MAY 29 1980

Docket Nos. 50-280
and 50-281

DISTRIBUTION
Docket Files 50-280
and 50-281
NRC Pdrs (2)
Local PDR
TERA
NSIC
NRR REading
ORB1 Reading
D. Eisenhut
T.Novak
S. Varga
D. Neighbors
C. Parrish
I&E (3)
Attorney, OELD

Mr. J. H. Ferguson
Executive Vice President - Power
Virginia Electric and Power Company
Post Office Box 26666
Richmond, Virginia 23261

Dear Mr. Ferguson:

We have reviewed your letters dated August 9 and November 13, 1979 and January 14, 1980 which provided information regarding the Surry Power Station Fire Protection Program. We have reviewed and accepted the items listed below and discuss them in Enclosure 1.

1. Air Flow Detectors
2. Breathing Apparatus
3. Floor Drains, Dikes, and Curbs
4. Reactor Coolant Pump Motor Oil Collection System
5. Containment Dry Standpipe System
6. Valve Supervision
7. Ventilation System

Enclosure 2 provides the status of the Surry review. Although the schedule developed for implementing the fire protection modifications was approved in the September 19, 1979 Safety Evaluation Report, the proposed Appendix R to 10 CFR 50 requires completion of modifications by November 1, 1980 except for those related to alternate shutdown capability. Therefore, your should attempt to improve your schedule for this work.

Sincerely,

Original signed by:
S. A. Varga

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosures:
As Stated

cc: w/enclosures
See next page

8006260167

OFFICE	DL:ORB1	DL:ORB1				
SURNAME	JDNeighbors:jb	SAVarga				
DATE	05/ /80	/ /80				

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

May 29, 1980

Docket Nos. 50-280
and 50-281

Mr. J. H. Ferguson
Executive Vice President - Power
Virginia Electric and Power Company
Post Office Box 26666
Richmond, Virginia 23261

Dear Mr. Ferguson:

We have reviewed your letters dated August 9 and November 13, 1979 and January 14, 1980 which provided information regarding the Surry Power Station Fire Protection Program. We have reviewed and accepted the items listed below and discuss them in Enclosure 1.

1. Air Flow Detectors
2. Breathing Apparatus
3. Floor Drains, Dikes, and Curbs
4. Reactor Coolant Pump Motor Oil Collection System
5. Containment Dry Standpipe System
6. Valve Supervision
7. Ventilation System

Enclosure 2 provides the status of the Surry review. Although the schedule developed for implementing the fire protection modifications was approved in the September 19, 1979 Safety Evaluation Report, the proposed Appendix R to 10 CFR 50 requires completion of modifications by November 1, 1980 except for those related to alternate shutdown capability. Therefore, your should attempt to improve your schedule for this work.

Sincerely,

Steven A. Varga, Chief
Operating Reactors Branch #1
Division of Licensing

Enclosures:
As Stated

cc: w/enclosures
See next page

8006260167

cc: Mr. Michael W. Maupin
Hunton and Williams
Post Office Box 1535
Richmond, Virginia 23213

Mr. W. L. Stewart, Manager
P. O. Box 315
Surry, Virginia 23883

Swem Library
College of William and Mary
Williamsburg, Virginia 23185

Donald J. Burke, Resident Inspector
Surry Power Station
U. S. Nuclear Regulatory Commission
Post Office Box 959
Williamsburg, Virginia 23185

ENCLOSURE 1

ADDITIONAL FIRE PROTECTION INFORMATION REVIEW
SURRY POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-280 AND 50-281

AIR FLOW DETECTORS, SECTION 3.1.2

By letter dated January 14, 1980, the licensee provided information regarding the monitoring of the air flow to the four safety-related battery rooms. The licensee relies upon the ventilation air flow out of the exhaust duct in each battery room to maintain hydrogen levels below an explosive concentration. The licensee has installed flow switches in each of the ventilation ducts. The air flow switches are wired to alarm inside the control room on loss of air flow.

The air flow switches will alarm in the control room to indicate a loss of ventilation air flow which meets Section C.6.g of BTP APCSB 9.5-1. We conclude that the monitoring system ensures that hydrogen concentrations will not reach an explosive level. Based on the above, we find the proposed air flow monitoring in the safety-related battery rooms acceptable.

BREATHING APPARATUS, SECTION 3.1.3(2)

By letter dated January 14, 1980, the licensee provided additional information regarding the breathing air charging system. The air charging system will utilize ducting to draw air from the outside and the compressors are approved for breathing air use.

The licensee has demonstrated to our satisfaction that the air charging system is a dependable onsite reserve air supply. The licensee has agreed to relocate the breathing air compressor and cascade recharging system located in the south annex building to an area of the building remote from combutible materials and away from any other items that may obstruct the efficient use of the system. We find that the breathing air charging system meets Section C.4.d(7) of BTP APCSB 9.5-1 and, therefore, we conclude that it is acceptable.

FLOOR DRAINS, DIKES AND CURBS, SECTIONS 3.1.15(1), (2), (3)

By letter dated January 14, 1980, the licensee provided information regarding the oil containment dikes installed around the lube oil conditioner, in the diesel generator rooms, and around the diesel driven fire pump oil tank.

A diked enclosure with sufficient capabity to hold 110% of the contents of the lube oil conditioner has been installed around the lube oil conditioner pump and piping.

