

## VIRGINIA ELECTRIC AND POWER COMPANY RICHMOND, VIRGINIA 23261

November 10, 1978

Mr. H. R. Denton

Office of Nuclear Reactor Regulation

Attn: Mr. Albert Schwencer, Chief

Operating Reactors Branch No. 1

Division of Reactor Licensing

U. S. Nuclear Regulatory Commission

Washington, D. C.

Serial No. 623

PO/HSM:scj

Docket Nos. 50-280

50-281

DPR-32 License Nos.

DPR-37

Dear Mr. Denton:

Enclosed herewith are 40 copies of Revision 8 to the document entitled "Steam Generator Repair Program, Surry Power Station, Unit Nos. 1 and 2" submitted in our letter of August 17, 1978. The revision contains supplemental information requested by your staff.

The document should be revised in accordance with the attached instructions.

If you have any questions regarding this material, we would be pleased to meet with your staff at their convenience to discuss them.

Very truly/yours,

C. M. Stallings

Vice President-Power Supply and Production Operations

Enclosure

cc: Mr. James P. O'Reilly Office of Inspection and Enforcement Region II

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COMMONWEALTH OF VIRGINIA )

CITY OF RICHMOND

Before me, A Notary Public, in and for the City and Commonwealth aforsaid, today personnally appeared S. C. Brown, Jr., who being duly sworn, made oath and said (1) that he is Vice President - Power Station Engineering and Construction, of the Virginia Electric and Power Company, (2) that he is fully authorized to execute and file the aforegoing Amendment in behalf of that Company, and (3) that the statements in the Amendment are true to the best of his knowledge and belief.

Given under my hand an November		this 10 7h	day of	
My Commission expires	January	20, 1981	<del></del>	<b>_•</b>
		Alex.		

Notary Public

(SEAL)

## STEAM GENERATOR REPAIR PROGRAM FOR THE SURRY POWER STATION UNIT NOS. 1 and 2

## Revision 8

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Rev. 0

Repair Program. 1tr dtd 11-10-78 50-28/201

Updated 12-5-78 CCD

in exposure commensurate with overall program objectives. Special scaffolding and other components will be prefabricated to the extent possible to minimize radiation exposure and outage time.

- 4. The reactor cavity will be covered by structural members to minimize the possibility of damage to the reactor vessel and associated components during the repair program.
- 5. The repair program will be completed in accordance with the Vepco Nuclear Power Station Quality Assurance Manual and Section XI of the ASME Code, including such items as interaction of repair activities with the unaffected part of the station, design reviews, radiation control procedures, document control, material acquisitions, etc.
- 6. The actual repair process will be similar to the methods used during original construction of the units. Much of the experienced gained during original construction is applicable to the repair process and will be used as appropriate.
- 7. The potential environmental effects of the repair program are expected to be minimal. However, reasonable precautions will be exercised to further minimize any environmental impact.
- 8. Presently installed station facilities will be augmented as required to accommodate the additional personnel who will participate in the repair program or to facilitate the actual repair work. The areas of special concern are facilities to prevent the spread of radioactive contamination, disposal of radioactive material, and security provisions.
- 9. The major portion of the repair program will be performed by a commercial installer under the direction of Vepco personnel. It is presently anticipated that Vepco will utilize its own radiation control procedures and personnel. The installer will provide quality control personnel and procedures and Vepco will provide quality assurance personnel. The installer will be required to have an ASME "N" stamp applicable to the work he is to perform.
- The length of the steam generator repair outage is now estimated to be approximately 180 days. This schedule is predicated on working 24 hrs/day. The schedule is divided into the following phases:
  - a. Preshutdown activities
  - b. Shutdown and preparatory activities
  - c. Removal activities
  - d. Installation activities
  - e. Post Installation activities
  - f. Startup activities
  - g. Post Startup activities

A.16. Details and criteria used in the selections of the filtration unit and sump system of the Engineered Storage Facility shown in Figure 5.3-1 should be provided. Include estimated radiation levels on the outside surface of the facility, at the nearest unrestricted area, and the site boundary. Also provide justification that the facility will not flood under a plant design basis flood or describe the flood size and probability for which the facility would be protected.

## **RESPONSE:**

The basic design criteria for both the filtration unit and sump system of the engineered storage facility is that they be simple, maintenance free and require no outside electrical power. The filtration system is a penetration in the building wall which will contain a HEPA filter. This will provide venting to accomodate air expansion/contraction. No forced or induced ventilation is provided. It is anticipated that this filter will be changed on a periodic basis. The sump system will be a passive system that will merely consist of provisions for any liquid to drain to a sump. This sump will be checked periodically by use of a dip stick and pumped out if necessary. No significant water accumulation in the sump is anticipated. The building will be sealed against rainwater intrusion. Condensation may contribute a slight amount.

The surveillance program proposed for the storage facility for the first year is to check the sump level, check residual radioactivity levels inside the building, and change the HEPA filters on a monthly basis. At the end of one year the data collected will be reviewed and if warranted the surveillance period may be increased from monthly to quarterly.

Provisions in the building design have been made to allow the above surveillance activities to be performed from outside the building. It is not anticipated that entry to the storage facility will be necessary.

6