

PHILADELPHIA ELECTRIC COMPANY

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SHIELDS L. DALTROFF
VICE PRESIDENT
ELECTRIC PRODUCTION

January 30, 1980

Re: Docket Nos. 50-277
50-278

Mr. Thomas A. Ippolito, Chief
Operating Reactors Branch #3
Division of Operating Reactors
United States Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Ippolito:

On November 5, 1979, a partial response was submitted to your October 5, 1979 request for additional information with respect to our August 27, 1979 application for amendment to Facility Operating License Nos. DPR-44 and DPR-56 for the Peach Bottom Atomic Power Station Unit Nos. 2 and 3. The proposed amendments involve the use of analog transmitter/trip unit systems for certain engineered safeguard sensors. The requests which we could not respond to previously concerning environmental information are restated below with the necessary information.

1. Provide the interface information specified in the GE Topical Report NEDO-21617-A for each of the four parameters specified in your application for amendment.

Response

Item 5.4.3.1 of GE Topical Report NEDO-21617-A asks for normal operation and post accident temperature and humidity for each location where the retrofit hardware will be located. This information is included in the response to requested information item 2.

2. For each location, state the maximum and minimum abnormal environmental conditions that are expected

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Mr. Thomas A. Ippolito,

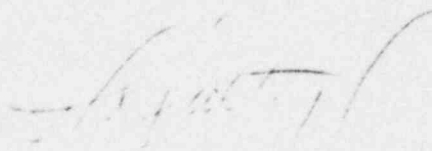
Page 2

during normal, accident, and post-accident situations.
The information should include magnitude and duration.

Response

The required information is supplied in Appendix A which includes Table 1 and Graphs 1 through 4.

Very truly yours,

A handwritten signature in dark ink, appearing to be "A. J. Ippolito", is written over the typed name "A. J. Ippolito".

