UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	§	
	§	
HOUSTON LIGHTING & POWER COMPANY	§	Docket No. 50-466
	§	
(Allens Creek Nuclear Generating Station, Unit 1)	§	

MOTION TO COMPEL FURTHER ANSWERS
FROM INTERVENOR McCORKLE

I.

Houston Lighting & Power Company (Applicant) requests the Board to issue an order as described herein compelling further answers by Intervenor McCorkle to certain of Applicant's interrogatories and requiring that all of Ms. McCorkle's answers to interrogatories be resubmitted under oath.

II.

On July 3, 1979, Applicant served its second set of interrogatories and requests for production of documents on Ms. Brenda McCorkle. Ms. McCorkle did not file the answers to these interrogatories within the time required by 10 CFR § 2.740b(b), and on August 7, 1979, the Applicant filed a motion requesting the Board to issue an order compelling Ms. McCorkle to answer Applicant's second interrogatories. The Board issued an order on August 27, 1979,

granting Applicant's motion and requiring Ms. McCorkle to respond within ten days after service of the order. On September 6, 1979, Ms. McCorkle served her answers, a copy of which is attached hereto.

As can be seen by examination of the answers Ms. McCorkle did not include the affidavit required by the Commission's Rules of Practice. Specifically, 10 CFR § 2.740b(b) provides that interrogatories should be answered separately and fully in writing under oath or affirmation. Absent the proper oath or affirmation Ms. McCorkle's answers to Applicant's second interrogatories are manifestly deficient and Ms. McCorkle should be required to provide answers to the interrogatories under the oath or affirmation required by § 2.740b(b).

III.

Aside from deficiencies as to the form of Ms. McCorkle's answers, a number of her answers are deficient as to substance, and Applicant respectfully requests that the Board compel further answers as hereinafter described. Applicant's Interrogatory A was as follows:

1259 314

"Interrogatory A - McCorkle Contention 9:

1. McCorkle Contention 9 states that '[n]o plan has been developed to protect the plant operators from the danger of poisoning from gases such as chlorine....'

a. State why the protection provisions described in PSAR Sections 6.4 and 9.4, including chlorine detectors, automatic isolation, control room leak tightness and self-contained breathing apparatus does not provide adequate protection against chlorine poisoning.

b. What provisions, in addition to those described in PSAR Sections 6.4 and 9.4, must be added in order to constitute an acceptable 'plan'?

c. At page 6-14 of Supplement No. 2 to the Safety Evaluation Report (hereinafter 'SER Supp. 2') the NRC Staff concluded that the plant's toxic gas protection is acceptable. State each fact which to your knowledge demonstrates that this conclusion is in error.

d. Specify the facts upon which you rely in proving that Applicant's toxic gas protection design is not in compliance with Regulatory Guide 1.95. State which provisions of Regulatory Guide 1.95 are not being complied with, and every reason, with every fact supporting these reasons, why you believe that the pertinent design is in noncompliance.

2.a. Which toxic gases other than chlorine should the control room atmosphere be protected against?

b. State how you determined that such gases, if any, could be present at the control room air intakes."

Ms. McCorkle's answer was as follows:

"1.a. Chlorine detectors alone are not sufficient. Other gases from outside the plant may enter and contaminate the operators.

b. Intervenor objects to this interrogatory on the basis that it is not intervenor's responsibility to devise plans for HL&P; but is the responsibility of the proponent of the facility.

c. Recently, a large sulfur [sic] well caught fire near the proposed site. With this sort of accident near the facility and the wind blowing in the direction of the facility, there could be great danger for the personnel within.

d. I do not have Reg. Guide 1.95, so at present am unable to answer this question.

2.a. All toxic gases which could get into the control room, including gases from wells located nearby and toxic chemicals being transported on the rail line nearby.

b. The wind could carry the gases from their point of origin."

As can be seen from Applicant's Interrogatories A.1 and A.2, Applicant sought information from Ms. McCorkle relating to her allegation that "no plan has been developed to protect the plant operators from the danger of poisoning from gases such as chlorine." Applicant's design does in fact provide for protective devices to prevent plant operators from being effected by poisonous gases such as chlorine. Applicant does not believe that Ms. McCorkle's answers contain any information which facilitates the Applicant in understanding her contention. Accordingly, the Applicant will seek further information from Ms. McCorkle by further interrogatories rather than burden the Board at this point. However, on the most fundamental question contained in the Applicant's answers, Interrogatory A.1(b), Ms. McCorkle objected to the interrogatory on "the basis that it is not intervenor's responsibility to devise plans for HL&P; but is the responsibility of the proponent of the facility." This objection is a clear illustration of the necessity for this motion. If Ms. McCorkle is allowed to frustrate Applicant's efforts at discovery through such objections the discovery process will be totally frustrated and Applicant's efforts to seek further clarification and information will be seriously jeopardized.

