NRC Form 366
(9-83)

U.S. NUCLEAR REGULATORY COMMISSION
APPROVED OMB NO. 3150-0104
EXPIRES: 8/31/85

LICENSEE EVENT REPORT (LER)

FACILITY NAME (1)	DOCKET NUMBER (2)	PAGE (3)
Washington Nuclear Plant - Unit 2	0 5 0 0 0 3 9 7	1 OF 0 3

TITLE (4)
Drywell Hydrogen Analyzer calibrated with wrong gas concentration

EVENT DATE (5)			LER NUMBER (6)			REPORT DATE (7)			OTHER FACILITIES INVOLVED (8)	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAMES	DOCKET NUMBER(S)
										0 5 0 0 0
0 8	2 2	8 6	8 6	— 0 2 9	— 0 0	0 9	1 9	8 6		0 5 0 0 0

OPERATING MODE (9)		THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check one or more of the following) (11)			
POWER LEVEL (10)	0 9 4	20.402(b)	20.405(c)	50.73(a)(2)(iv)	73.71(b)
		20.405(a)(1)(i)	50.36(c)(1)	50.73(a)(2)(v)	73.71(c)
		20.405(a)(1)(ii)	50.36(c)(2)	50.73(a)(2)(vii)	OTHER (Specify in Abstract below and in Text, NRC Form 366A)
		20.405(a)(1)(iii)	X 50.73(a)(2)(i)	50.73(a)(2)(viii)(A)	
		20.405(a)(1)(iv)	50.73(a)(2)(ii)	50.73(a)(2)(viii)(B)	
		20.405(a)(1)(v)	50.73(a)(2)(iii)	50.73(a)(2)(x)	

LICENSEE CONTACT FOR THIS LER (12)

NAME	TELEPHONE NUMBER
	AREA CODE
S. L. Washington, Compliance Engineer	5 0 9 3 7 1 7 - 1 2 1 5 0 1 1

COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT (13)

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS		CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO NPRDS	

SUPPLEMENTAL REPORT EXPECTED (14)		EXPECTED SUBMISSION DATE (15)	MONTH	DAY	YEAR
YES (If yes, complete EXPECTED SUBMISSION DATE)	X NO				

ABSTRACT (Limit to 1400 spaces, i.e., approximately fifteen single-space typewritten lines) (16)

The Regulatory Guide 1.97 Drywell Hydrogen Analyzer instruments were calibrated using two and six percent by volume hydrogen gas rather than the zero and twenty-five percent by volume hydrogen gas specified in WNP-2 Technical Specifications. A higher level of safety is achieved by calibrating the instruments using the low hydrogen concentrations because of increased accuracy in the range where operator emergency actions are required. A WNP-2 Technical Specification change to delete the zero and twenty-five percent by volume hydrogen calibration gas requirement has been requested.

The Drywell Hydrogen Analyzer instruments were recalibrated using zero and twenty-five percent by volume hydrogen as currently specified in WNP-2 Technical Specifications.

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TEXT (If more space is required, use additional NRC Form 366A's) (17)

Plant Condition

a) Power Level - 94%
b) Plant Mode - 1 - Plant Operating

Event

On May 23, 1986, the Supply System using an approved procedure calibrated the Regulatory Guide 1.97 Drywell Hydrogen Analyzer (H_2 Analyzer) with a two percent and six percent by volume hydrogen calibration gas. WNP-2 Technical Specification Table 4.3.7.5.1, Item 9, specifies that the Drywell Hydrogen Analyzer (H_2 Analyzer) be calibrated using calibration concentrations of "zero and twenty-five percent hydrogen, balance nitrogen."

During the Spring 1986 Outage, the H_2 Analyzer was replaced with a qualified replacement. Prior to the H_2 Analyzer replacement the Supply System by Letter GO2-86-224, dated March 14, 1986, requested an amendment to WNP-2 Technical Specifications deleting the zero and twenty-five percent calibration gas concentrations from the Table. Engineering was notified of the need to comply with the twenty-five percent gas calibration requirement until the Technical Specification Amendment was approved by the NRC and provided a test connection for that purpose. In parallel with the installation of the H_2 Analyzer the calibration procedures were revised to the engineering specified calibration gas concentrations of two and six percent by volume hydrogen. The Plant Technical Staff recognized the error on August 22, 1986. This event is being reported under 10CFR 50.73 (a)(2)(i)(c) as a deviation from the WNP-2 Technical Specification.

The immediate cause was a procedural error in that the instruments were calibrated with a gas concentration different from that required by WNP-2 Technical Specifications.

The root cause of the event is cognitive personnel error by a utility engineer. The requirement to calibrate using the 25 percent H_2 gas concentration was not communicated to the plant personnel responsible for procedure preparation and to the Plant Operating Committee members responsible for procedure approval.

Immediate Corrective Action

Procedure deviations were written to bring the calibration procedures into compliance with the current requirements of WNP-2 Technical Specifications.

The H_2 Analyzers were recalibrated using the deviated procedures.

The individuals involved in the cognitive personnel error have been counseled concerning the importance of compliance with WNP-2 Technical Specifications.

Safety Significance

None. The Drywell Hydrogen Analyzer calibrated with the two and six percent by volume hydrogen provided greater accuracy in the region of need. The alarm setpoint for high drywell concentration of hydrogen is three point six (3.6) percent. Low level accuracy near the alarm setpoint is needed so that emergency actions can be implemented when required. A large calibration span like the zero to twenty-five percent reduces the overall accuracy of the instruments.

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TEXT *(If more space is required, use additional NRC Form 366A's)* (17)

Similiar Events

None

EIIS Information

Text Reference	EIIS Reference System	EIIS Reference Component
Drywell Hydrogen Analyzer	IK	AC

WASHINGTON PUBLIC POWER SUPPLY SYSTEM

P.O. Box 968 • 3000 George Washington Way • Richland, Washington 99352

Docket No. 50-397

September 19, 1986

Document Control Desk
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555

Subject: NUCLEAR PLANT NO. 2
LICENSEE EVENT REPORT NO. 86-029

Dear Sir:

Transmitted herewith is Licensee Event Report No. 86-029 for WNP-2 Plant. This report is submitted in response to the report requirements of 10CFR50.73 and discusses the item of reportability, corrective action taken, and action taken to preclude recurrence.

Very truly yours,

JV Baker

C. M. Powers (M/D 927M)
WNP-2 Plant Manager

CMP:db

Enclosure:
Licensee Event Report No. 86-029

cc: Mr. John B. Martin, NRC - Region V
Mr. R. T. Dodds, NRC - Site (901A)
Ms. Dottie Sherman, ANI
INPO Records Center - Atlanta, GA
Mr. C. E. Revell, BPA (M/D 399)

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