

### III. Present Status

1. Noble gas monitors are now on site at SQN. These are IEEE Class 1E, seismic Category I, and qualified to the environment.
  - A. The instruments were procured from General Atomic Company.
  - B. The instruments are area type monitors. Two monitors per channel have been procured; the range of one monitor overlaps the range of the second monitor by one decade. Together, they cover the range required by RG 1.97.
  - C. Information pertinent to the interim noble gas monitors is given below:

<u>Instrument Nos.</u>	<u>Location</u>
1,2-RE-90-260/261	RB (Shield bldg) vent
1,2-RE-90-262/263	RB (Shield bldg) vent
0-RE-90-235/236	Aux. Bldg. Vent
1,2-RE-90-255/256	Condensate Vacuum Pump Vent

2. Control board panels which will house the readouts for the interim noble gas monitors in the main control room are due to be shipped on September 18, 1981.
3. The noble gas monitors will be installed at the first outage of sufficient duration.
4. TVA has interim procedures for monitoring noble gas, iodine and particulate effluents which were reviewed and approved by NRC as documented in Sequoyah SER Supplement 1.
5. TVA expects to be able to procure and provide for noble gas, iodine and particulate monitoring in accordance with regulatory requirements before startup following the first refueling outage.
6. We estimate six weeks of nonoutage and two to three weeks of outage time required to install the noble gas monitors. Some work may require a two unit outage.

### IV. Recommendations

TVA recommends that the Sequoyah unit 2 full power operating license be conditioned to require installation of qualified particulate and iodine effluent monitors before startup following the first refueling outage and installation of the interim noble gas effluent monitors at the first outage of sufficient duration.

### Containment Pressure Monitor

The design for a wide range, minus 5 to plus 60 psig, containment pressure monitoring system qualified to the appropriate sections of RG 1.97 as listed in Appendix B of NUREG-0737 has been completed for Sequoyah Nuclear Plant. The equipment consisting of transmitters, power supplies, recorders, and indicators qualified to IEEE 323-1974 was put out on bid invitation; and the first bid invitation was opened on January 8, 1981. Three bids were received but none were responsive since they could offer only IEEE 323-1971 qualification. The second bid invitation was opened on May 5, 1981. Only one bid was received and it was for IEEE 323-1971 equipment. The third bid invitation was opened on July 16, 1981 with only one bid and same results.

Subsequent discussions with several vendors indicate that IEEE 323-1974 qualified equipment will be available in the first half of 1982. We will go out for bid again in September 1981.

In the interim, TVA has installed redundant wide range containment pressure indication utilizing IEEE 323-1971 equipment. Pressure is indicated in the main control room. Other than in areas of qualifications and the inability to record, the system meets the NRC requirements.

TVA recommends that the Sequoyah unit 2 full power operating license be conditioned to require installation of an instrument that meets NRC requirements before startup following the first refueling outage.

### Containment Hydrogen Monitor

The present installation meets the NRC requirements except for qualification. The system is presently qualified to meet IEEE 323-1971. However, the monitors are being tested to upgrade the qualifications to meet a more severe environment. The equipment has passed the test once, but due to failure to properly verify the calibration of the equipment before the test, the test was invalidated. The equipment was returned to the manufacturer and refurbished to original condition and is scheduled to be retested. The equipment was received at the test laboratory in the latter part of August 1981 and testing is scheduled to be completed in January 1982. No changes to the system are anticipated as a result of this testing.

TVA recommends that the Sequoyah unit 2 full power license be conditioned to require a qualified hydrogen monitor before startup following the first refueling outage.

### Containment Water Level Monitoring

The present installation meets the NRC requirements.

No condition on the Sequoyah unit 2 full power operating license is required.

### Containment Radiation Monitors

The high range in containment radiation monitors are now onsite for installation. The associated control equipment is expected to be onsite in September 1981. Installation of the monitor will require four weeks in cold shutdown (not including time for shutdown and startup) to allow for work inside the main control room and containment building. TVA expects to be able to have the high range containment radiation monitors installed at the next outage of sufficient duration.

TVA recommends that the Sequoyah unit 2 full power operating license be conditioned to require installation of the monitor at the next outage of sufficient duration.

### Summary

Based on the above discussions, TVA requests deferral of the implementation dates for the instrumentation described in section II.3.1 of NUREG-0737 until qualified components become available. As noted, the noble gas monitors should meet NRC's requirements; however, the iodine and particulate monitors cannot be installed until at least the first refueling outage. Qualified monitors for containment pressure and hydrogen concentration should be available by mid-1982. The installed containment water level monitor presently installed meets current NRC requirements. The containment high radiation monitor should be installed at the next outage of sufficient duration..