



GULF STATES UTILITIES COMPANY

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RBG-17,457

File No. G9.5, G9.8.6.2

Mr. Harold R. Denton, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dear Mr. Denton:

Pursuant to recent discussion with your Mr. E. Weinkam, enclosed is additional information on the solid radwaste system for River Bend Station. This information includes a revised flow diagram and text to indicate the ventilation provided for the system, and revised equipment arrangement drawings. This information will be reflected in a future FSAR amendment.

Sincerely,

Eddie E. Grant

for J. E. Booker
Manager-Engineering,
Nuclear Fuels & Licensing
River Bend Nuclear Group

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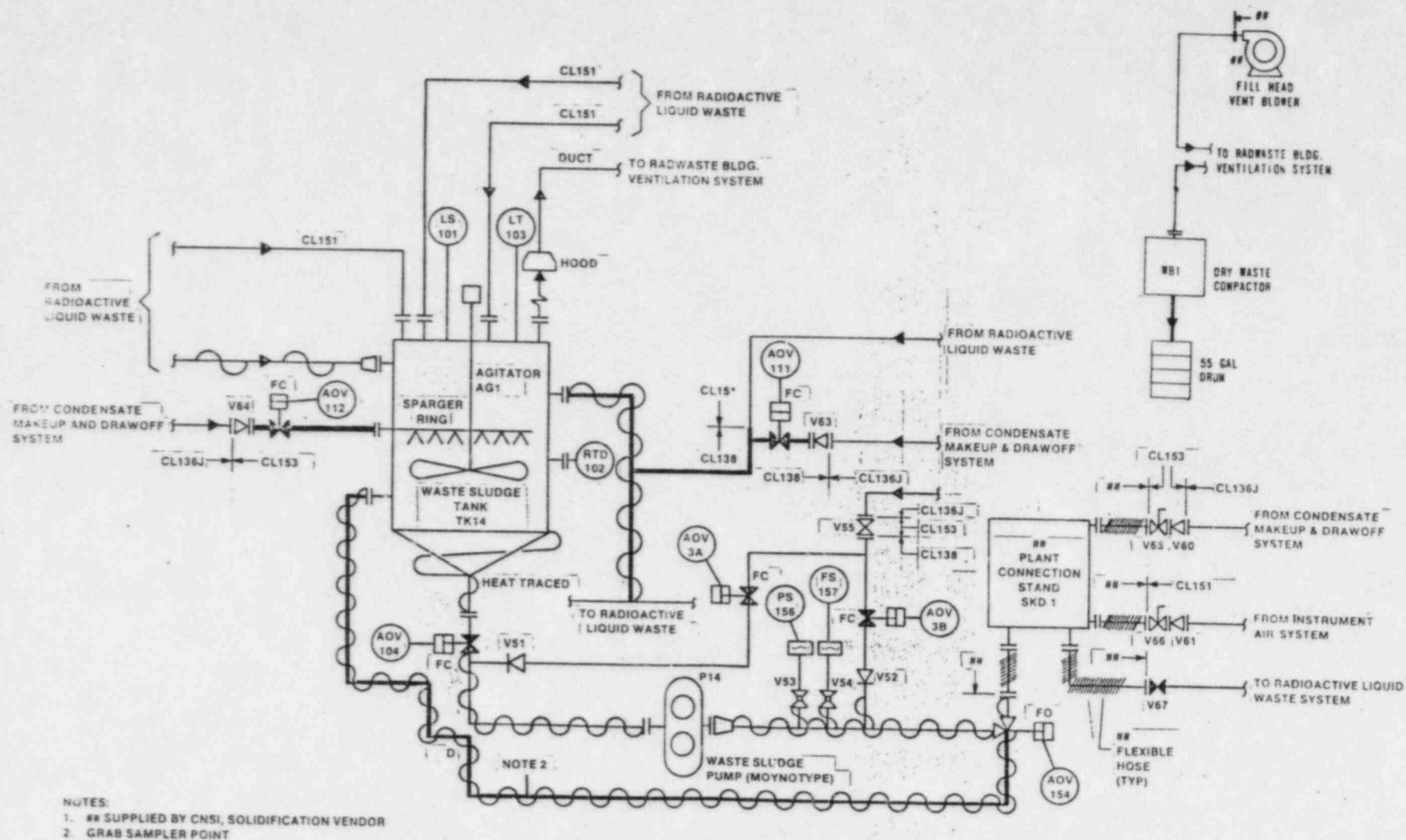
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Attachment 1

Attachment 2 is a flow diagram for the solid radwaste system that indicates the ventilation provided for the CNSI equipment.

