



NUCLEAR REGULATORY COMMISSION

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ATLANTA, GEORGIA 30303

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November 22, 1978

SSINS 0320

MEMORANDUM FOR: File
FROM: James P. O'Reilly, Director
SUBJECT: OIA REPORT CONCERNING HARRIS CONSTRUCTION PERMIT
HEARING - REPORT OF INTERVIEW WITH F. S. CANTRELL

I have attached an informal note from Floyd (Mr. F. S. Cantrell, Jr.) on the above subject.

I have discussed this matter briefly with Floyd and with Mr. Fortune (OIA) and Mr. Reis (ELD). The consensus of their views and mine is that no further action is indicated and that detailed responses to questions clearly set forth Mr. Cantrell's position.

If any of the copyholders have any different view, it is requested that I be informed.

James P. O'Reilly
James P. O'Reilly
Director

Encl: Informal note fm Cantrell
to JPOR dtd 11/22/78

- cc: R. Fortuna, OIA
- E. Reis, ELD
- E. Jordan, ROI
- F. Long, RII ✓
- H. Dance, RII
- C. Murphy, RII
- F. Cantrell, RII

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PDR FOIA
VADENB3-413 PDR

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[Handwritten signature]

RE: CIA REPORT CONCERNING HARRIS
CONSTRUCTION PERMIT HEARING-REPORT
OF INTERVIEW WITH FS CAPITALE
THE REFERENCED INTERVIEW, WHICH WAS NOT
REVIEWED BY ME PRIOR TO PUBLICATION, GENERALLY
PRESENTED MY CONCERNS ABOUT CPTL, BUT IT
EXPRESSED A MORE NEGATIVE ATTITUDE TOWARD
CPTL THAN I FEEL, OR INTENDED TO CONVEY
DURING THE INTERVIEW. THERE ARE A FEW
MINOR ERRORS IN THE REPORT THAT DO NOT
MATERIALLY AFFECT THE CONCLUSIONS

To: J. S. B. BILLY

11/22/75

SUMMARY OF INVESTIGATION-RELATED CONVERSATION

CASE NO. 2E16	DATE 04/14/80	TIME INITIATED 16:15 p.m.	TIME COMPLETED 17:30 p.m.
TYPE <input type="checkbox"/> MEETING <input type="checkbox"/> INTERVIEW <input checked="" type="checkbox"/> TELEPHONE CALL COLLECT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> OTHER		PARTICIPANTS Alderson	
		CALLED NO.	CALLING NO.

SUMMARY:

[redacted] stated that he was employed by [redacted] as a [redacted] at the Harris site and specifically requested confidentiality. [redacted] stated that this was his eighth or ninth job (later determined that all previous jobs ~~were~~ fossil) and that he was a certified welder but not on "stick welding". [redacted] talked for an hour and 15 minutes mostly in general terms, providing the following information:

1. He believed the journeymen to trainee ratio at Harris was unconscionable and stated that they promote the journeymen in 4-6 months and he believed that this was causing quality problems. He believes that as a result CP&L will have problems maintaining the plant in the future and this will give the industry a black eye. It should be noted that [redacted] is a union member and the Harris job is non-union. Many of his comments appeared to indicate that union people could do it better. [redacted] indicated that the welding school at the site turns out welders who can pass the test and in response to [redacted] particular question stated that he knows no cases where welders were performing work that they were not certified to do. He specifically stated that he believes only certified welders were used. He pointed out that the union requires a four-year apprentice program and during that time individuals would not be permitted to perform welding but would learn under a journeyman welder.
2. [redacted] stated that the main condenser, manufactured by Westinghouse, was a piece of junk and had numerous defective welds. He said in cutting out a weld they found a slug in the previous butt welds. He said when they started putting the plate back in place the slug was still there and that an inspector said he had seen several such slugs in welds.
3. [redacted] described a 35 foot butt weld in the main condenser which required 100% penetration. He stated that the plates were so warped that the space between them closed at various points and

