

## NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

TO: Mr. George Lear

FROM: Iowa Elec. Light & Power Co.  
Cedar Rapids, Iowa  
Lee LiuFILE NUMBER  
ENVIRODATE OF DOCUMENT  
7-27-76DATE RECEIVED  
8-3-76☒ LETTER  
☒ ORIGINAL  
☐ COPY☐ NOTORIZED  
☒ UNCLASSIFIED

PROP

INPUT FORM

NUMBER OF COPIES RECEIVED

1 signed

DESCRIPTION Ltr furn info on Enviro Tech Specs  
(App. B) for the Duan Arnold Plant...

ENCLOSURE

PLANT NAME: Duane Arnold Plant

Do Not Remove

ACKNOWLEDGED

SAFETY

FOR ACTION/INFORMATION

ENVIRO

DHL 8-5-76

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LIC. ASST.:

(6) LEAR  
SHEA  
PARRISH

ASSIGNED AD:

BRANCH CHIEF:

PROJECT MANAGER:

LIC. ASST.:

REGAN  
BEVAN  
DUNCAN

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

## EXTERNAL DISTRIBUTION

<input checked="" type="checkbox"/> LPDR Cedar Rapids, Iowa	NAT LAB:	BROOKHAVEN NAT LAB
<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 16 CYS	SENT TO L.A.	

CONTROL NUMBER

7846

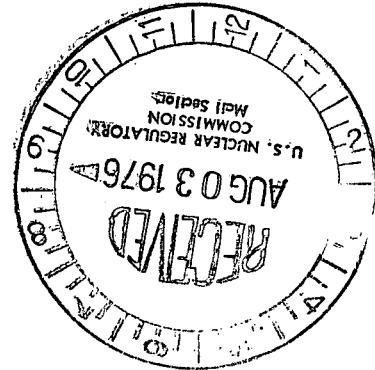
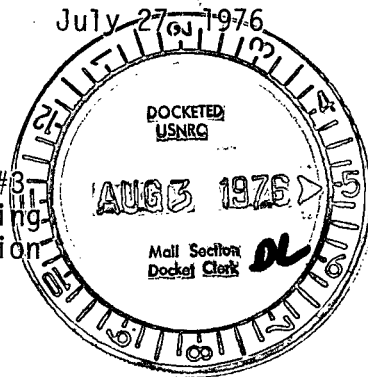
## IOWA ELECTRIC LIGHT AND POWER COMPANY

General Office

CEDAR RAPIDS, IOWA

July 27, 1976

Mr. George Lear  
Operating Reactors Branch #3  
Division of Reactor Licensing  
Nuclear Regulatory Commission  
Washington, D. C. 20555



Dear Mr. Lear:

The purpose of this letter is to present our interpretation of various items in the Environmental Technical Specifications (Appendix B to License DPR-49) for the Duane Arnold Energy Center. During plant inspections by the Region III Office of Inspection and Enforcement there have been differences of agreement in interpretation of the Technical Specifications and Region III has asked that we present our interpretation to you to see if it meets the intent of the Technical Specifications.

The items under discussion with the Region III Office of Inspection and Enforcement are as follows:

1. Specifications 2.1, 2.2 and 2.3 - The Environmental Technical Specifications (ETS) do not specify a tolerance for the surveillance frequencies specified in Appendix B.

It is proposed to use the same tolerance as specified in Appendix A as follows:

"Surveillance Frequency - Periodic surveillance tests, checks, calibrations and examinations shall be performed within the specified surveillance intervals. These intervals may be adjusted plus or minus 25%. The operating cycle interval as pertaining to instrument and electrical surveillance shall never exceed 15 months. In cases where the elapsed interval has exceeded 100% of the specified interval, the next surveillance interval shall commence at the end of the original specified interval."

2. Specification 3.3.1.B.2 states as follows:

"Prior to release of each batch of liquid effluent, a sample shall be taken from the batch and analyzed for gross radioactivity ( $\beta, \gamma$ ) and the concentration of each significant gamma energy peak to demonstrate compliance with 2.3.1.B using the circulating water flow rate at the time of discharge."

We interpret "circulation water" to mean the dilution water flow which includes blowdown and radwaste dilution flow. The circulating water itself is not used as dilution flow.