Enclosure

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APPENDIX A

Table 1

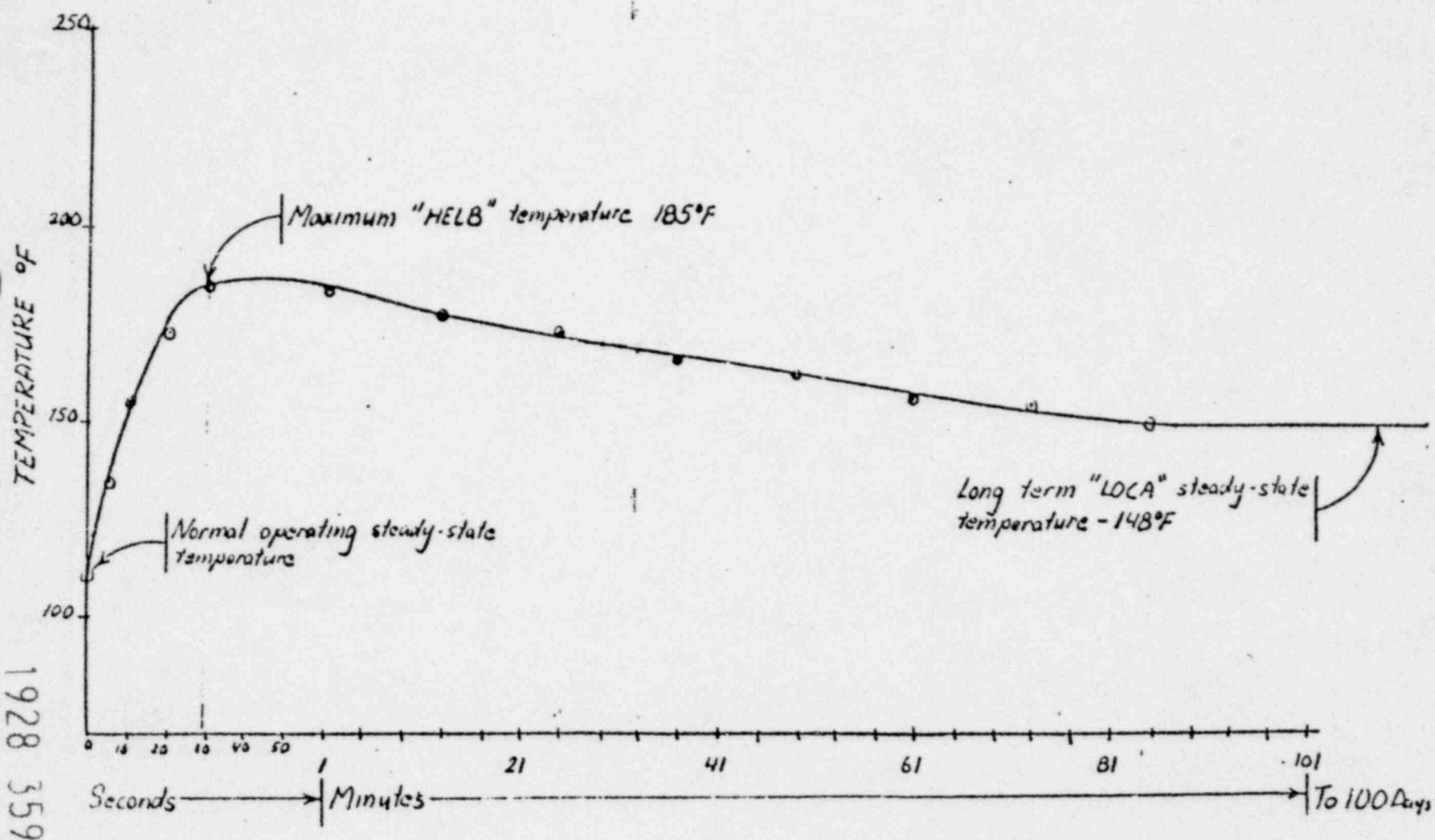
PEACH BOTTOM STATION

Environmental Information by Location					
Location	Condition	Temp (°F)	Press (psia)	Radiation (RADS)	Rel. Humid. (%)
Oper. Area Elev. 165'	Normal	60/105	14.7	1.76 X 10 ² (Note 1)	50
	Accident	185/164 (Note 2)	16.1/14.7 (Note 2)	2.98 X 10 ⁴ (Note 2)	100
	Post Acc.	148 (Note 3)	14.7 (Note 3)	3.00 X 10 ⁴ (Note 3)	100
CRD equip Area Elev. 135'	Normal	60/105	14.7	3.51 X 10 ⁴ (Note 1)	50
	Accident	225/174 (Note 2)	16.6/14.7 (Note 2)	2.98 X 10 ⁴ (Note 2)	100
	Post Acc.	171 (Note 3)	14.7 (Note 3)	6.49 X 10 ⁴ (Note 3)	100

- Notes:
1. For the normal condition radiation dose is a 40 year integrated dose.
 2. For the accident condition the higher temperature corresponds to a HELB and the lower temperature corresponds to a LOCA with loss of ventilation. The high and low pressures correspond to a HELB and a LOCA with loss of ventilation, respectively. Radiation is a LOCA dose for 180 days based on a secondary containment cloud.
 3. For duration see the attached temperature, pressure, and radiation curves. The radiation dose is a total integrated dose combining both the normal and accident doses.

