11/16/81

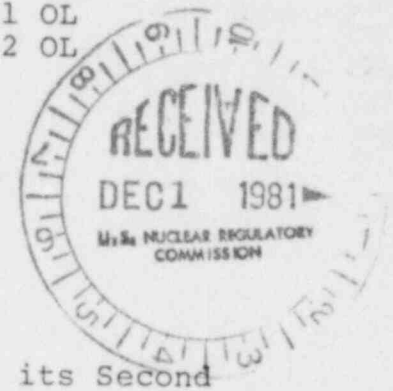
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

'81 NOV 25 P3:09

OFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCH

IN THE MATTER OF	)	
ILLINOIS POWER COMPANY,	)	
SOYLAND POWER COOPERATIVE, INC.	)	
and WESTERN ILLINOIS POWER	)	
COOPERATIVE, INC.	)	
	)	Docket Nos. 50-461 OL
	)	50-462 OL
(Operating Licenses for Clinton	)	
Power Station, Units 1 and 2)	)	



THE STATE OF ILLINOIS'
SECOND SET OF INTERROGATORIES
TO NRC STAFF

The State of Illinois (Illinois) propounds its Second Set of Interrogatories to the Nuclear Regulatory Commission (NRC) Staff, pursuant to Section 2.720(h)(2)(ii) of the NRC Rules of Practice. Each interrogatory must be answered fully in writing, under oath or affirmation, and must include all relevant information known to the NRC Staff. Each answer must clearly indicate the interrogatory to which it responds. Pursuant to Section 2.740(e) of the NRC Rules of Practice NRC Staff must supplement responses to interrogatories under certain circumstances when new or different information becomes available. If it cannot answer one or more of the interrogatories in full, after exercising due diligence, state so and answer to the extent possible, specifying the inability to answer the remainder and stating when it expects to answer the unanswered portions. Answers to these interrogatories must be served upon Illinois by no later than December 15, 1981.

D503
S
1/1

I. Definitions and Instructions

1. "And" or "or" is construed conjunctively and disjunctively so as to allow for broad answers to each interrogatory.

2. "CPS-1" refers to the Clinton Power Station, Unit 1.

3. "Document" means the original and non-conforming copies of written, printed, typed or graphic material of any kind or character, including, but not limited to, correspondence, letters, telegrams, memoranda, notes, records, minutes, contracts, agreements, records, studies, pamphlets, books, articles, treatises, records or notations of personal conversations or conferences, inter-office communications, micro-film, bulletins, circulars, blue prints, plans, drawings, photographs, teletype messages, invoices, tape recordings, and work-sheets, together with all copies of said documents by whatever means made, in the custody, care, possession or control of any officer, director, employee, agent, consultant, attorney or representative of NRC Staff. Identification of copies of the original is necessary if there is material in the original or a copy that is not in other copies or the original.

4. "Identify", when used with respect to a document, means to state its date, author, addressee, type of document, present location and custodian, and brief description of its contents. If any such document was, but is no longer,

in NRC Staff's custody, control, or possession state what disposition was made of it.

5. "Identify", when used with respect to a person, means to state his or her full name, business or home address, and occupation or position.

6. "Person" means an individual, agent, partnership, firm, company, consultant, corporation, association, political sub-division, governmental agency, or any other legal entity, or its legal representative, agency or assign.

7. If NRC Staff refuses to answer any interrogatory, or any part of any interrogatory, because it claims an alleged privilege, it shall identify, to the extent consistent with its claim, the information or document claimed to be privileged and state the reason for its claim.

II. Interrogatories

A. General

1. Identify all persons who have assisted in any way in the preparation of each answer to each interrogatory below and describe the substance of each person's assistance.

2. Identify all documents that were relied upon to provide an answer to each interrogatory below, and describe the substance of each document so used.

B. Contention 2

3. State whether the number of persons on the inspection staff of Baldwin Associates' (BA) Department of Quality Control meets NRC requirements.

4. State whether NRC Staff has ever received any complaint concerning IP's or BA's piping department Quality Assurance (QA)/Quality Control (QC) procedures. If so, for each complaint:

   a) identify the person who has made the complaint;

   b) describe the substance of the complaint;

   c) describe the corrective action, if any, that NRC Staff required; and

   d) identify all documents related to the complaint.

5. State whether NRC Staff has ever received any complaint concerning IP's or BA's small bore design QA/QC procedures. If so, for each complaint:

   a) identify the person who has made the complaint;

   b) describe the substance of the complaint;

   c) describe the corrective action, if any, that NRC staff required;

   d) identify all documents related to the complaint.

6. State and explain NRC Staff's position or whether IP's QA system for the documentation of procurement and specification requirements meets NRC requirements.

