

RELATED CORRESPONDENCE

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSIONOFFICE OF SECRETARY
DOCKETING & SERVICE
BRANCHBEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)	
)	
CAROLINA POWER & LIGHT COMPANY)	Docket Nos. 50-400 OL
AND NORTH CAROLINA EASTERN)	50-401 OL
MUNICIPAL POWER AGENCY)	
)	
(Shearon Harris Nuclear Power)	
Plant, Units 1 and 2))	

APPLICANTS' RESPONSES TO
WELLS EDDLEMAN'S GENERAL INTERROGATORIES
AND INTERROGATORIES ON CONTENTION 65
TO APPLICANTS CAROLINA POWER & LIGHT, ET AL. (SEVENTH SET)

RESPONSES TO GENERAL INTERROGATORIES

INTERROGATORY NO. G1(a). Which contentions of Wells Eddleman do Applicants agree are now admitted in this proceeding, NRC Dockets 50-400/401 O.L.?

ANSWER: The contentions of Intervenor Eddleman which are admitted to this proceeding are set forth in various memoranda and orders issued by the Atomic Safety and Licensing Board, all of which are available to Mr. Eddleman.

INTERROGATORY NO. G1(b). For each such contention, provide for any answers to interrogatories by Wells Eddleman which Applicants have previously or presently received (except those suspended by Board order, if any), the following information:

ANSWER: The answers to General Interrogatories herein are restricted to Eddleman Contention 65.

INTERROGATORY NO. G1(c). Please state the name, present or last known address, and present or last known employer of each person whom Applicants believe or know (1) has first-hand knowledge of the facts alleged in each such answer; or (2) upon whom Applicants relied (other than their attorneys) in making such answer.

ANSWER: L.F. Garner: Interrogatories 65-10, 65-14, 65-15, 65-16, 65-17 and 65-18. B. Marlar: Interrogatories 65-9, 65-11, 65-12, 65-13, 65-19 through 65-27. Messrs. Garner and Marlar are employees of Carolina Power & Light Company at the Shearon Harris Nuclear Power Plant, Route 1, Box 101, New Hill, North Carolina 27562.

INTERROGATORY NO. G1(d). Please identify all facts concerning which each such person identified in response to G1(c)(1) above has first-hand knowledge.

ANSWER: See answer to Interrogatory No. G1(c).

INTERROGATORY NO. G1(e). Please identify all facts and/or documents upon which each person identified in response to G1(c)(2) above relied in providing information to respond to the interrogatory, including the parts of such documents relied upon.

ANSWER: All facts or documents relied upon by those individuals identified in the answer to Interrogatory No. G1(c) are indicated within each response to the specific interrogatories on Contention 65.

INTERROGATORY NO. G1(f). Please identify any other document(s) used or relied upon by Applicants in responding to the interrogatory.

ANSWER: See answer to Interrogatory No. G1(e).

INTERROGATORY NO. G1(g). Please state which specific fact each document, identified in response to G1(e) and G1(f) above, supports, in the opinion or belief of Applicants, or which Applicants allege such document supports.

ANSWER: Applicants have indicated which specific facts are supported by the documents identified, within each response to the specific interrogatories on Contention 65.

INTERROGATORY NO. G1(h). Please state specifically what information each person identified in response to G1(c)(1) or G1(c)(2) above provided to or for Applicants' affiant in answering the interrogatory. If any of this information is not documented, please identify it as "undocumented" in responding to this section of General Interrogatory G1.

ANSWER: See answer to Interrogatory No. G1(c).

INTERROGATORY NO. G2(a). Please state the name, present or last known address, title (if any), and present or last known employer, and economic interest (shareholder, bondholder, contractor, employee, etc.) if any (beyond expert or other witness fees) such person holds in Applicants or any of them, for each person you intend or expect to call as an expert witness or a witness in this proceeding, if such information has not previously been supplied, or has changed since such information was last supplied, to Wells Eddleman. This applies to Eddleman and Joint Contentions as admitted, or stipulated by Applicants.

INTERROGATORY NO. G2(b). Please identify each contention regarding which each such person is expected to testify.

INTERROGATORY NO. G2(c). Please state when you first contacted each such person with regard to the possibility of such person's testifying for Applicants, if you have contacted such person.

INTERROGATORY NO. G2(d). Please state the subject matter, separately for each contention as to which each such person is expected to testify, which each such person is expected to testify to.

INTERROGATORY NO. G2(e). Please identify all documents or parts thereof upon which each such witness is expected to, plans to, or will rely, in testifying or in preparing testimony.

ANSWER: See Applicants answers to Interrogatories
G2(a)-(e) filed on May 12, 1983.

INTERROGATORY NO. G3(a). Please identify any other source(s) of information which Applicants have used to respond to any interrogatory identified under G1 above, stating for each such source the interrogatory to which it relates, and what information it provides, and identifying where in such source that information is to be found.

ANSWER: Applicants have identified all other such sources of information, if any, within the answers to the specific interrogatories set forth herein.

INTERROGATORY NO. G3(b). Please identify any other source(s) of information not previously identified upon which any witness identified under G2 above, or other witness, has used in preparing testimony or exhibits, or expects to use in testimony or exhibits, identifying for each such source the witness who is expected to use it, and the part or part(s) or such source (if applicable) which are expected to be used, and, if not previously stated, the fact(s) or subject matter (or both) to which such source relates.

ANSWER: See answer to Interrogatory No. G2.

INTERROGATORY NO. G4(a). Please identify all documents, and which pages or sections thereof Applicants intend or expect to use in cross-examination of any witness I call in this hearing. For each such witness, please provide on a timely basis (ASAP near or during hearings) a list of all such documents, the subject matter Applicants believe they relate to, and make the document(s) available for inspection and copying as soon as possible after Applicants decide or form intent to use such document in cross-examination.

INTERROGATORY NO. G4(b). Please identify any undocumented information Applicants intend to use in cross-examination of each such witness for me.

ANSWER: See Applicants' answers to Interrogatories G4(a), (b) filed on May 12, 1983.

INTERROGATORY NO. G5(a). For each contention Applicants state or admit is an admitted Eddleman contention under G1(a) above, or an admitted joint intervenor contention, please state whether applicants have available to them experts, and information, on the subject matter of the contention.

