

3.13 ACCIDENT MONITORING INSTRUMENTATION

Applicability: Applies to the operating status of accident monitoring instrumentation.

Objective: To assure operability of accident monitoring instrumentation.

Specification: A. Relief Valve Position Indicators

1. The accident monitoring instrumentation channels shown in Table 3.13.1 shall be OPERABLE when the mode switch is in the Startup or Run positions.
2. With the number of OPERABLE accident monitoring instrumentation channels less than the Total Number of Channels shown in Table 3.13.1, either restore the inoperable channels to OPERABLE status within 7 days, or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.
3. With the number of OPERABLE accident monitoring instrumentation channels less than the Minimum Channels Operable requirements of Table 3.13.1, either restore the inoperable channel(s) to the OPERABLE status within 48 hours, or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.

B. Safety Valve Position Indicators

1. During POWER OPERATION, both primary* and backup** safety valve monitoring instruments are required to be OPERABLE except as provided in 3.13.B.2.
2. If the primary* accident monitoring instrument on a safety valve becomes inoperable, the primary* accident monitoring instrument on an adjacent valve, if OPERABLE, must have its set point appropriately reduced. When a reduced setpoint causes an alarm condition due to background noise, the setpoint may be returned to normal. If the backup** accident monitoring instrument on a safety valve becomes inoperable, no action is required. The provisions of Specification 3.0.A do not apply.

*Acoustic Monitor

**Thermocouple

C. In the event that any of these monitoring channels become inoperable, they shall be made OPERABLE prior to startup following the next COLD SHUTDOWN.

D. Wide Range Torus Water Level Monitor

1. Two wide range torus water level monitor channels shall be continuously indicated in the control room during POWER OPERATION.
2. With the number of OPERABLE accident monitoring channels less than the total Number of Channels shown in Table 3.13.1, restore the inoperable channel(s) to OPERABLE status within 7 days or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.
3. With the number of OPERABLE accident monitoring instrumentation channels less than the Minimum Channels operable requirements of Table 3.13.1, restore the inoperable channel(s) to OPERABLE status within 48 hours or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.

E. Wide Range Drywell Pressure Monitor

1. Two Wide Range Drywell Pressure monitor channels shall be continuously indicated in the control room during POWER OPERATION.
2. With the number of OPERABLE accident monitoring channels less than the total Number of Channels shown in Table 3.13.1, restore the inoperable channel(s) to OPERABLE status within 7 days or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.
3. With the number of OPERABLE accident monitoring instrumentation channels less than the Minimum Channels operable requirements of 3.13.1, restore the inoperable channel(s) to OPERABLE status within 48 hours or place the reactor in the SHUTDOWN CONDITION within the next 24 hours.

F. Drywell H₂ Monitor

1. Two drywell hydrogen monitor channels shall be capable of continuously indicating in the control room during POWER OPERATION.

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 in-containment high range radiation monitors shall be OPERABLE at all times except for COLD SHUTDOWN and other times when primary containment is not required.
2. In case of failure of one or more monitors, appropriate actions shall be taken to restore its OPERABLE capability as soon as possible. Also, refer to Table 3.1.1 for any additional action which may be required.
3. If the monitor or monitors are not restored to OPERABLE condition within 7 days after the failure, a special report shall be submitted to the NRC within 14 days following the event, outlining the cause of inoperability, actions taken and the planned 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