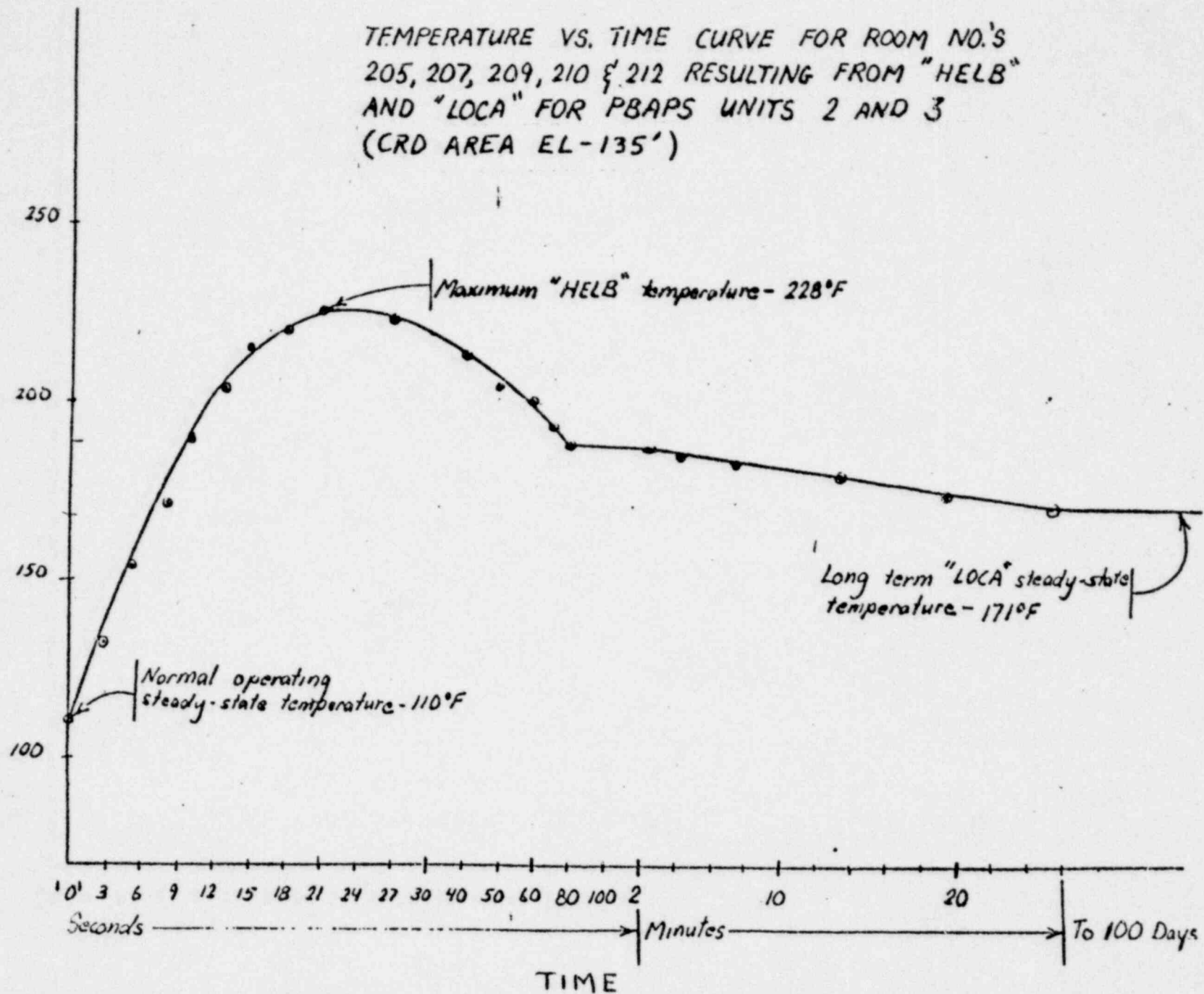
PEACH BOTTOM
ENVIRONMENTAL INFORMATION
GRAPH 1

TEMPERATURE VS. TIME CURVE FOR ROOM NO. 403
RESULTING FROM "HELB" AND "LOCA" FOR PBAPS
UNITS 2 AND 3 (OPERATING AREA EL. 165')