INTERROGATORY NO. G5(b). If the answer to (a) above is other than affirmative, state whether Applicants expect to be able to obtain expertise in the subject matter, and information on it, and if not, why not.

ANSWER: See Applicants' answers to Interrogatories G5(a), (b) filed on May 12, 1983.

INTERROGATORY NO. G6(a). For each document identified in response to any interrogatory herein, or referenced in response to any interrogatory herein, please supply all the following information which has not already been supplied:

- (i) Date of document;
- (ii) Title or identification of document;
- (iii) All authors of the document, or the author;
- (iv) All qualifications (professional, technical) of each author of the document;
- (v) The specific parts, sections or pages of the document, if any, upon which Applicants rely;
- (vi) The specific information each part, section or page identified in response to (v) above contains;
- (vii) Identify all documents used in preparing the document, to the extent known (and also to the extent not identified in the document itself);
- (viii) State whether Applicants possess a copy of the document;
- (ix) State all expert opinions contained in the document, upon which Applicants rely, or identify each such opinion;
- (x) Identify the contentions with respect to which Applicants rely upon (a) the expert

opinions (b) the facts identified in the document.

- (xi) State whether Applicants now employ any author(s) of the document, identifying each person for each document;
- (xii) State whether Applicants have ever employed any author(s) of the document, identifying each such person for each document; and
- (xiii) Identify all sources of data used in the document.

Answers to all the above may be tabulated or grouped for efficiency.

ANSWER: See Applicants' Response to Wells Eddleman's Request for Production of Documents (Contention 65) (March 23, 1984).

INTERROGATORY NO. G7(a). Please identify all documents which Applicants plan, expect or intend to offer as exhibits (other than for cross-examination) with respect to each Eddleman contention admitted in this proceeding which (i) is included in your current response to G1(a), or (ii) is the subject of interrogatories in this set; please state for which contention or contentions each exhibit will be or is expected to be offered.

ANSWER: Applicants have not yet identified those documents they intend to offer as exhibits relating to Eddleman Contention 65.

INTERROGATORY NO. G7(b). Please identify all documents which Applicants plan, expect or intend to use in cross-examination of any other parties' witnesses or joint intervenor witness in this proceeding, with respect to (i) Eddleman contentions identified under G7(a)(i) (or G1(a)) above, or any other Eddleman contention which is the subject of interrogatories in this set; (ii) each Joint contention now admitted in this proceeding; (iii) per our agreement of 4-8-83, each contention of each other party to this proceeding which is currently admitted. Please identify for each such document the witnesses, or witness, and all contentions with respect to whom (or which) that document is planned, expected, or intended to be offered or used.

ANSWER: Applicants have not yet identified those documents they intend to use for cross examination of any witness.

INTERROGATORY NO. G7(c). Please identify which of the documents identified in response to (b) above (i) will be offered into evidence by Applicants, and (ii) which of the same documents Applicants expect to offer into evidence or intend to offer as evidence or exhibits in this proceeding.

ANSWER: See answer to Interrogatory No. G7(b).

INTERROGATORY NO. G10(a). Where the above general interrogatories and/or specific interrogatories below, or any of them, call for identification of documents, (i) and no documents are identified, is that the same as Applicants stating that there are no documents responsive to this general interrogatory, in each case where no documents are identified? (ii) and documents are identified, is that the same as Applicants stating that the identified documents are the only ones presently known which are responsive to the interrogatories? (iii) If your answer to G10(a)(ii) is other than affirmative, please state all reasons for your answer. (iv) If your answer to G10(a)(i) above is other than affirmative, please state all reasons for your answer.

ANSWER: (i) Yes.

(ii) Yes.

(iii) Not applicable.

(iv) Not applicable.

INTERROGATORY NO. G10(b). Where any interrogatory, general or specific, herein, calls for factual information (i) and an opinion is stated in response, is that the expert opinion of any person(s) identified as having contributed information to that response? (ii) and facts are given or identified (or a fact is) in response, but no documents are identified, does that mean Applicants have no documents containing such fact(s)? (iii) If your answer to (i) above is affirmative, please state for each such response all qualifications of each expert upon whom Applicants rely for each such answer. The qualifications need be stated only once for each such person if they are clearly referenced in other answers. (iv) if your answer to (i) above is other than affirmative, please state which opinions, if any, given in response to interrogatories (general or specific) herein is the opinion of an expert, identify each

expert whose opinion you used in response to each interrogatory, and state in full the qualifications of each such expert. (v) If your answer to (i) above is other than affirmative, please identify all opinions of non-experts used in your responses, and identify each non-expert whose opinion is included in each answer herein. (vi) If your response to (ii) above is other than affirmative, please identify each document which contains a fact not previously documented in your response(s), stating what the fact is, and at what page, place, chapter or other specific part the document contains such fact.

ANSWER: (i) Yes.

(ii) See answers to Interrogatory Nos. G1(e), (f) and (g).

(iii) See Attachments A and B.

(iv) Not applicable.

(v) Not applicable.

(vi) Not applicable.

INTERROGATORY NO. G11. For each answer to each interrogatory herein (or any subpart or part thereof), please identify each item of information in possession of Applicants (including facts, opinions of experts, and documents) which (a) contradicts the answer you made, (i) in whole (ii) in part (please identify each such part for each item of information identified); (b) casts doubt on your answer (i) in whole (ii) in part (please identify each such part for each item of information identified); (c) Please identify all documents not already identified in response to parts (a) and (b) above (and their subparts) which contains any item of information asked for in (a) or (b) above. Please identify for each such document what information item(s) it contains and what answer(s) each such item is related to.

ANSWER: None.

RESPONSES TO INTERROGATORIES ON CONTENTION 65

INTERROGATORY NO. 65-8(a). Please answer each part of General Interrogatories G10 and G11 above with respect to all answers previously provided to Wells Eddleman by Applicants re Contention 65 on discovery.

ANSWER: The answers to Interrogatory Nos. G10 and G11 above apply to Applicants' previous discovery responses on Contention 65.

INTERROGATORY NO. 65-8(b). Please identify all documents responsive to G10 and/or G11 or any part or subpart(s) thereof, which have not already been identified in your discovery responses.

ANSWER: None.

INTERROGATORY NO. 65-9(a). Of the concrete samples mentioned in (i) Exhibit 1 (ii) Exhibit 2 of your 11-11-83 Supplemental Response re Eddleman 65, which of the samples numbers listed thereon were retained?

