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SHIELDS L. DALTROFF
VICE PRESIDENT
ELECTRIC PRODUCTION

(215) 841-5001

May 20, 1982

Docket Nos. 50-277
50-278

Mr. John F. Stolz, Chief
Operating Reactors Branch #4
Division of Licensing
US Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Stolz:

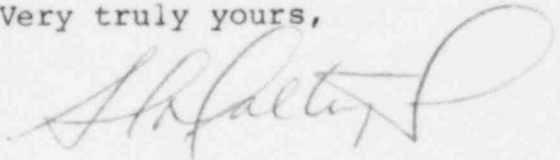
On April 29, 1982, a preliminary conference call was conducted between representatives of Philadelphia Electric Company, Franklin Research Center and the NRC concerning the draft Technical Evaluation Report on control of heavy loads which you forwarded on April 5, 1982.

During this call PECO was requested to provide a listing enumerating the differences between our June 18, 1981 and December 22, 1981 reports.

The attached report is submitted to satisfy that request. A copy of this report was delivered to Mr. I. Sargeant on May 5, 1982, in order to aid him in his review. Furthermore, a discussion of safe load paths is attached as requested during the conference call.

It is hoped that this information will be useful in the evaluation of PECO's NUREG 0612 submittals. If there are any further questions, please do not hesitate to contact us.

Very truly yours,



Attachment

cc: C. J. Cowgill - Site Inspector

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PEACH BOTTOM ATOMIC POWER STATION
Attachment 1

Difference Between June 18, 1981 and the December 22, 1981 Submittal

In the June 18, 1981 report to the NRC, Section 2.1-1 of Attachment 1, identified all the cranes which demonstrate a potential hazard. The December 22, 1981 letter to the NRC transmitted our evaluation of these cranes. Based on the evaluation of the consequences of a load drop, all cranes, except the reactor building crane, could be classified as not presenting a hazard with regard to preventing plant safe shutdown or cause damage to irradiated fuel. (Refer to Sections 2.3.2.b(1), Page 9; 2.3.2b(2), Page 29; and 2.3.2.b (3), Page 36.) The reactor building crane was found to be single failure proof. An evaluation of compliance to NUREG-0554 was submitted. (Attachment 2 to the December 22, 1982 report to NRC.) We believe our evaluations satisfy the requirements of NUREG-0612.

Further differences between the June 18, 1981 report and the report submitted by the December 22, 1981 letter to the NRC are identified in the following tables.

NUREG 0612 - Control of Heavy Loads at Nuclear Power Plants

Notable Differences between June 18, 1981 and December 22, 1981 Reports to NRC

June 18, 1981 Report		December 22, 1981 Report		Remarks
Page Ref.	Item	Page Ref.	Item	
Att. 2 Page 4	Slings-compliance to ANSI N45.2.2 - 1972. Further review was being made to determine if compliance with ANSI B30.9 - 1971 is possible	Att. 1 Page 1-4	Slings - Selection in accordance with ANSI B30.9 - 1971.	Slings for critical load on the refueling floor will be in compliance with ANSI B30.9 - 1971.
		Sec. 2.2.3 Page 3	Slings - Compliance to ANSI B30.9 - 1971	
Table 2 Page 1	Dryer - Separator Pool Plug 44 tons each	Table 1 Page 1a	Dryer - Separator Pool Plug Type 1 - 40 tons each Type 2 - 63 tons	It was found there are two sizes of dryer separator pool plugs.
Table 2 Page 1	Reactor Vessel Head 100 tons	Table 1 Page 1b	Reactor Pressure Vessel Head 96.5 tons	Weight in June report was estimated. December report shows weight as shown on vendor drawings.
Table 2 Page 2	Refueling Channel Shield 22 tons	Table 1 Page 1d	Refueling Channel Shield 9 tons	Weight in June report was estimated. December report weight is based on field data.

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NUREG 0612 - Control of Heavy Loads at Nuclear Power Plants

Notable Differences between June 18, 1981 and December 22, 1981 Reports to NRC

June 18, 1981 Report		December 22, 1981 Report		Remarks
Page Ref.	Item	Page Ref.	Item	
Table 2 Page 3	Fuel Bundle 0.34 tons	-	deleted	The consequences of this accident were analyzed and found to be acceptable.
Table 2 Page 3	Spent Fuel Storage Rack 0.86 tons	-	deleted	The spent fuel storage racks, once installed in the spent fuel pool are not moved.
Table 2 Page 3	RPV Drywell Head Strongback 3.1 tons	Table 1 Page 1b	RPV Drywell Head Strongback 13.5 tons	Increased weight due to anticipated modifications to the strongback to have the stud tensioner mounted on the strong-back.
Table 2 Page 3	Hydraulic Tensioner 3.1 tons	-	not listed	A part of GE supplied equipment. Data to be provided later.
Table 2 Page 4	Dryer Separator Sling 1.75 tons	Table 1 Page 1b, 1c	Dryer Separator Sling 0.9 tons	A part of GE supplied equipment. Data to be provided later.
Table 2 Page 4	Reactor Building Crane Hook 0.9 tons	-	deleted	Part of crane load block.

