2. With the number of OPERABLE channels less than the total number of channels shown in Table 3.13.1, restore the inoperable channel to OPERABLE status within 30 days or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.

3. With the number of OPERABLE channels less than the Minimum Channels Operable requirements of Table 3.13.1, restore at least one channel to OPERABLE status within 7 days or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.

G. Containment High-Range Radiation Monitor

1. Two containment high-range radiation monitors shall be OPERABLE when PRIMARY CONTAINMENT INTEGRITY is required.

2. With the number of OPERABLE monitors less than 2:

   a. Take appropriate action to restore the inoperable monitor(s) to OPERABLE status as soon as possible.

   b. Perform any actions required by Table 3.1.1.

   c. Restore the inoperable monitor(s) to OPERABLE status within 7 days of the failure or prepare and submit a Special Report within 14 days following the failure outlining the cause of inoperability, actions taken, and the planned schedule for restoring the monitors to OPERABLE status.

3. With the number of OPERABLE monitors less than 1, in addition to the actions of 3.13.G.2 above, restore at least 1 monitor to OPERABLE status within 7 days of the failure or have available a preplanned alternate method capable of being implemented to provide an estimate of the radioactive material in containment under accident conditions.

H. High-Range Radioactive Noble Gas Effluent Monitor

1. The high range radioactive noble gas effluent monitors listed in Table 3.13.1 shall be OPERABLE during POWER OPERATION.

2. With the number of OPERABLE channels less than required by the minimum channels OPERABLE requirements, restore the inoperable channel(s) to OPERABLE status within 7 days of the event or prepare and submit a Special Report within 30 days following the event outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the equipment to OPERABLE status.

BASES

The purpose of the safety/relief valve accident monitoring instrumentation is to alert the operator to a stuck open safety/relief valve which could result in an inventory threatening event.

As the safety valves present distinctly different concerns than those related to relief valves, the technical specifications are separated as to the actions taken upon inoperability. Clearly, the actuation of a safety valve will be immediately detectable by observed increase in drywell pressure. Further confirmation can be gained by observing reactor pressure and water level. Operator action in response to these symptoms would be taken regardless of the acoustic monitoring system status. Acoustic monitors act only to confirm the reseating of the safety valve. In actuality, the operator actions in response to the lifting of a safety valve will not change whether or not the safety valve reseats. Therefore, the actions taken for inoperable acoustic monitors on safety valves are significantly less stringent than that taken for those monitors associated with relief valves.

Should an acoustic monitor on a safety valve become inoperable, the setpoint on an adjacent monitor, if operable, will be reduced to assure alarm actuation should the safety valve lift. When a reduced setpoint results in having the acoustic monitor on an adjacent valve in an alarm condition due to background noise, the setpoint may be returned to normal. This will ensure that the adjacent valve's acoustic monitor remains operable. Analyses, using very conservative blowdown forces and attenuation factors, show that reducing the alarm setpoint on adjacent monitors to less than 1.4g will assure alarm actuation should the adjacent safety valve lift. Minimum blowdown force considered was 30g with a maximum attenuation of 27dB. In actuality, a safety valve lift would result in considerably larger blowdown force. The maximum attenuation of 27dB was determined based on actual testing of a similar monitoring system installed in a similar configuration.

The operability of the accident monitoring instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident. The capability is consistent with NUREGs 0578 and 0737.

The capability is provided to detect and measure concentrations of noble gas fission products in (1) plant gaseous effluents and (2) in containment during and following an accident. For the plant gaseous effluent capability, two Radioactive Gaseous Effluent Monitoring Systems (RAGEMS) are installed at Oyster Creek. One system monitors releases at the main stack (RAGEMS I) and the other monitors the turbine building vents (RAGEMS II). For the in containment post-accident capability, two high range radiation monitors are installed in the drywell. These monitors augment the capabilities provided by the Post Accident Sampling System (Technical Specification 6.17 and FSAR Section 11.5) and the Offsite Thermoluminescent Dosimeter Program (Emergency Plan Section 7.5.2.2b). The Post Accident Sampling System represents a preplanned alternate method to the high range radiation monitors capable of being implemented to provide an estimate of radioactive material in containment under accident conditions.