ANSWER: All; see Applicants' answers to Interrogatories 65-1(a) and 65-1(b).

INTERROGATORY NO. 65-9(b). If your answer to (a)(i) or (a)(ii) is other than "all" or words to that effect, please state (i) which samples were not retained, (ii) when each non-retained sample was disposed of, if known, (iii) whether CP&L has a policy that determines which samples will be retained, (iv) if answer to (iii) is affirmative, whether the samples not retained were disposed of in accordance with that policy, and who ordered or oversaw such disposal, and whether the samples disposed of or not retained were selected in accordance with that policy and if so by whom, (v) please state which samples now in CP&L's possession among those listed in Exhibits 1 and 2 referred to above can and will be made available to Wells Eddleman or his consultant(s) for inspection, (vi) please state for which samples of these the test reports by CP&L or other tester (aa) were retained (bb) will be made available for inspection and copying to Wells Eddleman and/or his consultant(s), (vii) if your answer to (vi) or (v) above withholds any samples or reports you now retain, please state each reason for withholding each such sample or report from inspection and/or copying.

ANSWER: Not applicable. See Applicants' answer to Interrogatory 65-1(b). All samples were retained for the required testing period; however, no samples are presently retained by

Applicants. The concrete compressive strength test reports are included in the pour packages for the placements identified in Exhibits 1 and 2.

INTERROGATORY NO. 65-9(b)[2]. Were any samples from any of the pours listed in Exhibits 1 and/or 2 referred to above taken, but not listed on either Exhibit 1 or Exhibit 2?

ANSWER: No.

INTERROGATORY NO. 65-9(c). If answer to (b)[2] is affirmative, please list each such sample from each such pour and state, if known (i) if not retained, why it was not retained, (ii) who took this sample, (iii) whether it was taken in accord with applicable concrete placement procedure(s), (iv) any reason why it was not listed on the Exhibit in question, (v) whether there is a test report on it in CP&L's or a CP&L consultant, contractor, employee or subcontractor's possession, (vi) whether the report and the sample will be made available to Wells Eddleman and/or his consultant for inspection and/or copying (no, I don't want to copy concrete samples, tho a photo might be of use).

ANSWER: Not applicable.

INTERROGATORY NO. 65-10(a). What were the weather conditions at the time of the 8-17-78 replacement ICBSL216002 ("216002") identified on Exhibit 1 of your 11-11-83 response? If you don't know, say so.

ANSWER: Placement duration was from 6:00 p.m. on August 17, 1978 to 6:15 a.m. on August 19, 1978 and weather conditions were stated as fair and clear with temperatures ranging from 71° to 90°. This information is contained in the pour package for this placement.

INTERROGATORY NO. 65-10(b). Will you make the pour package on this single placement, or a copy of it, available to Wells Eddleman for inspection and copying?

ANSWER: Yes.

INTERROGATORY NO. 65-10(c). Will you make the concrete placement report on this pour available to Wells Eddleman for inspection and copying?

ANSWER: Yes, in accordance with Applicants' Response to Wells Eddleman's Request for Production of Documents.

INTERROGATORY NO. 65-10(d). How many voids were found in this pour? If you don't know, please say so.

ANSWER: One void was detected. See Applicants' supplemental answer to Interrogatory 65-1(b).

INTERROGATORY NO. 65-10(e). How large an area of honeycombing was found in this pour? If you don't know, please say so.

ANSWER: See Affidavit of Roland M. Parsons (Jan. 17, 1984) in Support of Applicants' Motion for Summary Disposition of Eddleman Contention 65, dated January 18, 1984 ("Parsons Affidavit"), at 10.

INTERROGATORY NO. 65-10(f). Was this pour at elevation 216?

ANSWER: Yes.

INTERROGATORY NO. 65-10(g). Was this pour part of the construction of the level at elevation 216?

ANSWER: Yes.

INTERROGATORY NO. 65-10(h). What is the significance of the number 216 in the placement number?

ANSWER: This signifies the top elevation of the pour.

INTERROGATORY NO. 65-10(i). Was there a placement number ICBSL 216001?

ANSWER: Yes.

INTERROGATORY NO. 65-10(j). Was placement number ICBSL 216001 part of the containment building?

ANSWER: Yes.

INTERROGATORY NO. 65-10(k). Was placement number ICBSL 216001 part of the base mat?

ANSWER: Yes.

INTERROGATORY NO. 65-10(l). Was placement number ICBSL 216001 similar to No. 216002?

ANSWER: Yes.

INTERROGATORY NO. 65-10(m). Did placement number ICBSL 216001 cover or abut placement 216002?

ANSWER: Yes.

INTERROGATORY NO. 65-10(n). Do you possess the pour package for placement ICBSL 216001?

ANSWER: Yes.

INTERROGATORY NO. 65-10(o). If response to (n) is affirmative, will you make this pour package for ICBSL 216001 available to Wells Eddleman for comparison, inspection and copying, or will you make a copy of it and/or a copy of its concrete placement report available to W.E. for inspection and copying?

ANSWER: Yes, pursuant to Applicants' Response to Wells Eddleman's Request for Production of Documents.

INTERROGATORY NO. 65-11(a). Are there any concrete pours in the Harris containment building or base mat for which the concrete placement report does not now exist?

ANSWER: No.

INTERROGATORY NO. 65-11(b). If response to (a) is affirmative, please identify each such pour and give all explanation you know as to why the concrete placement report does not now exist.

ANSWER: Not applicable.

INTERROGATORY NO. 65-11(c). Are there any concrete pours in the Harris containment building or base mat for which CP&L does not possess a copy of the concrete placement report?

ANSWER: No.

INTERROGATORY NO. 65-11(d). If answer to (c) is affirmative, please identify each such pour not already identified in response to (b) above, and give all explanation CP&L knows as to why CP&L does not possess a copy of such report.

ANSWER: Not applicable.

INTERROGATORY NO. 65-11(e). For each report identified in response to (d) above, does someone else possess a copy of the concrete placement report?

ANSWER: Not applicable.

INTERROGATORY NO. 65-11(f). If answer to (e) above is affirmative, please identify who possesses a copy of each such report and state all reasons known to you why that person or entity, corporation, etc. possesses a copy of the concrete placement report.

ANSWER: Not applicable.