REVIEWED BY <i>Carl Alderson</i>	DATE 4/23/80	PAGE 1 OF 2
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SUMMARY OF INVESTIGATION-RELATED CONVERSATION (CONTINUATION SHEET)

therefore 100% penetration could not be achieved. He said this would not be identified by QC inspectors doing visual inspection because the weld had been ground down. He stated that he knows the code is not being met. When I asked which code he stated the ASME B&PVC codes. I asked how he knew that code applied and he said he had been told on the job. He also mentioned that ^{they} stress relieved the welds and used a special penning process; therefore he concludes that the code applies.

4. He discussed welders using a high speed welding process, MIG (metal-inert gas) that had not been trained to use it in the welding school. Said he didn't know of it being used anywhere except the condenser. *on*
5. With regard to the 35 foot butt weld mentioned above I asked him if QC inspectors had signed off on the fit-up prior to it being welded. He responded that fit-ups were not inspected by QC before the weld. The only inspection is the final visual inspection. I asked if he knew of any safety-related or critical welds that had not been inspected for fitup prior to the weld and he indicated he didn't believe any critical welds were inspected. When asked to identify certain welds he stated that in the condenser area there were some "important looking" pipes. I asked what he meant and he stated that there several smaller pipes inside a larger pipe approximately 1 yard in diameter. He also stated that non-coded welds in the condenser were looked at from the floor at times.

I asked *—* if he was one of the individuals who had talked to the reporter who wrote the article on Shearon Harris and he stated that he was. He stated that he believed two others who had talked to the reporter had left the area. One of them was an iron worker. One individual who is still on the site he believes is a QC inspector in the reactor area, but he indicated this individual was not an experienced inspector. *on*

Review of above. Concerns over 2,3,4,5 re Condenser are all non-safety related. (F. Hobbs) previously advised of this.

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Report No. 50-400/60-10

Licensee: Carolina Power and Light Company
411 Fayetteville Street
Raleigh, North Carolina 27602

Facility: Sharon Harris, Unit 1

Docket No. 50-400

License No. CPPR-158

Inspection at Region II Office

Inspector: R. D. Bradley Date

Accompanying Personnel:

- J. P. O'Reilly, Director, Region II
- J. G. Bryant, Acting Assistant to the Director, Region II
- A. R. Herdt, Acting Chief, RCES Branch
- J. K. Rausch, Acting Section Chief, RCES Branch
- J. Conlon, Section Chief, RCES Branch
- J. J. Lonahan, Reactor Inspector, RCES Branch

Approved by: _____

J. K. Rausch, Acting
Section Chief, RCFS
Branch

Date signed _____

SUMMARY

Inspection on April 17, 1980

Areas Inspected

Corporate management meeting to discuss the ~~cause and corrective action~~ ^{circumstances surrounding} ~~substantiating~~ the omission of reinforcement steel in the Unit 1 containment building exterior wall. This meeting involved 16 inspector hours.

Results

Within the areas inspected, no items of non-compliance or deviation were identified.

DETAILS

1. Persons Contacted

Licensee Employees

- M. A. Mc Duffie, Senior Vice President, Engineering and Construction Group
- P. W. Howe, Vice President, Technical Services
- S. D. Smith, Vice President, Power Plant Construction
- A. W. Lucas, Senior Resident Engineer
- A. B. Cutler, Manager, Nuclear Power Plant Engineering

2. Licensee Action on Previous Inspection, Findings

Not inspected.

3. Unresolved Items

No new unresolved items were identified during this inspection.

4. Management Meeting

At the request of NRC Region II, representatives of Carolina Power and Light (CP&L) management met, ^{on April 17, 1980} with ~~RTI~~ Region II personnel in Atlanta, Georgia to discuss a construction deficiency reported to the RTI principal inspector on April 9, 1980. The deficiency pertained to omission of twenty-five bars of reinforcement steel in the ~~cont~~ Unit 1 containment building exterior wall, adjacent to the construction opening for the equipment hatch. CP&L advised that placement of concrete containing rebar, ^{in the containment exterior wall,} had been discontinued pending resolution of the deficiency and approval of the NRC to resume such placements.

