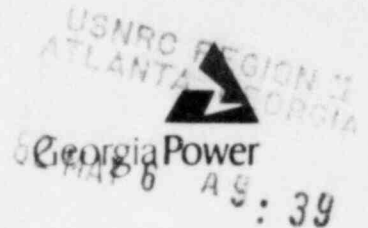


Georgia Power Company
Post Office Box 439
Baxley, Georgia 31513
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Edwin I. Hatch Nuclear Plant



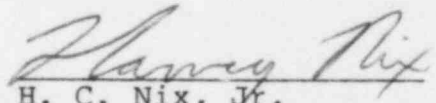
April 30, 1982
PM-82-376

PLANT E. I. HATCH
Licensee Event Report
Docket No. 50-321

United States Nuclear Regulatory Commission
Office of Inspection and Enforcement
Region II
Suite 3100
101 Marietta Street
Atlanta, Georgia 30303

ATTENTION: Mr. James P. O'Reilly

Pursuant to Section 5.9.1.9.d of Plant Hatch Unit 1 Technical Specifications and Sections 3.2 and 5.7.2 of the Hatch Unit 1 Environmental Technical Specifications, please find the attached Supplemental Narrative Summary to Reportable Occurrence Report No. 50-321/1979-021, Rev. 5. The attached report provides supplemental information to the previous submittal of this LER.


H. C. Nix, Jr.
Plant Manager

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April 23, 1982

SUPPLEMENTAL NARRATIVE SUMMARY
TO
LER 50-321/1979-021, REV. 5
EDWIN I. HATCH NUCLEAR PLANT - HATCH 1
NONROUTINE RADIOLOGICAL ENVIRONMENTAL OPERATING
ANOMALOUS MEASUREMENT REPORT

This report which supplements the previous submittals on LER 50-321/1979-021 provides updated data on tritium levels in groundwater samples taken from locations where the average value during the first quarter of 1982 exceeded 3.0 E4 pCi/l which is the report level for tritium in environmental water samples according to Table 3.2-3 of the ETS. There continues to be no significant impact on the public health and safety due to these readings which exceeded the report level. As reported previously, any releases to unrestricted areas are through the outfalls of the drainage system; such releases continue to be small and result in insignificant doses to the public.

There are six test wells from which the tritium levels in the groundwater samples are reportable - four from the CST-1 area (P16, T10, T12 and T18), and two from the area north of the Unit 1 Turbine Building (N9B and T3). Each of these areas is believed to be distinct and hydraulically unconnected to the other. The tritium levels found in samples gathered at these locations during the first quarter, along with the history of the average quarterly levels are presented in Table 1 for the CST-1 area and in Table 2 for the area north of the Unit 1 Turbine Building.

The source of the tritium in the CST-1 area has been attributed to leaks from the condensate transfer pumps. During 1980, a dyke was erected around the CST-1 pumps; this was expected to preclude any future leaks from entering the ground. As reported in the Supplement for the third quarter 1981, the dyke became flooded in July 1981 when a leak occurred to one of the condensate transfer pumps, shortly afterwards the tritium level in nearby groundwater samples increased greatly. But by year's end, those levels had subsided substantially.

On January 22, 1982, the dyke surrounding the condensate transfer pumps again became flooded due to pump leaks. And similar to the occurrence in July 1981, the tritium level in nearby groundwater samples soon showed large increases. This is exemplified by the first quarter data for T12 in Table 1.

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April 23, 1982

The levels at P16 and T18 have been reportable for a few years, ever since samples were collected there. The levels became reportable at T10 through T13 in the third quarter of 1981. The average levels for the first quarter 1982 at T11 and T13 dropped below the report level; these were 2.79 E4 and 1.37 E4, respectively.

A plausible explanation for the increase in the tritium levels of nearby groundwater samples following the flooding of the dyke is that the dyke itself is leaking. On March 3, 1982 the blockouts (the depressions in the dyke floor which accommodates the discharge piping of the pumps) were filled with a sealant. This action may have repaired the suggested dyke leak.

As may be seen in Table 2 for the affected locations north of the Unit 1 Turbine Building, the tritium levels in groundwater samples collected at both N9B and T3 have been reportable for a few years. During this period, fluctuations in the readings have generally been slow. However, the readings at both of these locations increased greatly during the first quarter of 1982 reaching substantially higher levels than had been found previously.

The reason for these increases is not apparent. It might be attributed to slight shifts in the main body of the tritiated groundwater which has been lodged in this area for some time and thereby revealing higher levels at these locations. The problem is being studied.

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Table 1

Tritium Levels at Affected Locations in CST-1 Area

pCi/l

<u>Qtr or Date</u>	<u>P16</u>	<u>T10</u>	<u>T12</u>	<u>T18</u>
<u>QUARTERLY AVERAGE</u>				
2-78	1.44 E5			
3-78	1.54 E5			
4-78				
1-79	1.26 E5			
2-79	9.60 E4			
3-79	7.08 E4	1.59 E3	1.46 E4	6.68 E4
4-79	6.38 E4	5.09 E2	7.83 E2	7.61 E4
1-80	9.18 E4	4.13 E2	9.31 E4	6.84 E4
2-80	1.12 E5	2.78 E3	7.92 E4	8.71 E4
3-80	dry	3.14 E3	1.55 E4	6.36 E4
4-80	dry	6.43 E2	1.07 E4	7.61 E4
1-81	6.22 E4	1.96 E2	5.22 E3	5.91 E4
2-81	5.73 E4	<7.60 E1	7.41 E3	8.29 E4
3-81	8.55 E4	1.70 E5	7.14 E3	7.77 E4
4-81	dry	8.70 E4	1.96 E5	1.27 E5
1-82	1.26 E5	3.90 E4	4.64 E4	1.27 E5
			1.07 E5	1.29 E5
<u>During First Quarter 1982</u>				
1/26	1.16 E5	3.38 E4	3.31 E4	
1/28				8.99 E4
2/19	1.36 E5	3.44 E4	1.52 E5	1.46 E5
3/27	dry	4.89 E4	1.37 E5	1.52 E5

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Table 2

Tritium Levels at Affected Locations North of the Unit 1 Turbine Building

pCi/l		
<u>Qtr or Date</u>	<u>N9B</u>	<u>T3</u>
<u>Quarterly Averages</u>		
3-78	3.45 E3	
4-78	4.49 E3	
1-79	3.42 E4	
2-79	8.50 E4	1.19 E4
3-79	1.38 E5	1.28 E4
4-79	1.71 E5	2.01 E4
1-80	1.73 E5	2.47 E4
2-80	1.79 E5	3.92 E4
3-80	1.64 E5	4.60 E4
4-80	1.13 E5	4.29 E4
1-81	1.06 E5	4.80 E4
2-81	8.17 E4	5.55 E4
3-81	8.47 E4	4.74 E4
4-81	9.77 E4	5.29 E4
1-82	4.20 E5	1.10 E5

During First Quarter 1982

1/26	2.83 E5	6.70 E4
2/19	4.71 E5	1.21 E5
3/03	4.73 E5	
3/19	4.54 E5	
3/27		1.41 E5

Supplement
April 23, 1982