INTERROGATORY NO. 65-11(g). Does CP&L or Daniel have any policy or procedural requirement to retain concrete placement reports (i) for safety-related concrete (ii) for concrete in the containment building (iii) for concrete in the base mat?

ANSWER: Yes.

INTERROGATORY NO. 65-11(h). If answer to any part of (g) above is affirmative, please identify each such policy and

state whether it would apply to any concrete placement report(s) identified in response to (b), (d) or (e) above, and if so, to which report(s) for each such policy or procedural requirement.

ANSWER: Work Procedure, WP-05, "Concrete Placement," and Technical Procedure, TP-15, "Concrete Placement Inspection."

INTERROGATORY NO. 65-11(j). Is there any report identified in response to (b), (d) or (e) above for which failure to retain the report is a violation of NRC regulations or a deficiency or noncompliance or failure to follow procedure under NRC regulations?

ANSWER: Not applicable.

INTERROGATORY NO. 65-11(k). If answer to (j) is affirmative, please identify each such report and give details of the NRC regulations not complied with and when NRC was first made aware of this failure to comply.

ANSWER: Not applicable.

INTERROGATORY NO. 65-12(a). Does CP&L employ anyone who did or supervised or observed concrete work on the (i) base mat (ii) containment of (aa) Callaway (bb) Wolf Creek (cc) Farley (any unit of such plant(s))?

ANSWER: To the best of Applicants' knowledge, CP&L does not employ anyone in a supervisory capacity for concrete who had the responsibility to perform, supervise, or observe concrete work for the Callaway, Farley or Wolf Creek containment structures.

INTERROGATORY NO. 65-12(b). Does CP&L employ anyone who observed placement of concrete in the base mat or containment of Farley, Wolf Creek, or Callaway?

ANSWER: See (a) above.

INTERROGATORY NO. 65-12(c). Does CP&L employ anyone who designed concrete mixes or mixed concrete or supervised or

verified concrete mixing at the sites of Wolf Creek, Callaway, or Farley?

ANSWER: To the best of Applicants' knowledge, CP&L does not employ anyone who designed concrete mixes, mixed concrete, supervised concrete mixed, or verified concrete mixing at the Callaway, Farley or Wolf Creek sites.

INTERROGATORY NO. 65-12(d). If response to (a), (b) or (c) or any subpart thereof is affirmative, please identify each such person, state the plant(s) each worked at or observed at, and state the nature of (i) the work done by the person (ii) the work observed by the person (iii) the work supervised by the person.

ANSWER: Not applicable.

INTERROGATORY NO. 65-12(e). State which of the persons identified in response to (d) above is available for deposition (i) before February 15 (ii) before March 1 (iii) before March 15, 1984.

ANSWER: Not applicable.

INTERROGATORY NO. 65-13(a). Does CP&L have any record of the times of pouring all the concrete pours in the Harris containment, base mat, exterior (containment) wall, and dome?

ANSWER: Yes; concrete placement starting time and date are recorded on the concrete placement card in the pour package.

INTERROGATORY NO. 65-13(b). Does CP&L have any explanation for the fact that every pour listed in Exhibit 2 of your 11-11-83 supplemental response is in the morning hours except one at 12 noon?

ANSWER: No. However, the preferred time for concrete placements is the morning hours because the majority of these placements can be completed within first and/or second shift working hours.

INTERROGATORY NO. 65-13(c). Does CP&L know how many or what percentage of the concrete pours made at Harris 1 for the containment building were made in the morning, and how many after noon?

ANSWER: This information can be determined from the concrete placement card. Applicants have not compiled the information in this format.

INTERROGATORY NO. 65-13(d). Will CP&L make available for inspection and copying any documents giving the times of the concrete pours for Harris 1 as inquired about in (a) above?

ANSWER: Applicants will produce the pour packages, including the concrete placement card, for those placements identified in Exhibits 1 and 2 to Applicants' November 11, 1983 Supplemental Response to Interrogatories on Contention 65.

INTERROGATORY NO. 65-13(e). If answer to (d) is other than affirmative, or there is an objection to (d), will CP&L make the time data for the pours available to Wells Eddleman?

ANSWER: Not applicable.

INTERROGATORY NO. 65-13(f). Please give (i) the percentage of morning pours (ii) the percentage of noon-or-after pours of concrete for the Harris 1 containment building (iii) any explanation asked about in (b) above as to why all the pours in the Exhibit 2 sample are at noon or earlier in the day.

ANSWER: Applicants have not determined these percentages, but they can be determined from concrete placement information provided in Exhibits 1 and 2 to Applicants' supplemental response dated November 11, 1983 and from the pour packages. See answers to Interrogatories 65-13(b) and (d) above.

INTERROGATORY NO. 65-13(g). Is it true that no more answers or information concerning Eddleman 65 was made available to Wells Eddleman in the Applicants' 1-13-84 supplemental "responses on contentions 41 and 65"?

ANSWER: Yes.

INTERROGATORY NO. 65-13(h). If answer to (g) is other than affirmative, state what information re Eddleman 65 was provided, since I cannot find any.

ANSWER: Not applicable.

INTERROGATORY NO. 65-13(j). Which of the pour supervisors identified in Exhibits 1 and/or 2 to your 11-11-83 supplemental response re Eddleman 65 are still employed by (aa) Daniel (bb) CP&L (cc) any other CP&L subcontractor?

ANSWER: The following are still employed by Daniel Construction Co. at the Harris Plant: J.C. Hyatt and R.L. Spears. To the best of Applicants' knowledge, none of the pour supervisors are employed by CP&L or a CP&L subcontractor.

INTERROGATORY NO. 65-13(k). Which persons inquired about in (j) above will CP&L provide the last known or present address of to Wells Eddleman for contact for possible deposition?

ANSWER: See answer to 65-13(l) below.

INTERROGATORY NO. 65-13(l). If your answer to (k) above is other than affirmative, or if (k) is objected to, please give all reasons for your answer or objection, including any reasons that differ between individuals inquired about in (j) above, stating to which person(s) each reason applies.

ANSWER: Messrs. Hyatt and Spears' business address is: Daniel Construction Co., Shearon Harris Nuclear Power Plant, Route 1, Box 101, New Hill, North Carolina 27562.

INTERROGATORY NO. 65-14(a). Are ICBSL216001 and ICBSL216002 two large pours in the Harris containment base mat?