In response to the RTI Confirmation

ion of Action letter issued to CP&H on April 10, 1980, the licensee presented the following information during the meeting:

- a. Investigative findings regarding the circumstances surrounding the reported omission of reinforcement steel.
- b. Results of an audit to identify similar rebar omissions which may have occurred during previous exterior wall concrete placements. This audit utilized information ^{developed} from the above investigation.
- c. Remedial actions to ~~correct~~ ^{assure} the exterior wall ^{will} be restored to design requirements.

d. Preventive actions that will be taken to minimize the probability of recurrence in the future.

With regard to the preceding items, a through d, the licensee ~~has~~ ^{has concluded} determined that:

a. Based on an intensive and comprehensive investigation, the root cause leading to the rebar omission was the unique notation referencing the "additional steel" (25 bars) on the main reinforcing drawing. ^{the notation was not} ~~was~~ ^{being used} by all parties involved in the placement. The significance of the notation was not fully recognized due to its location on the drawing and due to the complexity of the rebar design

and its geometry. This human error resulted in omission of the rebar.

The licensee is also of the opinion that lack of technical competence, or lack of proper training were not contributing factors to this deficiency. It was pointed out that this is the only case where penetration reinforcement ~~has~~ ^{have} extended beyond the blackout on a main reinforcing drawing.

- b. No omission of rebar was found during the ^{audit} of previous placements that would have compromised safety or structural integrity of the containment exterior wall.

c. Design requirements for the structural integrity of the containment exterior wall can be achieved by adding additional rebar and altering the configuration of replacement bars installed adjacent to the previous placement. This method of repair has been approved by the licensee's architect-engineer, Ebasco.

d. The omission of rebar from the exterior wall of Unit No. 1 containment building was a unique situation precipitated by an unusual mode of notation on the drawing and ~~did~~ ^{did} not represent a breakdown in CP&H's program or controls. The probability of a recurrence

in the future will be minimal after full implementation of the following preventive actions on April 22, 1980:

- (1) ^{Independent} ~~1~~ detailed tabulations of exterior wall bars by type and location will be prepared by field engineers and construction inspectors from the design drawings in advance of preplacement inspections. Differences in tabulations will be resolved in advance of field ~~an~~ inspection.
- (2) The area engineer for the exterior wall will be required to review the rebar drawing with the construction inspector before ^{significant design approval of} ~~he~~ ~~approves~~ the concrete placement report. This review will emphasize a search

for details on referenced drawings that are obscure or unusual.

- (3) The Quality Assurance ~~and~~ field audit program will be modified to monitor a few of the more difficult details of placements rather than ^{one hundred} +100 percent of selected placements. Special emphasis will be placed on columns, and "additional steel" of various types.
- (4) A drawing review will be conducted to identify similar potential problem areas on the exterior wall.
- (5) A field engineer responsible for rebar verification has been assigned to the exterior wall on a full time basis.

- (6) The area rebar superintendent has been instructed to closely coordinate the activities of crews working various portions of the exterior wall to ensure crews are aware of overlapping work.
- (7) Administrative action will be taken to ensure ^{that} first-line and second-line supervisors perform field audits on the people they supervise. The performance of individuals doing field installations and inspections will be monitored.
- (8) Ebasco design engineers will review ~~the~~ reinforcing drawings and problem areas with the area engineers. Special emphasis will be given to rebar details that may be obscure on the drawings, and more complicated or intricate areas of installation.

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The items presented above were discussed at length with CP#1 and they have committed to re-examining the preventive actions for possible implementation in other disciplines, and other areas that are highly stressed and/or complex. NRC approval to resume placement of concrete in the exterior wall will be predicated on the acceptability of the licensee's supplemental response and examination of ~~the~~^{their} actions during a subsequent civil inspection by RII.

