

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER
ENVBIO

TO: Mr. B.C. Rusche

FROM: Iowa Elec. Light & Power Co.
Cedar Rapids, Iowa 52406
Ellery L. HammondDATE OF DOCUMENT
10-27-76DATE RECEIVED
11-2-76☒ LETTER
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PROP

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1 signedDESCRIPTION Ltr adv of problem re precipitate
was lost during the analysis to cause a 0%
yield for the final result

ENCLOSURE

PLANT NAME: ~~ENH~~ Duane Arnold~~DO NOT REMOVE~~
ACKNOWLEDGED

SAFETY

FOR ACTION/INFORMATION

ENVIRO

DHL 11-6-76

ASSIGNED AD:		ASSIGNED AD:
BRANCH CHIEF:	LEAR (5)	BRANCH CHIEF:
PROJECT MANAGER:	SHRA.	PROJECT MANAGER:
LIC. ASST.:	PARRISH	LIC. ASST.:

INTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> REG FILE	SYSTEMS SAFETY	PLANT SYSTEMS	SITE SAFETY &
<input checked="" type="checkbox"/> NRC PDR	HEINEMAN	TEDESCO	ENVIRO ANALYSIS
<input checked="" type="checkbox"/> I & E (2)	SCHROEDER	BENAROYA	<input checked="" type="checkbox"/> DENTON & MULLER
OELD		LAINAS	
GOSSICK & STAFF	ENGINEERING	IPPOLITO	ENVIRO TECH.
<input checked="" type="checkbox"/> MIPC	MACCARRY	KIRKWOOD	<input checked="" type="checkbox"/> ERNST
CASE	KNIGHT		<input checked="" type="checkbox"/> BALLARD
<input checked="" type="checkbox"/> HANAUER	SIHWEIL	OPERATING REACTORS	SPANGLER
HARLESS	PAWLICKI	STELLO	
			SITE TECH.
PROJECT MANAGEMENT	REACTOR SAFETY	OPERATING TECH.	GAMMILL
BOYD	ROSS	EISENHUT	STEPP
P. COLLINS	NOVAK	SHAO	HULMAN
HOUSTON	ROSZTOCZY	BAER	
PETERSON	CHECK	BUTLER	SITE ANALYSIS
MELTZ		<input checked="" type="checkbox"/> GRIMES	<input checked="" type="checkbox"/> VOLLMER
HELTEMES	AT & I		<input checked="" type="checkbox"/> BUNCH
SKOVHOLT	SALTZMAN		<input checked="" type="checkbox"/> J. COLLINS
	RUTBERG		<input checked="" type="checkbox"/> KREGER

EXTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> LPDR: Cedar Rapids	NAT LAB: ANL	BROOKHAVEN NAT LAB	CONTROL NUMBER
<input checked="" type="checkbox"/> TIC:	REG. VIE	ULRIKSON (ORNL)	
<input checked="" type="checkbox"/> NSIC:	LA PDR		
<input checked="" type="checkbox"/> ASLB:	CONSULTANTS		
<input checked="" type="checkbox"/> ACRS / CYS	SENT CAT. B		11121

IOWA ELECTRIC LIGHT AND POWER COMPANY

DUANE ARNOLD ENERGY CENTER

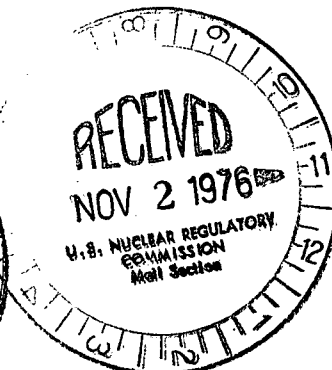
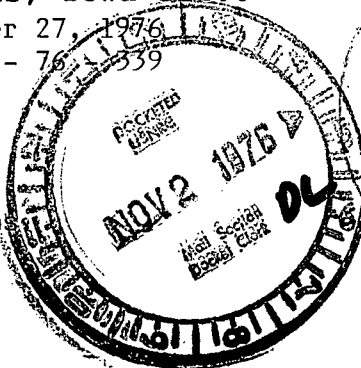
P. O. Box 351

Cedar Rapids, Iowa 52406

October 27, 1976

DAEC - 76-339

Mr. Benard C. Rusche, Director
Office of Nuclear Reactor Regulation
U. S. Nuclear Regulatory Commission
Washington, D.C. 20545



Subject: Environmental Technical Specification
Violation 76-6

File: A-117

50-331

Dear Mr. Rusche:

This report is submitted to you in accordance with the requirements of Appendix B to Operating License DPR-49, Specification 5.4.2.1.

Problem

DAEC is unable to determine the Sr-89 and Sr-90 release for the third quarter of 1976. This is in violation of Table 3.3-2 of the Environmental Technical Specifications.

Investigation

The results of the analysis indicated that the yield of Sr-89 and Sr-90 for the quarter was 0%. Our investigation indicates that, due to technician error, enough precipitate was "lost" during the analysis to cause a 0% yield for the final result. The "loss" of precipitate has been determined to have been caused by using a large diameter (27 cm) filter paper instead of a small diameter (<10 cm) paper which resulted in the following:

1. Precipitate was spread over a large area which allowed some of it to be carried out of the crucible by heat currents during the ashing process.
2. Due to the large volume of paper, it did not dry completely before the ashing process was started. The moisture in the paper flashed to steam, as indicated by snapping noises, and the steam carried some precipitate out with it.

The above resulted in not enough precipitate being left to carry through the rest of the analysis.

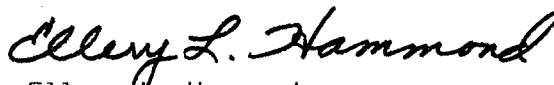
Corrective Action

Since the third quarter releases cannot be determined, DAEC shall average the release results from the second and fourth quarter of 1976 to obtain an estimated release.

The analysis procedure shall be revised to specify that a small diameter filter paper be used and to indicate for which steps extra caution should be observed to prevent recurrence of this problem.

The technician involved has been reinstructed in the importance of performing analyses with care and in accordance with established methods.

Very truly yours,



Ellery L. Hammond
Assistant Chief Engineer
Duane Arnold Energy Center

ELH/MHS/mg

cc: D. Arnold
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L. Liu
D. Wilson
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K. Young
J. Newman
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