1259 316

Applicant does, in fact, have a specific plan to protect against poisonous gases leaking into the control room, and Applicant attempted to elicit from Ms. McCorkle what information she had which indicated these plans were deficient. Clearly, the most straight-forward manner to elicit such information is to ask Ms. McCorkle what changes she would make in Applicant's plan, and this was the question clearly posed by Interrogatory A.1(b). Ms. McCorkle should be ordered to either state that she has a plan for improvement of Applicant's current plans or state that she does not know what the deficiencies are or how to improve upon Applicant's plan.

Applicant's Interrogatory B was as follows:

"Interrogatory B - McCorkle Contention 14:

1. This contention states that the fuel rods are not safe because of '. . . hydriding . . . .'

a. Define hydriding and explain how it causes clad failures and higher off-gas activities.

b. What is the source of hydrogenous impurities that you contend will cause hydriding.

c. What engineering specifications on hydrogenous impurities do you contend are necessary to prevent hydriding?

d. Is the hydrogen getter material placed in all fuel rods ineffective? If so, state every reason, and every fact supporting these reasons, why the hydrogen getter does not prevent hydriding.

2. This contention also states that the fuel rods are not safe because of '. . . fuel densification . . . .'

a. Define fuel densification and explain how it will increase in power spikes and heat generation rate.

1259 317

b. What changes in linear heat generation rate caused by densification will render the fuel rods 'not safe'? State in answering this question what alteration in linear heat generation rate you expect over the lifetime of a fuel rod and how this alteration will affect fuel rod integrity.

c. What changes in the probability of local power spikes caused by densification will render the fuel rods 'not safe'? State in answering this question what increase in anticipated localized spikes you expect and how this increase will affect fuel rod integrity.

d. State whether densification will have other effects on fuel rod thermal and mechanical performance. Identify each of these effects and state every reason, and every fact supporting these reasons, why these effects will impact fuel rod safety."

Ms. McCorkle's answer was as follows:

"1.a. Hydriding is the chemical combination of hydrogen with other elements, especially active metals, forming ironic compounds. The reaction with the fuel rod cladding inner surfaces causes cracks and holes in the cladding which allows the radioactive gases inside the fuel rods to escape.

b. Any compounds that contain hydrogen, especially water vapor.

c. All hydrogen must be removed from the plant site that could get inside the fuel rods. The fuel rods should be assembled in a completely hydrogen free environment.

d. It may not be ineffective in all fuel rods, but it is not successful in all fuel rods either.

2.a. Fuel densification is the shrinking of the volume of the UO_2 fuel pellets in the fuel rods.

b. An increase that causes the fuel to melt in a local area. Most of the change is early in the operating life of the fuel rods, but the total change depends on the construction of the fuel pellets.

c. Any increase will make the fuel rods unsafe.

1259 318

d. Yes, the heat generated can't be transferred to the reactor water so the electricity generated will be less. The fuel rods must collapse causing radioactive leaks."

Interrogatory B.1 sought information with respect to Ms. McCorkle's contention on hydriding of fuel rods. Ms. McCorkle was asked, for example, whether the hydrogen getter material placed in fuel rods is ineffective and, if so, why. Ms. McCorkle's answer was that "it may not be effective in all fuel rods, but it is not successful in all fuel rods either." This answer is clearly insufficient and Ms. McCorkle should be ordered to state with specificity why the hydrogen getter does not prevent hydriding, as was requested in Interrogatory B.1(d).

Interrogatories B.2(a) and B.2(b) were partially answered. However, Ms. McCorkle failed to explain how fuel densification will increase power spikes and heat generation rate; nor did Ms. McCorkle provide the alteration in linear heat generation rate expected over the lifetime of a fuel rod with an explanation as to how this alteration will effect fuel rod integrity. This information was clearly requested in Interrogatories B.2(a) and B.2(b). Ms. McCorkle filed no objection to these interrogatories and she should be required to answer them now.

1259 319

Ms. McCorkle again provided a partial answer to Interrogatory B.2(c), but failed to answer that part of the interrogatory calling for definition of the increase in anticipated localized spikes and how such increase would effect fuel rod integrity. Again, Ms. McCorkle filed no objection and should be required to answer this part of the interrogatory. Applicant's Interrogatory C was as follows:

"Interrogatory C - [illegible]le Contention 17:

1. This con[illegible] states that '[t]he containment as designed will allow [illegible]sive leakage to bypass the filtration systems . . . .'

a. What technical specification on bypass leakage is necessary to prevent 'excessive' leakage?

b. What criteria should be used to judge whether containment leakage is 'excessive'? State in detail each quantitative or qualitative criterion used in your assessment.

c. Will unfiltered leakage of 20% of the total containment leakage cause the total post accident offsite doses to exceed 10 CFR 100 guidelines? Will 10% unfiltered leakage exceed the guidelines? 5%? If the answer to any or all of these is yes, state every reason, and every fact supporting these reasons, why this amount of unfiltered leakage will exceed the Part 100 guidelines.