PEACH BOTTOM
ENVIRONMENTAL INFORMATION
GRAPH 2

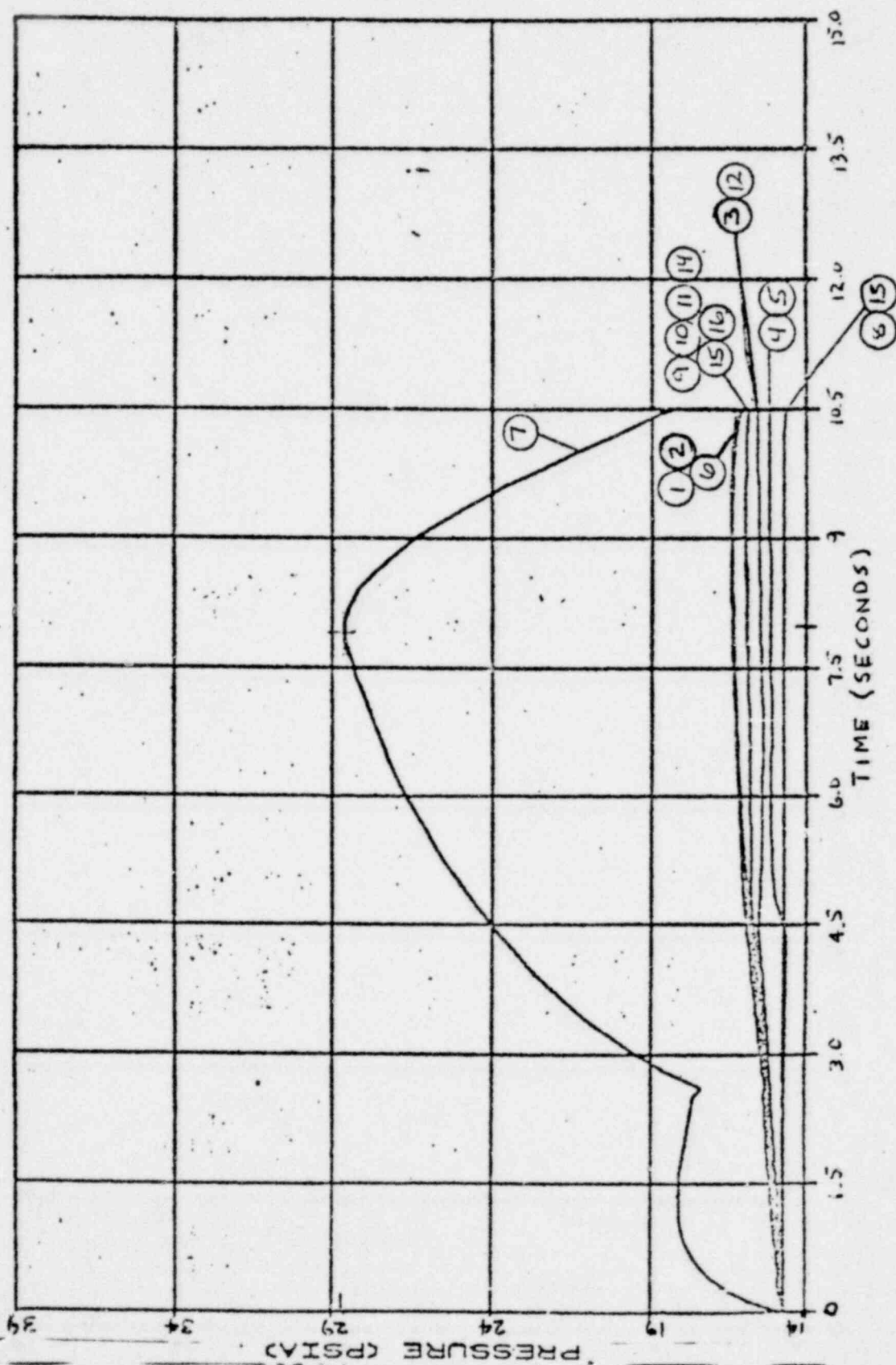
TEMPERATURE VS. TIME CURVE FOR ROOM NO.'S
205, 207, 209, 210 & 212 RESULTING FROM "HELB"
AND "LOCA" FOR PBAPS UNITS 2 AND 3
(CRD AREA EL-135')