ANSWER: Yes; see answer to Interrogatory 65-10.

INTERROGATORY NO. 65-14(b). Will CP&L explain, mark on blueprints or otherwise identify where each of the 2 pours asked about in (a) above was located in the Harris containment?

ANSWER: Yes.

INTERROGATORY NO. 65-14(c). If answer to (b) is affirmative, please identify where each is located (can be done orally or in documents at document production); if answer to (b) is not affirmative, or is negative, please give all reasons for that answer.

ANSWER: ICBSL 216001 extends from 0° Azimuth to 151° Azimuth. ICBSL 216002 extends from 151° Azimuth to 360° Azimuth.

INTERROGATORY NO. 65-14(d). How were voids detected in pour 216002?

ANSWER: Visual inspection of surface during a post placement inspection. See Parsons Affidavit at 10.

INTERROGATORY NO. 65-14(e). How was honeycombing detected in pour 216002?

ANSWER: See Parsons Affidavit at 10.

INTERROGATORY NO. 65-14(f). Where, and to what extent were (i) voids (ii) honeycombing (iii) other defects found in pour 216002?

ANSWER: See Parsons Affidavit at 10. There were no "other defects" associated with this pour. This information is also contained in the pour package.

INTERROGATORY NO. 65-14(g). What methods were used to detect (i) voids (ii) honeycombing (iii) other defects in pour 216002?

ANSWER: See Applicants' answer to Interrogatories 65-1(a)(b)(c) and Parsons Affidavit.

INTERROGATORY NO. 65-14(h). Were the same methods described in your response to (g) above used to check pour ICBSL 216001 for (i) voids (ii) honeycombing (iii) other defects?

ANSWER: Yes.

INTERROGATORY NO. 65-14(j). Were the same persons in charge of checking pours ICBSL 216001 and 216002 for (i) voids (ii) honeycombing (iii) other defect (iv) defects?

ANSWER: The same inspection groups (Construction Inspection, QA and QC) were responsible. Individuals who performed these tasks are identified in the pour packages.

INTERROGATORY NO. 65-14(k). Were the same methods used to check these 2 pours for voids, honeycombing, and/or other defects? (This may have been covered in a past answer, if so, so state).

ANSWER: Yes; see Applicants' answers to Interrogatories 65-10 and 65-1(a)(b)(c).

INTERROGATORY NO. 65-14(l). Identify each person who checked or inspected the 2 pours (or either of them) inquired about in (j) above for (i) defects (ii) noncompliance with applicable NRC regulations (iii) noncompliance with applicable NRC requirements (iv) compliance with applicable procedures (v) compliance with applicable codes (e.g. ASME) (vi) voids (vii) honeycombing (viii) concrete strength (ix) slump (x) other defects (xi) taking of samples (xii) composition of the concrete (xiii) consistency of concrete composition throughout the pour, i.e. in various batches used in it.

ANSWER: Carolina Power & Light Company employees who performed tasks designated (i)-(vii), (x), (xii) and (xiii) are identified in the pour packages. Daniel Construction Co. employees who performed tasks (ix) and (xi) are also identified in the pour packages.

INTERROGATORY NO. 65-14(m). Identify which of the person(s) identified in response to (l) above (i) now work for (aa) Daniel (bb) CP&L (cc) NRC (dd) other employer, please state employer's name, to your knowledge (ii) are available for deposition (aa) before Feb 16 (bb) before March 2 (cc) before March 16, 1984.

ANSWER: All of the persons who performed the actions described in Interrogatory 65-14(e) and who are identified in the pour packages are still employed by Carolina Power & Light or Daniel Construction except: Steve Mountcastle (former Carolina Power & Light employee) and Bruce Troxell (former Daniel employee).

INTERROGATORY NO. 65-15(a). Which of the pour packages identified in Exhibit 2, other than ICBSL 216001, will CP&L make available (i) a copy of (ii) the original of, to Wells Eddleman for inspection and copying?

ANSWER: See Applicants' answer to Interrogatory 65-13(d).

INTERROGATORY NO. 65-15(b). For any package you will not make available either as an original or as a copy, please state all reasons you will not make it available for inspection and copying.

ANSWER: Not applicable.

INTERROGATORY NO. 65-15(c). What does ICBSL stand for?

ANSWER: (I) Unit One, (CB) Containment Building, (SL) Slab.

INTERROGATORY NO. 65-15(d). What does ICBX stand for?

ANSWER: (I) Unit One, (CB) Containment Building, (XW) Exterior Wall.

INTERROGATORY NO. 65-15(e). Who filled out the information on Exhibits 1 and 2 of your 11-11-83 response?

ANSWER: L.F. Garner and B. Marlar.

INTERROGATORY NO. 65-15(f). Did the person or persons who filled out the information on Exhibits 1 and/or 2 obtain that information from direct inspection of the (i) pour packages (ii) concrete placement reports, for the pours listed on those 2 Exhibits?

ANSWER: Yes.

INTERROGATORY NO. 65-15(g). If answer to any part of (f) above is other than affirmative, please identify each individual who compiled the data in (i) Exhibit 1 (ii) Exhibit 2 inquired about above, stating which individual compiled which data, from which source document(s), stating whether each such document will be made available for inspection and copying and whether each such individual is available for deposition at any time prior to March 16, 1984.

ANSWER: Not applicable.

INTERROGATORY NO. 65-16(a). Please identify the specific procedures applicable to each pour identified in your 11-11-83 Exhibit 1 or Exhibit 2 which comprise those referred to in your response to interrogatory 65-1(a) (5-12-83 response at 29) as "site work procedures, technical procedures and administrative procedures."

ANSWER: See Applicants' answer to Interrogatory 65-11(h).

INTERROGATORY NO. 65-16(b). Please state exactly how the batching process is monitored, at what intervals, and identify each procedure for batching process monitoring used in connection with concrete in each pour inquired about in (a) above (i.e. those identified in 11-11-83 Exhibits 1 or 2).

ANSWER: This is explained in Ebasco Specification CAR-SH-CH-6 Concrete, CQC-13 Concrete Control, and WP-04 Concrete Production and Delivery.

Quality control instructions are given in:

QC-I 13.1 Compressive Strength Testing

QC-I 13.2 Batch Plant Inspection

QC-I 13.3 Concrete Field Tests

QC-I 13.5 Sieve Analysis of Fine and Coarse Aggregates.