7. State and explain NRC Staff's position on whether IP's system of using travelers to detail installation and

inspection requirements meets NRC requirements.

8. State and explain NRC Staff's position or whether IP's system of inspecting safety-related pipe hangars meets NRC requirements.

9. State and explain NRC Staff's position or whether IP's system to ensure that welders are familiar with welding procedures and parameters meets NRC requirements.

10. State and explain NRC Staff's position or whether IP's system of correlating IP audit findingsto the necessary corrective actions meets NRC requirements.

11. State and explain NRC Staff's position or whether IP's system of controlling the time taken between the completion and QA/QC inspection of work meets NRC requirements.

12. Identify all documents specifically calling into question the judgment, experience, capability or commitment to quality of IP to the construction or proposed operation of CPS-1.

13. State whether NRC Staff has any knowledge of any IP, BA or S&L employee resigning his position or otherwise being terminated on account of disagreement or dissatisfaction with the quality of construction or engineering work, or management decisions or policies relating to the construction or proposed operation of CPS-1, and, if so, identify documents or otherwise provide details pertaining to any such occurrences.

14. State whether NRC Staff has any knowledge of any IP, BA or S&L employee lodging a complaint concerning disagreement or dissatisfaction with the quality of construction or engineering work, or decisions or policies relating to the

construction or proposed operation of CPS-1, which complaint did not result in the resignation or termination of that employee, and, if so, identify documents or otherwise provide details pertaining to any such occurrences.

C. Contention 10

15. State the NRC Staff's position on how IP plans to test the following systems of the ECCS during operation of CPS-1:

    a) the pressure differential of the low-pressure core spray (LPCS);

    b) the flow rate of the LPCS;

    c) the pressure differential of the high-pressure core spray (HPCS); and

    d) the flow rate of the HPCS.

16. State the NRC requirements for the testing or measurement of the core spray sparger of the ECCS to determine nozzle angles and individual bundle flows.

17. State the NRC Staff's position on IP's conclusion that the worst single failure/break type combination is the HPCS line break of approximately 0.02 feet^2 and the failure of the LPCS diesel generator that powers one LPCS pump and one low-pressure coolant injection (LPCI) pump. Explain the basis for this position.

18. State the NRC Staff's position on IP's conclusion that the worst single failure/break type combination, referred to in the interrogatory above, will yield the highest peak cladding temperature of approximately 2085^{o} F of all cases affected by LPCI diversion at 10 minutes. Explain the basis for this position.

19. Explain what uncertainty exists as to the appropriateness of the reduction factors used by GE in its burst strain model to average cladding strain.

    a) What affect will a change in the reduction factor of 2.8 for fuel bundle interior rods have on this model?

    b) What affect will a change in the reduction factor of 4.1 for fuel bundle peripheral rods have on this model?

20. Describe what supplemental analysis will be performed with the NUREG-0630 models for the GE ECCS model.

21. Describe what revisions to the GE cladding models will be required, and state what affect these revisions will have on these models.

22. Describe how operation of the ECCS at CPS-1 has been verified for worst-case, design-basis accident conditions.

    a) State whether this verification has been achieved by actual, operational tests.

23. Describe how operation of the ECCS at CPS-1 has been verified for worst-case, anticipated transient without scram conditions.

    a) State whether this verification has been achieved by actual, operational tests.

24. Describe the classification of the automatic depressurization system (ADS). State whether:

a) the ADS is safety-grade;

b) the ADS is classified as important to safety; and

c) the relief valves and their controls and instruments, which are used in conjunction with ADS, are classified as safety-grade.

25. Identify all documents of communication between NRC Staff and GE regarding the CE ECCS model.

26. Identify all documents of communication between NRC Staff and IP regarding the GE ECCS model.

D. Contention 12

27. State the NRC Staff position on IP's conclusion that the dose rate exposure at the operator location due to the movement of fuel assemblies is a few million per hour (mrem/hr).

28. State the NRC Staff position on IP's determination that the dose rates in the accessible area of the dry-well, in the vicinity of the refueling pool bellows, will not exceed 16 mrem/hr.

29. State the NRC Staff position on IP's conclusion that the contact dose rate on the shielding surrounding the full transfer tube is a few mrem/hr.

30. State what action NRC will require IP to take in the event that a spent fuel load becomes stuck in the tube during transfer.

31. State what action NRC will require IP to take in the event of an equipment malfunction during transfer of a spent fuel load in the tube.

Respectfully submitted,

TYRONE C. FAHNER
Attorney General
State of Illinois

BY: Philip L. Willman

PHILIP L. WILLMAN
Assistant Attorney General
Environmental Control Division
188 West Randolph Street
Suite 2315
Chicago, Illinois 60601
[312] 793-2491