

CONTAINMENT SYSTEMS

3/4.6.4 COMBUSTIBLE GAS CONTROL

HYDROGEN ANALYZERS

LIMITING CONDITION FOR OPERATION

3.6.4.1 Two independent containment hydrogen analyzers shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

With both hydrogen analyzers inoperable, restore at least one analyzer to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.1 Each hydrogen analyzer shall be demonstrated OPERABLE by the performance of:

- a. a CHANNEL CHECK at least once per 12 hours;
- b. a CHANNEL FUNCTIONAL TEST at least once per 92 days;
- c. a gas calibration* at least once per 92 days using sample gases containing:
 1. Two volume percent hydrogen (low span), balance Nitrogen, and
 2. Six volume percent hydrogen (high span), balance Nitrogen.
- d. a CHANNEL CALIBRATION at least once per refueling using sample gases containing:
 1. Two volume percent hydrogen (low span), balance Nitrogen, and
 2. Six volume percent hydrogen (high span), balance Nitrogen.

* The hydrogen sensor gas calibration shall consist of all elements of the CHANNEL CALIBRATION, with the exception that only a single point comparison check for reasonableness (by comparison to other installed plant instrumentation) is required to check the hydrogen analyzer temperature and pressure sensors.

CONTAINMENT SYSTEMS

3/4.6.4 COMBUSTIBLE GAS CONTROL

HYDROGEN ANALYZERS

LIMITING CONDITION FOR OPERATION

3.6.4.1 Two independent containment hydrogen analyzers shall be OPERABLE.

APPLICABILITY: MODES 1 and 2.

ACTION:

With one hydrogen analyzer inoperable, restore the inoperable analyzer to OPERABLE status within 30 days or be in at least HOT STANDBY within the next 6 hours.

With both hydrogen analyzers inoperable, restore at least one analyzer to OPERABLE status within 72 hours or be in at least HOT STANDBY within the next 6 hours.

SURVEILLANCE REQUIREMENTS

4.6.4.1 Each hydrogen analyzer shall be demonstrated OPERABLE by the performance of:

- a. a CHANNEL CHECK at least once per 12 hours;
- b. a CHANNEL FUNCTIONAL TEST at least once per 92 days;
- c. a gas calibration* at least once per 92 days using sample gases containing:
 1. Two volume percent hydrogen (low span), balance Nitrogen, and
 2. Six volume percent hydrogen (high span), balance Nitrogen.
- d. a CHANNEL CALIBRATION at least once per refueling using sample gases containing:
 1. Two volume percent hydrogen (low span), balance Nitrogen, and
 2. Six volume percent hydrogen (high span), balance Nitrogen.

* The hydrogen sensor gas calibration shall consist of all elements of the CHANNEL CALIBRATION, with the exception that only a single point comparison check for reasonableness (by comparison to other installed plant instrumentation) is required to check the hydrogen analyzer temperature and pressure sensors.