2. This contention also states that 'the filter absorber [sic] may start a fire by auto-ignition, yet there is no water spray to prevent such auto-ignition as required by NRC regulation [sic] Guide 1.52.'

a. What is the source of heat which will cause absorber auto-ignition?

b. What temperature limit will safely maintain the absorber material below the auto-ignition point?

1259 320

c. Are water sprays the only cooling system acceptable under the guidance provided in Regulatory Guide 1.52? If so, specifically identify that portion of Regulatory Guide 1.52 which so indicates."

Ms. McCorkle's answer was as follows:

"1.a. Less than 1% of the total containment leakage and less than 1 cubic foot per hour.

b. If it allows more than 1% of the radioactive containment air to bypass the charcoal absorbers.

c. All are yes. It is larger than 1%. In addition 10CFR100 [sic] will be changed to greatly reduce the allowed amount of radiation to escape.

2.a. The weather and the heat generated in the reactor as well as the heat from the radioactivity in the absorber.

b. 10° C

c. No, a refrigeration system that can keep the temperature of the exhaust gases below 10° C at all times."

Interrogatories C.1 and C.2 sought information with respect to Ms. McCorkle's contention related to the inadequacy of the Applicant's filtration system. In particular, Interrogatory C.1(c) sought information with respect to the expected leakage rate and an answer as to what the facts were with respect to whether these expected leakage rates would exceed the Part 100 guidelines. Rather than answer how the Part 100 guidelines would be exceeded, Ms. McCorkle answered that the Part 100 guidelines "will be changed to greatly reduce the allowed amount of radiation to escape." Obviously this is not a responsive answer. Applicant clearly sought information from Ms. McCorkle as to what

1259 221

she anticipated the leakage rates would be, and given those leakage rates, how would such unfiltered leakage exceed the Part 100 guidelines. Her answer is not responsive and she should be required to either provide the information or state that she does not know.

Respectfully submitted,

J. Gregory Copeland

J. Gregory Copeland
C. Thomas Biddle, Jr.
Charles G. Thrash, Jr.
3000 One Shell Plaza
Houston, Texas 77002

Jack R. Newman
Robert H. Culp
1025 Connecticut Ave., N.W.
Washington, D. C. 20036

ATTORNEYS FOR APPLICANT
HOUSTON LIGHTING & POWER COMPANY

OF COUNSEL:

BAKER & BOTTS
3000 One Shell Plaza
Houston, Texas 77002

LOWENSTEIN, NEWMAN, REIS,
AXELRAD & TOLL
1025 Connecticut Ave., N.W.
Washington, D. C. 20036

1259 322

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	§	
	§	
HOUSTON LIGHTING & POWER COMPANY	§	Docket No. 50-466
	§	
(Allens Creek Nuclear Generating	§	
Station, Unit 1)	§	

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Applicant's Motion to Compel Further Answers from Intervenor McCorkle in the above-captioned proceeding were served on the following by deposit in the United States mail, postage prepaid, or by hand-delivery this 14th day of September, 1979.

Sheldon J. Wolfe, Esq., Chairman
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Dr. E. Leonard Cheatum
Route 3, Box 350A
Watkinsville, Georgia 30677

Mr. Gustave A. Linenberger
Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

Chase R. Stephens
Docketing and Service Section
Office of the Secretary of the
Commission
U.S. Nuclear Regulatory Commission
Washington, D. C. 20555

R. Gordon Gooch, Esq.
Baker & Botts
1701 Pennsylvania Avenue, N. W.
Washington, D. C. 20006

Richard Lowerre, Esq.
Assistant Attorney General
for the State of Texas
P. O. Box 12548
Capitol Station
Austin, Texas 78711

Hon. Charles J. Dusek
Mayor, City of Wallis
P. O. Box 312
Wallis, Texas 77485

Hon. Leroy H. Grebe
County Judge, Austin County
P. O. Box 99
Bellville, Texas 77418

Atomic Safety and Licensing
Appeal Board
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555

Atomic Safety and Licensing
Board Panel
U.S. Nuclear Regulatory
Commission
Washington, D. C. 20555

1259 323

Steve Sohinki, Esq.
Staff Counsel
U. S. Nuclear Regulatory Commission
Washington, D. C. 20555

John F. Doherty
4438 1/2 Leeland
Houston, Texas 77023

Madeline Bass Framson
4822 Waynesboro Drive
Houston, Texas 77035

Robert S. Framson
4822 Waynesboro Drive
Houston, Texas 77035

Carro Hinderstein
8739 Link Terrace
Houston, Texas 77025

D. Marrack
420 Mulberry Lane
Bellaire, Texas 77401

Brenda McCorkle
6140 Darnell
Houston, Texas 77074

F. H. Potthoff, III
7200 Shady Villa, #110
Houston, Texas 77055

Wayne E. Rentfro
P. O. Box 1335
Rosenberg, Texas 77471

James M. Scott, Jr.
8302 Albacore
Houston, Texas 77074

J. Gregory Copeland

J. Gregory Copeland

1259 324