NRC FORM 366
(7-77)

U. S. NUCLEAR REGULATORY COMMISSION

LICENSEE EVENT REPORT

CONTROL BLOCK: ① (PLEASE PRINT OR TYPE ALL REQUIRED INFORMATION)

0 1 | LICENSEE CODE: N C B E P 1 ② | LICENSE NUMBER: 0 0 - 0 0 0 0 0 - 0 0 ③ | LICENSE TYPE: 4 1 1 1 1 ④ | CAT ⑤

CON'T 0 1 | REPORT SOURCE: L ⑥ | DOCKET NUMBER: 0 5 0 - 0 3 2 5 ⑦ | EVENT DATE: 1 0 1 0 8 1 ⑧ | REPORT DATE: 1 0 3 0 8 1 ⑨

EVENT DESCRIPTION AND PROBABLE CONSEQUENCES ⑩

0 2 During routine surveillance, it was discovered that primary containment atmospheric
0 3 monitor oxygen analyzer, 1-CAC-AT-1263-2, indicated a torus oxygen concentration that
0 4 was 3% higher than was indicated by the other primary containment atmospheric monitor
0 5 oxygen analyzer, 1-CAC-AT-1259-2. On 10/16/81, the 1263 analyzer indicated a drywell
0 6 concentration that was lower than was indicated by the 1259 analyzer. Neither event
0 7 affected the health and safety of the public.
0 8 Technical Specifications 3.3.5.3, 3.6.6.4, 6.9.1.9b

0 9 | SYSTEM CODE: S E ⑪ | CAUSE CODE: B ⑫ | CAUSE SUBCODE: A ⑬ | COMPONENT CODE: I N S T R U ⑭ | COMP. SUBCODE: E ⑮ | VALVE SUBCODE: Z ⑯

⑰ LER/RO REPORT NUMBER | EVENT YEAR: 8 1 | — | SEQUENTIAL REPORT NO.: 0 5 9 | / | OCCURRENCE CODE: 0 3 | REPORT TYPE: L | — | REVISION NO.: 0

ACTION TAKEN: B ⑱ | FUTURE ACTION: C ⑲ | EFFECT ON PLANT: Z ⑳ | SHUTDOWN METHOD: Z ㉑ | HOURS ㉒: 0 0 0 0 | ATTACHMENT SUBMITTED: Y ㉓ | NPRD-4 FORM SUB.: Y ㉔ | PRIME COMP. SUPPLIER: N ㉕ | COMPONENT MANUFACTURER: B 1 3 5 ㉖

CAUSE DESCRIPTION AND CORRECTIVE ACTIONS ㉗

1 0 Moisture buildup in the 1263 analyzer sample lines caused the analyzer's electro-
1 1 magnetic unit to fail and low sample flow which resulted in each of the respective
1 2 events. In each case, the moisture was then purged from the lines. On 10/10/81, a
1 3 new electromagnetic unit was installed, calibrated, and the analyzer returned to ser-
1 4 vice. On 10/16/81, the analyzer was check for calibration, observed for proper operation and returned to service.

1 5 | FACILITY STATUS: E ㉘ | % POWER: 0 9 0 ㉙ | OTHER STATUS ㉚: NA | METHOD OF DISCOVERY: A ㉛ | DISCOVERY DESCRIPTION ㉜: Operator Surveillance

1 6 | ACTIVITY RELEASED: Z ㉝ | CONTENT OF RELEASE: Z ㉞ | AMOUNT OF ACTIVITY ㉟: NA | LOCATION OF RELEASE ㊱: NA

PERSONNEL EXPOSURES
1 7 | NUMBER: 0 0 0 ㊲ | TYPE: Z ㊳ | DESCRIPTION ㊴: NA

PERSONNEL INJURIES
1 8 | NUMBER: 0 0 0 ㊵ | DESCRIPTION ㊶: NA

LOSS OF OR DAMAGE TO FACILITY ㊸
1 9 | TYPE: Z ㊷ | DESCRIPTION: NA

PUBLICITY
2 0 | ISSUED: N ㊹ | DESCRIPTION ㊺: NA

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NRC USE ONLY

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LER ATTACHMENT - RO # 1-81-59

Facility: BSEP Unit No. 1 Event Date: 10/10/81

Each of these events occurred as a result of moisture buildup in the sample line piping of the 1263 monitor analyzer. As presently designed, these monitors encounter significant moisture in their sample flow due to the design of the sample line piping configuration to the monitors.

During the investigation of each event, a calibration check of both monitors showed the 1259 monitor was operating within tolerance and it was showing normal expected indications of oxygen concentration.

On 10/10/81, when the 1263 analyzer sample point was switched from the drywell to the torus, a pressure surge developed in the analyzer sample piping as a result of moisture buildup in the piping. This then caused the analyzer's electromagnetic unit tube assembly test body balls to deflect and produce the erroneous oxygen concentration indication. The moisture was then removed from the torus sample piping by purging the line with nitrogen. A new electromagnetic unit was installed in the analyzer and was calibrated and, following a calibration of the analyzer, it was observed for proper operation and was returned to service.

The 10/16/81 event occurred when moisture accumulation in the 1263 analyzer drywell sample piping condensed and collected in the low point of the piping causing a low sample flow condition which resulted in the indicated oxygen concentrations. The moisture was purged from the piping using nitrogen and, following a calibration check of the analyzer, the 1263 monitor was returned to service indicating as expected. Due to a history of similar events involving moisture problems, a plant modification has been developed to replace these monitors with others of a more reliable design during the next refueling outage. The sample piping to these monitors will also be modified in hopes that the changes made to the piping configuration will help eliminate the source of the moisture problems encountered by the monitors.