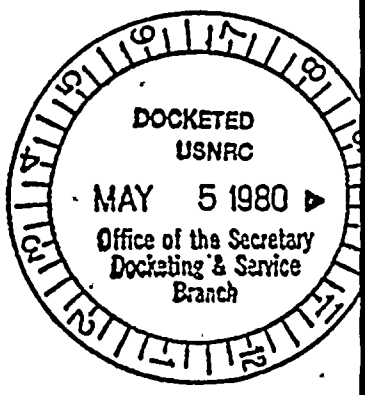
May 1, 1980



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the matter of	)	
	)	
PP&L & AEC,	)	Docket Nos.: 50-387
(SSES 1 & 2)	)	50-388
	)	

SUSQUEHANNA ENVIRONMENTAL ADVOCATES
Supplemental Answers to Applicant
PENNSYLVANIA POWER AND LIGHT'S
First Round Interrogatories

As directed by the Board, SEA replies now and files supplemental responses to PP&L's first round interrogatories as follows:

CONTENTION #1:

1-A-1. The assessment is inadequate because there has been no assessment. PP&L, in describing the effects of the fuel cycle, simply reprinted Table S-3 from the NRC regulations. However, the effect of Radon-222 is now "presently under reconsideration by the Commission." Presumably, the Commission will determine that there will be a greater impact or effect than had previously been estimated. Until the Commission publishes a new determination, PP&L's survey of the effects of the fuel cycle is incomplete and the interrogatory cannot be answered.

1-A-2. SEA has no information at this time.

1-A-3. SEA has no information at this time.

1-A-4. An increase in the risk of contracting cancer and of genetic damage in the people and other living things.

continued

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1-B-1. a.b.

Rn-222	-	Mining/Milling/Tailings
Ra-226)		
Th-230)		
Uranium)		
Tritium)		
C-14)	-	Reprocessing
Kr-85)		
Ru-106)		
I-129)		
I-131)		
Tc-99		
Ra-226)		
Th-230)	-	From Uranium Hexafluoride production
Th-234	-	From fuel fabrication plants

Krypton	- 83 m		-	Reactor operation
	85 m			
	85			
	87			
	88			
	89			
	90			
Xenon	131 m	135	-	Reactor operation
	133 m	137		
	133	138		
	135 m	139		
Iodine	129-136		-	Reactor operation

1-B-1.c. No information available at this time.

1-B-2. Radiological health effects of isotopes have been misrepresented and underestimated by PP&L in its ER, Section 5.2.2. "Radioactivity in Environment," in that PP&L chose the "site boundary in the southwest sector" as the location to measure atmospheric releases. The prevailing winds are from the southwest to the northeast. Thus, the northeast sector should have been selected.

SEA has no other information concerning other ways in which health effects of isotopes may have been misrepresented at this time.

1-B-3. Please see answer to 1-A-4. In addition, SEA states that:

1) PP&L's estimates of effects of the fuel cycle are based, in many cases, not on its own research, but on NRC research and figures.

2) The methodology and accuracy of NRC research has been called into question by the Heidelberg Report. SEA respectfully requests:

continued

1-B-3., continued:

A) That the NRC re-do the research necessary to arrive at these figures in an unbiased manner - or commission an unbiased third party to do the research.

B) That the results be made public.

CONTENTION #2:

2-1.a. Tritium
Krypton 85 and others
Strontium 90 and 89
Iodine 129 and others
Xenon 131m and others
Cesium 134, 137
Uranium 237, 239
Plutonium 239 and others
Americium
Curium
Activated Zircaloy Cladding

b. SEA has no information at this time.

c. SEA has no information at this time.

2-2. Increased risk of cancer and genetic defects. SEA has no information on specific types and magnitudes.

2-3. No information available at this time.

2-4. No information available at this time.

2-5. No information available at this time.

2-6. Danville, Pa.

2-7. No information available at this time.

2-8. No information available at this time.

With respect to Interrogatory 2-1, 2-2, SEA states that, where PP&L's figures are based on NRC data, and not on independent research, these figures should be discarded in light of the Heidelberg Report. The NRC should conduct new, unbiased tests and monitoring.

continued

CONTENTION #14:

14-1. 80%

14-2. The average capacity factor for all nuclear plants to date is about 60%. The average CF for all nuclear plants the size of SSES is substantially less than 60% (around 55%, according to Charles Komanoff, for plants larger than 800Mw).

A sharp drop in capacity factors for large plants was also found by Saunders Miller, The Economics of Nuclear and Coal Power, NY: Praeger, 1976.

Based on this past performance, SEA contends that an 80% CF is far too optimistic.

14-3. 60%, for the reasons stated above.

14-4. No information available at this time.

Based on the submission of these answers, SEA intends to participate fully in the litigation of contentions 1, 2, 3, 4 and 14. SEA will furnish information when it is available.

SEA commends the NRC for arranging to have a set of ASLB reports loaned to the local public document library, and for organizing the documents on file there; and for placing a complete set of the applicable regulations there.

SEA objects to the Board's characterization of SEA's most recent Motion for a Protective Order as being identical to previous motions. This is factually incorrect. Even on its face, the motion was more specific. Furthermore, SEA objects to the denial of the motion, especially since no reason for the denial was cited by the Board.

Dated: April 30, 1980

Respectfully submitted,

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I hereby certify that copies of this document were served on all parties to this proceeding.

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