INTERROGATORY NO. 65-16(c). Please state what tests were applied to the concrete constituent materials of each batch of concrete used in each pour inquired about in (a) above. Please identify each document giving results of each such test, and all documents which specify the procedures for each such test.

ANSWER: See Applicants' answer to Interrogatory 65-16(b) and the pour packages identified in response to Interrogatory 65-13(d).

INTERROGATORY NO. 65-16(d). Please state the criteria used to accept or reject a batch of concrete (e.g. those used for the Harris (i) base mat (ii) other portions of containment) and identify all documents specifying procedures and/or criteria for such acceptance or rejection.

ANSWER: These criteria are set forth in QC-I 13.3, QC-I 13.2 and TP-15.

INTERROGATORY NO. 65-16(e). Please state who puts the mix design identification number on each truck transporting concrete to the pour location, and who takes it off and who holds onto the mix design ID number and whether it is recorded in the pour package or retained in the pour package. (By "who" I mean job description or title unless you can readily identify specific individuals who did the actions asked about for the pours inquired about in (a) above).

ANSWER: When the trucks are loaded the driver is given the batch ticket for his mix and this ticket has his truck number on it. The driver delivers the concrete to the placement

location referenced by the placement numbers on the batch ticket. At the placement site the Construction Inspector takes the batch ticket prior to concrete discharge and verifies that the concrete is that specified for the placement, as stated in Applicants' answer to Interrogatory 65-1(a), by checking the placement number, the mix number and the truck number as determined by the Area Engineer on the Concrete Placement Report.

INTERROGATORY NO. 65-16(f). Are the records and original notes of the Construction Inspector who "follows all aspects of the placing operation" in the pour package for each pour inquired about in (a) above?

ANSWER: Yes. Complete and accurate records are in the pour package.

INTERROGATORY NO. 65-16(g). Are the test results of the QA inspector who "performs air content, slump, unit weight and temperature tests in addition to molding compressive strength cylinders" for each placement, and any original notes of this inspector, included in the pour package for that placement?

ANSWER: Yes; see Applicants' answers to Interrogatories 65-16(f) and 65-1(a).

INTERROGATORY NO. 65-16(h). Are the original notes and all reports of the Construction Inspector about "curing operations, concrete temperature and moisture conditions" in the pour package for each pour?

ANSWER: Yes, the Construction Inspector monitors cure operations and denotes this on the Post Placement Report. The Cure Logs, containing specific information on the curing of each placement, are maintained separately in Document Control.

INTERROGATORY NO. 65-16(i). What is checked for in the "post placement check" by the Construction Inspector on the

final quality of the placement? Is there a checklist used? What notes and documents on this check are in the pour package? Are there any that are not in the pour package?

ANSWER: The complete Post Placement Report contains a checklist of inspection items standard for all placements. This report is in the pour package. See also Applicants' answers to Interrogatories 65-1(a) and 65-16(a).

INTERROGATORY NO. 65-16(j). At which stage or stages of the inspections and checks described in your answer to 65-1(a) were the voids and/or honeycombing in pour 216001 detected, and by whom?

ANSWER: During Post Placement Inspections by Construction Inspection and QA, voids would be found in the exterior surface but there were no voids in ICBSL 216001. (As to pour ICBSL 216002, see Parsons Affidavit at 10).

INTERROGATORY NO. 65-16(k). How was each such defect identified?

ANSWER: Not applicable.

INTERROGATORY NO. 65-16(l). Were other defects identified in pour 216001?

ANSWER: No.

INTERROGATORY NO. 65-16(m). Were any defects identified in any pour listed in Exhibit 2 of your 11-11-83 Response?

ANSWER: No.

INTERROGATORY NO. 65-16(n). If answer to (m) is affirmative, which defects were identified, in which pour(s), at what stage of the checks and inspection described in your answer to 65-1(a), and by whom.

ANSWER: Not applicable.

INTERROGATORY NO. 65-16(o). Is anything asked about in (j) through (n) above for which all documentation is not in the pour packages?

ANSWER: No.

INTERROGATORY NO. 65-16(p). If answer to (o) is affirmative, for each such thing for each pour identified in Exhibit 1 or 2 of 11-11-83 response, identify all documents known or believed to contain the information asked about. Identify who possesses each such document.

ANSWER: Not applicable.

INTERROGATORY NO. 65-16(q). Please identify each person not listed in responses above who identified any defect in any pour listed in Exhibit 1 or 2 of 11-11-83, which Exhibits are referred to above.

ANSWER: To the best of Applicants' knowledge, no one else identified any defects beyond that described in Parsons Affidavit at 10.

INTERROGATORY NO. 65-16(r). Which repair procedure(s) were used to repair each defect in (i) pour 216001 (ii) each pour listed in Exhibit 2 where any defects have yet been found?

ANSWER: Not applicable. There were no defects in pour 216001, or the other pours identified in Exhibit 2.

INTERROGATORY NO. 65-16(s). For each procedure identified in response to (r) above, please state (i) the date it was used, (ii) the date the procedure was originally approved, (iii) the date any revision of the procedure which was actually used for the repair was approved, (iv) identification of each document containing (aa) the original procedure (bb) the procedure used to make the actual repair (cc) any further revisions of the procedure since the repair was made, (v) identification of any document(s) referred to in the procedure or any version of it which was actually used to make the repair, and of any document(s) requesting and/or approving change(s) in the procedure either before or after the repair was made.

ANSWER: Not applicable.

INTERROGATORY NO. 65-16(s)[2]. Who verified, for each repair made to each pour listed in Exhibit 1 or 2, that the repair was made "using prescribed repair procedures?"

ANSWER: Individuals who performed inspections are identified in the pour package.

INTERROGATORY NO. 65-16(t). Did the person making the verification asked about in (s)[2] above have in hand a copy of each prescribed repair procedure at the time of making the verification?

ANSWER: Applicants are unable to determine this; but see Applicants' answer to Interrogatory 65-16(u).

INTERROGATORY NO. 65-16(u). If answer to (t) is other than affirmative, did that person have available readily a copy of each prescribed repair procedure actually being used in the repair, at or within one hour or so of the time the repair was made?

ANSWER: Yes. Individuals performing inspections are trained, qualified and certified to perform their inspection activity and have ready access to necessary procedures.