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PEACH BOTTOM
ENVIRONMENTAL INFORMATION
GRAPH 3

11187 PBOCIS. MSLB IN MST - STUDY CASE NEW MODEL @ 0.748BLOO



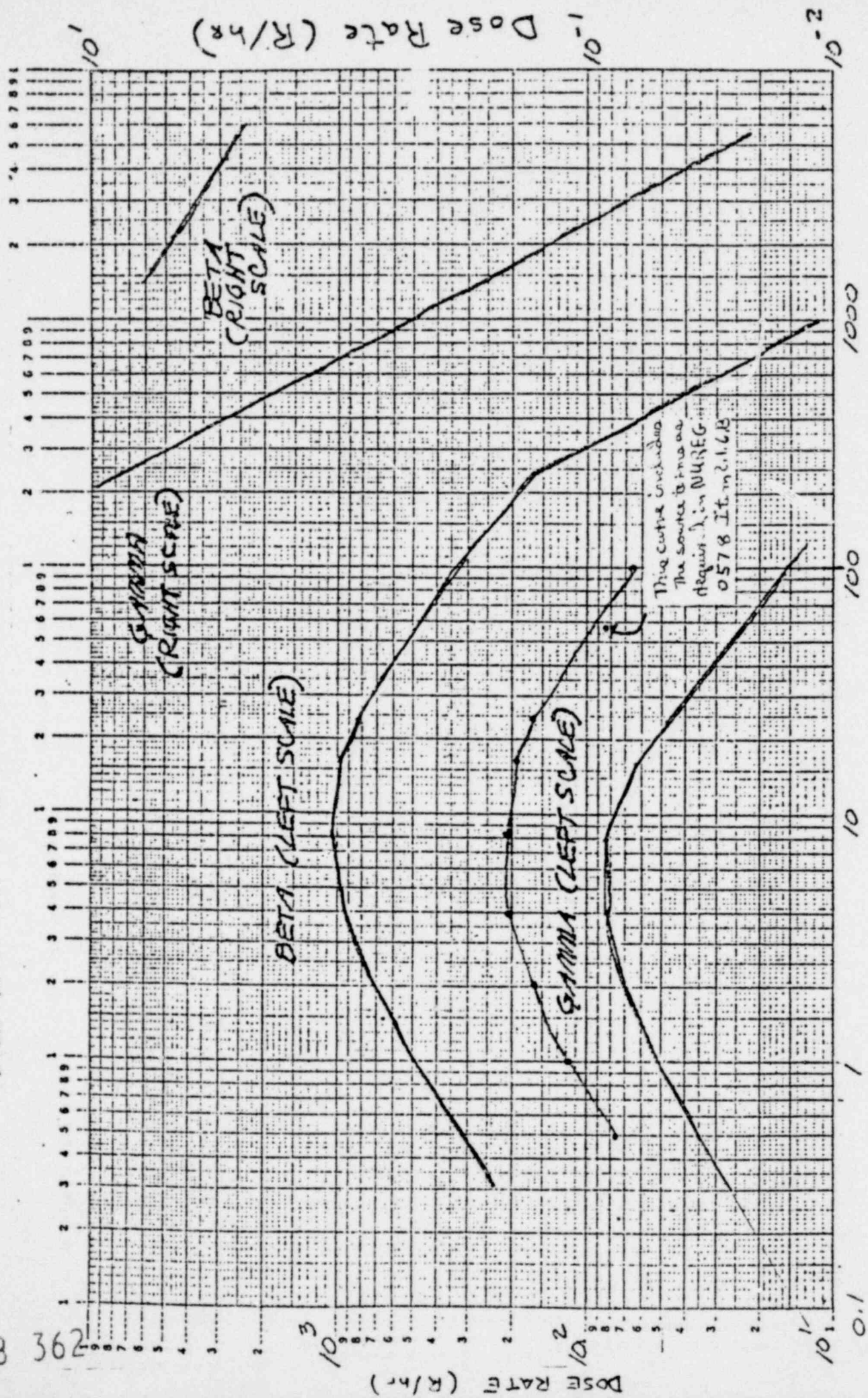
CRD AREA EL 135' - CURVE ②
OPERATING AREA EL 165' - CURVE ③

PEACH BOTTOM

ENVIRONMENTAL INFORMATION

GRAPH 4

DOSE RATE VS. TIME FOR SECONDARY CONTAINMENT CLOUD



POST-LOCA TIME (HOURS)

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