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SUMMARY OF INVESTIGATION-RELATED CONVERSATION

CASE NO. 2E16	DATE 4/3/80	TIME INITIATED 11:10-11:14; 12:28-12:32	TIME COMPLETED
TYPE <input type="checkbox"/> MEETING <input type="checkbox"/> INTERVIEW <input type="checkbox"/> TELEPHONE CALL COLLECT <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> OTHER	PARTICIPANTS <input checked="" type="checkbox"/> J. Hobbs to R. Marsh R. Marsh to <input checked="" type="checkbox"/> J. Hobbs		
	CALLED NO.	CALLING NO.	

SUMMARY:

Hobbs called to acknowledge receipt of my 4/1 letter. She requested permission to print portions of it in the hopes it will motivate Harris workers with concern to come forward with details.

Checked with CEA and told Hobbs to proceed. She agreed to remove reference to "collect" phone calls.

REVIEWED BY <i>[Signature]</i>	DATE 4.3	PAGE OF
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SUMMARY OF INVESTIGATION-RELATED CONVERSATION

CASE NO. 2E16	DATE 4-2-80	TIME INITIATED 10:21	TIME COMPLETED 10:35
TYPE <input type="checkbox"/> MEETING <input type="checkbox"/> INTERVIEW <input type="checkbox"/> TELEPHONE CALL COLLECT <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> OTHER	PARTICIPANTS <input checked="" type="checkbox"/> J. Howard (OSHA) to Marsh		
	CALLED NO.		CALLING NO.

SUMMARY:

Jim Howard, OSHA (919) 733-4880 called and has been called by unidentified [female] who indicated work experience (past or current?) at Harris. Caller refused to identify herself.

1. Provide identity of alleged drug pusher at Harris site.

Howard did not reveal specifics but stated he provided the intelligence to the local sheriff's office for follow up.

2. Stated [she] had heard an employee (not further defined) who [she] knew as [redacted] discuss his knowledge and dissatisfaction with "shoddy workmanship" at the Harris site. Howard said the caller was aware [redacted] worked in the "welding inspection" area at Harris.

Howard stated he provided (a) above for information; (b) for NRC's action as deemed appropriate.

I advised Howard we would attempt to identify the [redacted] identified in the hearsay information and further that I would attempt to contact [redacted] in a privileged (e.g., offsite by private mail) manner to solicit any information he might have for the NRC.

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SUMMARY OF INVESTIGATION-RELATED CONVERSATION

CASE NO. 2E16	DATE 4/2/80	TIME INITIATED 10:05	TIME COMPLETED 10:09
TYPE <input type="checkbox"/> MEETING <input type="checkbox"/> INTERVIEW <input type="checkbox"/> TELEPHONE CALL COLLECT <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> OTHER		PARTICIPANTS McFarland (CONS) to Marsh	
		CALLED NO.	CALLING NO.

SUMMARY:

Bob McFarland (for R. Bradley) advised he had been contacted by a Jim Howard (OSHA) at 8:50a.m. this morning. Howard advised he had received allegations against Harris site.

1. Drug use Howard referred to State LE Agency

2. Welding Howard was referring to NRC. Provided name of alleged as

Howard can be reached at (919) 733-4880. Howard had advised he had been speaking with a (female source) in the Harris site area and had obtained the above information. McFarland was not sure if Howard was in direct contact with _____ or not.

Attempted to call (J. Howard) at 10:15. Secretary stated he was on another line but would return my call shortly.

McFarland also indicated CP&L had advised (NRC) that (WRAL (Daniel Walters) had been on the Harris site yesterday (4/1). Decision was for no PN to be issued.

REVIEWED BY <i>Rfm</i>	DATE 4/2	PAGE / OF / 1 / 1
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