.000	4.883
OPERATIONS PERSONNEL	1.945	0.000	1.000	0.560	0.000	0.139
HEALTH PHYSICS PERSONNEL	2.410	2.391	13.887	1.056	0.531	3.052
SUPERVISORY PERSONNEL	8.228	0.491	0.000	3.304	0.108	0.000
ENGINEERING PERSONNEL	7.176	0.994	59.942	1.712	0.158	15.514
SPECIAL PLANT MAINTENANCE						
MAINTENANCE PERSONNEL	3.756	0.000	69.496	1.019	0.000	18.519
OPERATIONS PERSONNEL	1.092	0.000	0.000	0.223	0.000	0.000
HEALTH PHYSICS PERSONNEL	2.591	0.220	4.072	0.976	0.075	0.965
SUPERVISORY PERSONNEL	0.043	0.036	0.000	0.008	0.004	0.000
ENGINEERING PERSONNEL	0.473	0.051	0.279	0.068	0.016	0.078
WASTE PROCESSING						
MAINTENANCE PERSONNEL	2.567	0.000	0.202	0.455	0.000	0.031
OPERATIONS PERSONNEL	0.133	0.000	1.000	0.017	0.000	0.409
HEALTH PHYSICS PERSONNEL	7.227	0.000	6.853	1.823	0.000	2.311
SUPERVISORY PERSONNEL	0.000	0.000	0.000	0.000	0.000	0.000
ENGINEERING PERSONNEL	0.000	0.000	0.000	0.000	0.000	0.000

1
2
1

Regulatory Guide 1.16 Information
End of Year Report 1999

Work and Job Function	Number of Personnel > 100 mrem			Total man-rem *		
	Station	Utility	Contractor	Station	Utility	Contractor
REFUELING						
MAINTENANCE PERSONNEL	3.119	0.231	17.584	0.620	0.028	5.735
OPERATIONS PERSONNEL	1.746	0.019	0.000	0.381	0.002	0.000
HEALTH PHYSICS PERSONNEL	0.951	0.111	1.791	0.299	0.038	0.605
SUPERVISORY PERSONNEL	3.721	1.924	0.000	1.249	0.360	0.000
ENGINEERING PERSONNEL	1.425	1.852	19.837	0.222	0.848	8.645
Totals						
MAINTENANCE PERSONNEL	52.007	1.000	282.993	11.573	0.121	70.379
OPERATIONS PERSONNEL	29.000	2.000	3.000	4.361	0.219	0.665
HEALTH PHYSICS PERSONNEL	41.001	2.986	78.000	12.082	0.708	19.011
SUPERVISORY PERSONNEL	17.000	4.000	0.000	5.914	0.746	0.000
ENGINEERING PERSONNEL	14.000	3.059	80.955	2.861	1.083	24.520
Grand Totals	153.009	13.045	444.948	36.791	2.877	114.575

* The man-rem totals include dose only from individuals receiving more than 100 mrem throughout the year at the site.