Attachment 3 provides appropriate text changes to be included in the revisions provided with our letter of February 17, 1984 (RBG-17066).

Attachment 4 is a revised arrangement drawing for the radwaste building el. 106'-0", 117'-0", and 120'-0", showing the location of the solid radwaste system equipment. This is derived from drawing EM-9B-SK-2, and will replace the left half of FSAR Fig. 1.2-30.



11.4-1

RADIOACTIVE SOLID WASTE SYSTEM
P & ID

Insert 1 for Page 11.4-2

1.4.1.1.1 Applicable Codes and Standards

Table 11.4-4 lists the applicable codes and standards for equipment in the solid waste system. The basis for the non-nuclear safety (NNS) classification and the material selections for equipment in the solid radwaste system are the criteria as established by Regulatory Guide 1.143, as discussed in Section 11.4.1.2.

The atmospheric waste sludge storage tank is a filament-wound, fiberglass-reinforced plastic tank. It is designed to meet or exceed National Bureau of Standards Voluntary Product Standard PS 15-69 and American Society for Testing and Materials Specification No. ASTM D3299-74.

11.4.1.1.2 Structural Design

The solid radwaste equipment arrangement is presented in Figures 1.2-30 through 1.2-32. The structural design is described in Section 3.8.4.1.8. In accordance with Regulatory Guide 1.143 and Branch Technical Position ETSB 11-1 (Revision 1, April 1975), the building is seismically analyzed as described in Section 3.7.3.16A. The solid radwaste layout provides design features consistent with maintaining personnel exposure ALARA, as required by Regulatory Guide 8.8.

11.4.1.2 Compliance with Regulatory Guides and Code of Federal Regulations

Regulatory Guide 1.143 identifies the quality level, quality group classification (safety class), seismic requirements, and material requirements for equipment and structures containing radioactive wastes. The solid waste system is in conformance with the guide in that:

1. The equipment within the system is designed in accordance with requirements identified in Table 1 of the guide.
2. Materials for pressure-retaining components conform to the requirements of the specification for materials in Section II of the ASME Code, except that nickel alloy stainless steel and fiberglass-reinforced plastic (FRP) piping are used. The use of FRP piping is restricted to condensate flush connections to solid waste piping and components. Nickel alloy stainless piping is used in the solid waste system due to its corrosion resistance when transferring acidic wastes and evaporator bottoms.
3. Foundations and walls of the radwaste building, to an elevation above that sufficient to contain the maximum liquid inventory expected in the building, are designed to the seismic criteria described in the guide. They are described in Section 3.8.4.

Regulatory Guide 8.8 provides criteria for maintaining potential radiation exposure to plant personnel to ALARA levels. Design features incorporated to maintain ALARA criteria and meet the limits of 10CFR20 include:

1. Totally remote operation of permanently installed wet solid waste equipment (i.e. waste sludge tank and transfer pump) from the radwaste control panel, located in the auxiliary control room.
2. Remote flushing of all lines containing radioactive solids.
3. Minimizing lengths of piping runs.
4. Provide drip trays under pumps and control panels.
5. Waste lines and valves utilize butt or socket weld end connections to the maximum extent practical.
6. Providing operator training by both the Contractor and GSU.
7. Providing adequate shielding of piping and components. To the greatest extent possible, components requiring access or maintenance are located in separate, shielded cubicles or are otherwise provided with features to reduce personnel exposure (i.e., tanks are in separate shielded compartments from pumps, air-operated valves located in high radiation areas have their air sets, regulators and/or solenoid valves in low radiation areas).
8. Providing curbs to contain spills.
9. Compliance with Regulatory Guide 8.10, as indicated in Section 1.8.
10. Potentially contaminated exhaust air from the CNSI solidification equipment is routed to the radwaste building ventilation system.

CNSI operates under and is subject to the River Bend Station plant specific Radioactive Waste Solidification Process Control Plan.

All documents, procedures, and drawings used in the fabrication, testing, operation, and maintenance of the solid waste equipment are developed and controlled in accordance with the provisions established in the Code of Federal Regulations, Title 10CFR50, Appendix E, Sections V and VI. CNSI follows RBS Radiation Protection Procedures in solidifying the radwaste to maintain their occupational radiation exposure ALARA. A Radiation Work Permit (RWP) is issued to the CNSI operator prior to beginning solidification operations.

Packaging and transportation of radioactive materials are accomplished in accordance with 10CFR71, Appendix E and 10CFR61.

Refer to Topical Report CNSI-2 (4313-01354-01P-A) for details concerning CNSI implementation of the requirements of 10CFR Parts 20, 50, and 71, and Regulatory Guides 1.143, 8.8, and 8.10.