NUREG 0612 - Control of Heavy Loads at Nuclear Power Plants

Notable Differences between June 18, 1981 and December 22, 1981 Reports to NRC

June 18, 1981 Report		December 22, 1981 Report		Remarks
Page Ref.	Item	Page Ref.	Item	
Table 2 Page 4	Service Platform 2 tons	Table 1 page 1e	Service Platform 4 tons	A part of GE supplied equipment. Data to be provided later.
Table 2 Page 4	In service shielding 70 tons	-	deleted	No longer used at PBAPS
Table 2 Page 4a	Hatch Cover	-	deleted	No longer used at PBAPS
—	not listed	Table 1 Page 1d	New Fuel Crates 4.5 tons	Evaluation of lifting device to be provided later.
—	not listed	Table 1 Page 1f	RPV Head Insulation 10 tons	Part of GE supplied equipment. Data to be provided later.
—	not listed	Table 1 Page 1f	Head Nut and Washer Rack 700 lbs.	Consequences of a load drop no worse than a fuel bundle drop.

NUREG 0612 - Control of Heavy Loads at Nuclear Power Plants

Notable Differences between June 18, 1981 and December 22, 1981 Reports to NRC

June 18, 1981 Report			December 22, 1981 Report			Remarks
Page Ref.	Item	Load wt.	Page Ref.	Item	Load wt.	
Table 3	RPV-Drywell Head Strongback	3.1 tons	Table 2	RPV-Drywell Head Strongback	96.5 tons	Revised load weight in December report.
Table 3	Fuel Cask Yoke	1.41 tons	Table 2	Fuel Cask Yoke	100 or 37.5 tons	Revised load weight in December report.
Table 3	Hydraulic Tensioner	3.1 tons	Table 2	not listed	-	A part of GE supplied equipment. Data to be provided later.
-	not listed	-	Table 2	Dryer Separator Type 1 Pool Plug Sling	40 tons	
-	not listed	-	Table 2	Dryer Separator Type 2 Pool Plug Sling	63 tons	
Table 3	Service Platform Sling	-	Table 2	Service Platform Sling-Strongback	2 tons	A part of GE supplied equipment. Data to be provided later.
Table 3	Spent Fuel Grapple	-	Table 2	not listed	-	Not a heavy load.

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June 18, 1981 Report			December 22, 1981 Report			Remarks
Page Ref.	Item	Load wt.	Page Ref.	Item	Load wt.	
Table 3	Lifting Bar (Tandem) TB Crane	-	-	not listed	-	Not a critical load.
Table 3	Lifting Bar (Rotor) TB Crane	-	-	not listed	-	Not a critical load.
-	not listed	-	Table 2	Shield Plug Sling	95 tons	
-	not listed	-	Table 2	(Fuel Pool) Slot Plug Sling	5.5 tons	Provided by GE. Data to be provided later
-	not listed	-	Table 2	Steam Dryer Sling	31 tons	
-	not listed	-	Table 2	Steam Separator Sling	52 tons	
-	not listed	-	Table 2	FP Gates 1 & 2	3.75 tons each	

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June 18, 1981 Report			December 22, 1981 Report			Remarks
Page Ref.	Item	Load wt.	Page Ref.	Item	Load wt.	
-	not listed	-	Table 2	Refueling Channel Shield Lifting Rig (Cattle Chute)	9 tons	Provided by Ge. Data to be provided later.
-	not listed	-	Table 2	Personnel Basket Lift Rig	4 tons	
-	not listed	-	Table 2	Hydrolazer	900 lbs.	Not a heavy load.
-	not listed	-	Table 2	Head Stud, Nut & Washer Rack Sling	700 lbs.	Not a heavy load.
-	not listed	-	Table 2	New Fuel Crate Lifting Device	4.5 tons	

Peach Bottom Atomic Power Station
Attachment 2

Safe Load Paths

As an alternate to safe load paths, PECO chooses to utilize the concept of exclusion zones and recommended load paths to provide the high level of assurance that drops of heavy loads will not pose an undue safety risk to the public.

Exclusion zones have been established for those areas from which a falling load could impact irradiated fuel or equipment which would compromise safe shutdown or decay heat removal capability. The cranes/hoists operating in these areas are prevented from entering the exclusion area by the use of electrical interlocks. Administrative procedures will control the overriding of the electrical interlocks. Changes to these procedures must be reviewed/approved by the Plant Operation Review Committee.

Recommended load paths are provided to crane operators with instructions that these loads paths should be followed to the extent practicable. They are cautioned to adhere to the recommended load path and not vary from these paths without due consideration.

As an additional aid, signs are posted on or near appropriate crane/hoist controls stating that the crane/hoist is controlled. There are two different signs utilized as follows: 1) RESTRICTED AREA FOR HEAVY LOADS, contact Maintenance or Construction rigging supervision prior to work, and 2) CONTROLLED LIFTING DEVICE, contact Maintenance or Construction Rigging Supervisor prior to use.

It is believed that the use of exclusion zones and recommended load paths provides protection equivalent to the methods suggested by NUREG 0612.