INTERROGATORY NO. 65-16(v). Describe the procedure used to summarize "all inspection documents" into a concrete pour package. Is this a written procedure? If so, please identify each document telling how the summarizing's done. Who did the summarizing for each pour package identified in Exhibit 1 or 2? Who was the Construction Inspection Supervisor who "reviewed" each such pour package "for accuracy and conformance to procedures?" (cf. page 30 of 5-12-83 responses)

ANSWER: Technical Procedure TP-15 and Work Procedure WP-05. Names of personnel responsible for the review of pour packages are contained in the package.

INTERROGATORY NO. 65-16(w). Were any inaccuracies or nonconformances to procedures identified by the Construction Inspection Supervisor prior to the submission of each pour package for each pour identified in Exhibit 1 or 2, prior to "being submitted to QA for final review?" If so, please state what (i) inaccuracies (ii) nonconformances, to which procedures, were identified, by whom, for which pour(s), and state whether the person who identified them still works at Harris, and if so whether s/he is available for deposition before March 16, 1984 and if not whether CP&L will make available the person's last known address to Wells Eddleman.

ANSWER: No.

INTERROGATORY NO. 65-16(x). Were any inaccuracies or nonconformances to procedures (i) found by or (ii) reported to QA (aa) during final review (bb) after final review, for any pour or pour package for any pour identified in Exhibit 1 or 2?

ANSWER: No.

INTERROGATORY NO. 65-16(y). If answer to (x) or any part thereof is affirmative, please identify each such inaccuracy or nonconformance, when it was found or reported to QA, who found or reported it, what was done about it, and identify all documents reporting it, describing procedures used for dealing with it, stating what was done about it, and/or approving what was done about it. Please also state whether there was a procedure in place for dealing with the inaccuracy or nonconformance at or before the time it was found or reported, identifying all documents containing each such procedure, and to what pour(s) each procedure applies. Please state also if the person who found or reported each such inaccuracy or nonconformance still works at Harris, and if so, is s/he is available for deposition before March 16, 1984 and if not, whether CP&L will make available such person's last known address to Wells Eddleman.

ANSWER: Not applicable.

INTERROGATORY NO. 65-16(z). Which of the pours identified in Exhibit 1 or 2 has the NRC inspected: (i) prior to pouring, (ii) during pouring, (iii) after pouring, including inspection of the finished concrete, (iv) the repairs of (aa) during repairs (bb) after repairs were completed. Please state also if any violations or noncompliances with NRC regulations or failures to follow procedures or deviations or deficiencies were found related to any pour identified in Exhibit 1 or 2 (cc) by CP&L (dd) by NRC (ee) by CP&L but not reported to NRC.

ANSWER: NRC maintains records of their inspections at the Harris site. (See NRC Staff discovery response of February 21, 1984.) NRC IE Inspection Report No. 50-400/78-5, 50-401/78-05, 50-402/78-5 and 50-403/78-5, cover letter dated October 26, 1978, discusses the containment basemat placement. No NRC regulations have been violated with regard to containment concrete placements.

INTERROGATORY NO. 65-17(a). For each pour identified in Exhibit 1 or 2, identify (i) the items placed for embedding in the placement (ii) the inspector(s) who "examine[d] all items to be embedded ... prior to the actual placement and document(ed) the inspections for accept/reject criteria.

ANSWER: The Concrete Placement Card designates the groups of items and discipline signatures required for item acceptance. The Inspection Reports identify embedded items and inspection results and the inspection personnel. The pour package is the combination of these reports and it shows procedures and drawings used in inspections of embedded items.

INTERROGATORY NO. 65-17(b). What are the accept/reject criteria for (i) placement of, (ii) alignment of, (iii) distance between rebars (aa) used in pour ICBSL 216001 (bb) used in pour ICBSL 216002 (cc) used in other pours identified in Exhibit 2. Please identify all documents giving each such accept/reject criterion and stating to which pour(s) each applies if it does not apply to all of them.

ANSWER: Reinforcing steel drawings and other approved design documents state installation criteria. Inspections are made to these criteria. See Applicants' answers to Interrogatories 65-17(a) and 65-4(e)(f).

INTERROGATORY NO. 65-17(c). Please identify, for each pour in Exhibit 1 or 2, the Construction Inspector who examined the items prior to placement, and the Construction Inspection Supervisor who reviewed the pour package prior to placement. Please also state how the inspection documents prior to placement are combined into a "pour package" and whether this is done by a written procedure and if so identify the written procedure used for each combining of documents into a pour package for each pour in Exhibit 1 or 2, and identify all documents containing each such procedure.

ANSWER: The requested information is contained in the pour packages. See also Applicants' answer to Interrogatory 65-16(v).

INTERROGATORY NO. 65-17(d). State which, if any, inaccuracies were found by the Construction Inspection Supervisor in the pre-placement pour package for (i) pour ICBSL 216001 (ii) pour 216002 (iii) each other pour identified in Exhibit 2.

ANSWER: No such inaccuracies were found.

INTERROGATORY NO. 65-17(e). Were any reserve cylinders tested on pour 216001? If so, what were the results? Please identify all documents which (i) ordered or requested such testing, (ii) contained procedures actually used in such testing, (iii) gives results of such testing.

ANSWER: No, all regular test cylinders were used at required times (one at 7 days and two at 28 days) and were above the design strength of 4000 psi. This information is in the pour package. See also documents identified in Applicants response to Interrogatory 65-16(b).

INTERROGATORY NO. 65-18(a). What measures were taken on pour 216002 to "prevent the formation of honeycombs and voids" (cf. 5-12-83 response at 31).

ANSWER: See Applicants' answer to Interrogatory 65-1(c) and Parsons Affidavit.

INTERROGATORY NO. 65-18(b). Were the measures taken on pour ICBSL 216001 any different, for preventing the formation of honeycombs and voids, than on 216002?

ANSWER: No.

INTERROGATORY NO. 65-18(c). Were the measures taken on pours after 216002 in the containment building at Harris revised in any way (i) after pour 216002 was found to have void/honeycomb defect(s) in it? (ii) in response to the defect(s) in pour 216002?

ANSWER: Each placement is looked at prior to concrete placement by the Area Engineer, Construction Inspector and Concrete Foreman or Superintendent because each has a different configuration and may require different precautions. After the ICBSL 216002 placement more emphasis was placed on pre-placement meetings in order to identify possible problem areas in placement.