July 27, 1976

3. Specification 2.3.1.C.1 contains a definition as follows:

"MPC<sub>i</sub> = maximum permissible concentration for isotope i as defined in 10 CFR Part 20, Appendix B, Table II, Column 1."

We interpret this as follows:

$$MPC_i = \frac{\text{Total Concentration}}{\frac{C_A}{MPC_A} + \frac{C_B}{MPC_B} + \dots}$$

where MPC<sub>A</sub>, MPC<sub>B</sub>, etc., are maximum permissible concentrations for isotopes A, B, etc., as defined in 10 CFR Part 20, Appendix B, Table II, Column 1."

This interpretation is necessary in order to determine MPI<sub>i</sub> when more than one isotope is present.

4. Specification 2.3.1.C.2 contains a formula for combined maximum stack release rate and ventilation release rate. The signs "≤" should be added so that the formula reads as follows:

$$\frac{Q_s}{1.3 \times 10^{-6}} + \frac{Q_v}{1.8 \times 10^{-7}} \leq 1.0$$

5. Specification 2.3.1.C.4 states as follows:

"If the limits of 2.3.1.C.1, 2.3.1.C.2 or 2.3.1.C.3 are exceeded, appropriate corrective action such as an orderly reduction of power shall be initiated to bring the releases within the limit."

We interpret this to be as follows:

"If the limits of 2.3.1.C.1, 2.3.1.C.2 or 2.3.1.C.3a are exceeded, appropriate corrective action such as an orderly reduction of power shall be initiated to bring the releases within the limit."

Specification 2.3.1.C.3.b gives reporting requirements to be initiated if certain percentages of the limits required by Specifications 2.3.1.C.1 and 2.3.1.C.2 are exceeded and are not limits on the DAEC which, if they are exceeded, require a reduction of power.

6. Specification 3.3.1.C.3.d states as follows:

"If the gaseous waste monitors indicate an increase of greater than 50% in the steady state fission gas release after factoring out increases due to power changes."

We interpret this to be as follows:

"If the post-treatment gaseous waste monitors indicate an increase of greater than 50% in the steady state fission gas release after factoring out increases due to power changes."

Specification 3.3.1.C.3.d is one of the conditions which indicate that an isotopic analysis shall be made of a representative sample of gaseous activity, excluding tritium, at the discharge of the Steam Jet Air Ejector. As the post treatment monitor has the capability to shift the "treat" mode and/or isolate the offgas system, it is appropriate that this monitor has operability requirements. A specification requiring increased surveillance should be based on monitors with operability requirements.

7. Specification 3.3.1.C.5 states as follows:

"All effluent gas monitors shall be calibrated at least quarterly by means of a built-in check source and annually with a known radioactive source. Each monitor shall have an instrument channel test at least monthly and sensor check at least daily."

We interpret this to mean as follows:

"All effluent gas monitors (the final monitor in each release path and/or those monitors with operability requirements) shall be calibrated at least quarterly by means of a built-in check source and annually with a known radioactive source. Each monitor (the final monitor in each release path) shall have an instrument channel test at least monthly and sensor check at least daily."

8. Specification 2.3.1.C.8 states, in part, as follows:

"One reactor building exhaust vent and one plant stack monitoring system shall be operable, and the off-gas radiation monitors shall be operable or operating whenever steam pressure is available to the air ejectors....."

We interpret this to be as follows:

"One reactor building exhaust vent monitor, one plant stack monitor and both post-treatment monitors shall be operable or operating as defined in Appendix A, Specifications 3.2.D.1.a and b whenever steam pressure is available to the air ejectors....."

This interpretation is necessary to clarify what comprises a monitoring system.

Mr. George Lear

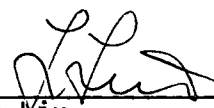
-4-

July 27, 1976

These interpretations have been reviewed by the DAEC Operations Committee and Safety Committee which have found that these interpretations do not involve a significant hazards consideration. These items are not being submitted as proposed Technical Specification changes at this time since Iowa Electric contemplates revising Appendix B to License DPR-49 after issuance of final staff guidance for Technical Specifications in accordance with Appendix I to 10 CFR Part 50.

Iowa Electric Light and Power Company

By

  
Lee Liu

Vice President-Engineering

LL/OCS/D

cc: D. Arnold  
J. Newman  
J. Keppler  
J. Shea  
R. Bevan