The day tank located inside the diesel generator room is surrounded by a diked enclosure that has sufficient capacity to hold 110% of the contents of the day tank. Further, covers are bolted over the floor drains to contain an oil spill from the oil tank in the base of the diesel generator and the diesel generator lubricating oil. In addition, a dike is installed at the doorway to prevent the oil from running into the turbine building hallway.

The diesel driven fire pump oil tank is surrounded by a diked enclosure that has sufficient capacity to hold 110% of the contents of the tank. In addition, steel covers are bolted over the drains to keep oil from spreading via the drain system.

The licensee has demonstrated to our satisfaction that the diked enclosures and drain covers will contain the oil contents in each of the areas discussed above and prevent the spread of oil via the drain system. Based on our review, we find that the diked enclosures meet our fire protection guidelines and, therfore, are acceptable.

REACTOR COOLANT PUMP MOTOR OIL COLLECTION SYSTEM, SECTION 3.1.15(4)

By letter dated November 13, 1979, the licensee provided information regarding the reactor coolant pump oil collection system. The oil collection system consists of leakproof pans under oil bearing components of the reactor coolant pump motor. Covers are provided to contain oil from leaks in pressurized lines and to keep foreign matter out of the drain. Each of the oil collection enclosures are connected to a header with a flexible hose. The oil is drained to a seismically supported tank below the enclosure. By telephone, the licensee verified that the oil collection tank is capable of holding the entire lube oil system inventory for the reactor coolant pump motor it protects. The licensee also confirmed that the oil collection system is designed to withstand an SSE (Safe Shutdown Earthquake) and to collect and drain any oil leakage that may occur during an SSE.

We have reviewed the licensee's information regarding the reactor coolant pump motor oil collection system. Based on our review, we find that the fire protection modification provided by the licensee for the reactor coolant pump lube oil system meets Section D.2.a of BTP APCSB 9.5-1, Appendix A, and, therefore, we conclude that it is acceptable.

CONTAINMENT DRY STANDPIPE SYSTEM, SECTION 3.1.18(6)

By letter dated November 13, 1979, the licensee provided information regarding the fire service standpipe system to be installed in the reacotr containment building. By telephone, the licensee verified that the standpipe system meets NFPA 14 as a Class II system.

We find that the licensee's containment fire service standpipe system meets the appropriate industry standards and, therfore, we conclude the system is acceptable with regards to fire protection.

VALVE SUPERVISION, SECTION 3.1.22

By letter dated January 14, 1980, the licensee provided information regarding the supervision of valves in the fire water system. All valves which are not presently electrically supervised will be maintained in an open position with chains and breakaway locks. The licensee has also committed to performing a periodic visual inspection of all valves in the fire water system.

The licensee's procedure of locking all valves in the fire water system, which are not electrically supervised, and a periodic visual inspection of all valves meets Section E.3.b of BTP APCSB 9.5-1, Appendix A, and, therefore, we find the licensee's proposal acceptable.

VENTILATION SYSTEM, SECTION 3.1.27

By letters dated November 13, 1979 and August 9, 1979, the licensee provided information regarding modifications to the charging pump ventilation system. Our concern was that the ventilation system modifications might include charcoal filters, which would then require additional fire protection.

The licensee has agreed to provide sprinkler system protection for each charcoal filter. This is one of the acceptable methods listed in Reg. Guide 1.52, "Design, Testing, and Maintenance Criteria for Post Accident Engineered-Safety-Feature Atmosphere Cleanup System Air Filtration and Adsorption Units of Light-Water-Cooled Nuclear Power Plants". Therefore, we conclude that the use of the sprinkler system to mitigate the radioactive material releases from fires of charcoal filters is acceptable.

ENCLOSURE 2

FIRE PROTECTION REVIEW STATUS
SURRY POWER STATION, UNITS 1 AND 2
DOCKET NOS. 50-280 AND 50-281

ITEM	DESCRIPTION	STATUS*
3.1.2	Air Flow Detectors	C
3.1.3	Breathing Apparatus	C
3.15(1), (2), (3)	Floor Drains, Dikes and Curbs	C
3.1.15(4)	Oil Collection System	C
3.1.18(6)	Hose Stations - Containment Bldg.	C
3.1.22	Valve Supervision	C
3.1.27	Ventilation System	C
3.1.4	Cable Tray Covers	I
3.1.5	Safe Shutdown Circuitry	I
3.1.9	Fire Detection Systems	I
3.1.10	Fire Barriers	I
3.1.11	Fire Doors	I
3.1.16	Gas Suppression	I
3.1.18(1)(7)	Hose Stations - Turbine Bldg.	I
3.1.18(3)	Hose Stations - M.E. Rooms	I
3.1.18(5)	Hose Stations - Service Bldg.	I
3.1.18(8)	Hose Stations - Switch Gear Room	I
3.1.18(16)	Hose Stations - Aux. Bldg.	I
3.1.23	Monitoring Panels	I
3.1.24	Penetrations	I
3.1.25	Safe Shutdown	I
3.1.26	Water Suppression Systems	I
3.1.29	Water Spray Shields	I
3.1.30	Technical Specifications	I
3.2.1	Auxiliary Boiler Room	I
3.2.2	Fire Dampers	I
3.2.3	Safe Shutdown	I
3.2.4	Charcoal Filter Hazard	I
3.2.5	In-Situ Testing	I

* C - Our evaluation is complete and the licensee's modification is acceptable with regards to fire protection.

I - Our evaluation is incomplete because we are awaiting additional information from the licensee.