

7.15 HEALTH PHYSICS LABORATORY RADIATION MONITORING EQUIPMENT

7.15.1 Power Generation Objective

The health physics and laboratory radiation monitoring equipment is used to monitor radiation and contamination levels in all normal and emergency conditions.

7.15.2 Radiation Monitoring Equipment

Sufficient quantities of operational, portable health physics radiation survey instruments are maintained which are capable of detecting radiation types and intensities expected at BFN. These instruments are controlled in accordance with written procedures and instructions. Procedures and instructions have provisions for the unique identification of each instrument, instrument calibration techniques, calibration and operational check frequencies, and storage requirements, if necessary. Records are maintained which indicate instrument status, maintenance history, and calibration results. Traceability of reference standards and periodic revalidation of such standards with national standards is maintained.

7.15.3 Personnel Monitoring

TVA provides dosimetry that is processed by a laboratory accredited by the National Voluntary Laboratory Accreditation Program of the National Institute of Standards and Technology in accordance with 10 CFR 20.1501. Personnel may also be monitored with self-reading dosimeters. Each person entering a radiologically controlled area is provided personnel monitoring device(s) if exposure conditions warrant. Dose information is used by a real-time dose tracking system and retained in a permanent historical database for generating required reports. Doses are calculated when dosimetry devices are not available or not practical.