INTERROGATORY NO. 65-18(d). If answer to (c) above is affirmative for (i) or (ii) in (c), please identify all documents (i) requesting the change in procedure, (ii) approving the change in procedure, (iii) justifying or weighing the merits of the change in procedure, (iv) giving the new procedure.

ANSWER: No procedure revisions were made. Informal meetings for containment concrete placements were held on a regular basis but were not procedurally required.

INTERROGATORY NO. 65-18(e). Please identify any document or documents which give the procedure(s) to be used to prevent formation of honeycombs or voids which were used (i) on pour ICBSL 216001 (ii) on pour 216002 (iii) on other pours listed in Exhibit 2.

ANSWER: See Applicants' answer to Interrogatory 65-11(a). WP-05 and TP-15 are procedures used on all concrete placements.

INTERROGATORY NO. 65-18(f). Please state whether a written determination of the difficulty of placement for pour (i) ICBSL 216001 (ii) 216002 (iii) or other pours found in listing in Exhibit 2, was made prior to each such placement.

ANSWER: No. Pre-placement meetings were held at management direction with placing personnel at which time placement configuration, method, techniques, drawings and other placing aspects were discussed.

INTERROGATORY NO. 65-18(g). If answer to any part of (f) above is affirmative please identify each document containing such written determination, state whether such document is in the possession of CF&L, state whether it is in the pour package, state whether CP&L knows if anyone else has a copy of the document (and if so who, please identify) (giving name and address).

ANSWER: Not applicable.

INTERROGATORY NO. 65-18(h). Were any of the pours listed in Exhibit 1 or 2 "determined to be difficult" prior to pouring? (cf. pp 31-32 of 5-12-83 responses). If so please list which ones and state how the difficulty was determined if not already stated in response to interrogatories above.

ANSWER: None of the listed placements were viewed as difficult to place. The pre-placement meetings were held to inform placing personnel of logical placement progression and methods, and to ensure everyone involved was aware of the required quality of the placement.

INTERROGATORY NO. 65-18(j). Who selected the concrete mix for pours (i) ICBSL 216001 (ii) 216002 (iii) otherwise listed in Exhibit 2?

ANSWER: The Area Engineer as stated Applicants' answer to Interrogatory in 65-1(c) and noted on the Placement Card.

INTERROGATORY NO. 65-18(k). Was a "super plasticized mix" (cf. p 32 of 5-12-83 response) used in pours (i) 216001 (ii) 216002 (iii) otherwise listed in Exhibit 2? If so, who designed it?

ANSWER: No.

INTERROGATORY NO. 65-18(l). Was the "preventative program ... used during actual placements ... (in which) construction inspection personnel constantly watch the placement to insure that adequate consolidation is being used to effect a dense and homogeneous concrete placement" in use on pour 216002? If so, who were the personnel who continuously watched the placement, and how long did each one watch for, if known?

ANSWER: Yes. The requested information can be determined from the pour package.

INTERROGATORY NO. 65-18(m). Was "special attention given" (cf. p 32 5-12-83 response) to vibration of concrete during pour 216002? If so, by whom? If not, why not?

ANSWER: Yes, see Applicants' answer to Interrogatory 65-1(c). Special attention to vibration is given for all placements.

INTERROGATORY NO. 65-18(n). Were craft personnel on pour 216002 already instructed, prior to the pour, on the importance of adequate vibration?

ANSWER: Yes. Craft personnel on the placement were instructed on placing technique, drop heights, lift thicknesses, and proper consolidation. See Applicants' answer to Interrogatory 65-1(c) and Parsons Affidavit.

INTERROGATORY NO. 65-18(o). Does CP&L or Daniel have any information on whether the voids and/or honeycombing on pour 216002 were caused by or contributed to by (i) the concrete mix, (ii) its placement, (iii) inadequate watchfulness over the placement, (iv) inadequate vibration during or after the placement, (v) other causes known to you or identified in reports?

ANSWER: The void was discovered in an area highly congested by rebar and was next to exterior forms. Extra effort was made in these areas to achieve a dense homogeneous mix.

INTERROGATORY NO. 65-18(p). If answer to any part of (o) is affirmative, please identify all documents containing such information.

ANSWER: The pour package contains the requested details in Inspection Post Placement Reports and QA Inspection Reports.

INTERROGATORY NO. 65-18(q). Were voids and/or honeycombing detected in pour 216002 during its placement?

ANSWER: No. See Parsons Affidavit.

INTERROGATORY NO. 65-18(r). Were voids and/or honeycombing detected in pour 216002 after its placement but before its "Post Placement Inspection" (cf. 5-12-83 at 32)

ANSWER: No, voids were detected at Post Placement Inspection by Construction Inspection and QA following form removal. See Parsons Affidavit at 10.

INTERROGATORY NO. 65-18(s). Were voids and/or honeycombing detected in pour 216002 at its Post Placement Inspection?

ANSWER: Yes; see answer to Interrogatory 65-18(r).

INTERROGATORY NO. 65-18(t). Were voids or honeycombing detected in pour 216002 after its post placement inspection at any time up to the the present?

ANSWER: No.

INTERROGATORY NO. 65-18(u). For each affirmative answer to any of (q) thru (t) above please state (i) who found the voids, (ii) how they were found, (iii) who found the honeycombing, (iv) how it was found, (v) when the voids and/or honeycombing were first reported to QA, and when they were first reported to the Construction Inspector Supervisor, identifying the

Supervisor to whom they (or it) was/were reported, (vi) when repair operation began, (vii) who supervised the repair operations -- if more than one person supervised them, identify each one and state what part(s) or the repair each supervised, (viii) who inspected the repair operation, (ix) whether the inspector had in hand at the time of the inspection the procedure(s) then approved for making such repairs, (x) whether any inspection other than of exposed concrete surfaces of pour 216002 was ever made for honeycombing and/or voids, and if so when, by whom and how, with what results, identifying all documents requesting such inspection, giving the inspection procedure used, or documenting the results of such inspection, (xi) how thick the portion(s) of pour 216002 examined visually at the surface for honeycombing and/or voids are (e.g. vertical depth or horizontal thickness at each point inspected, or overall depth or thickness), (xii) how, and for how long, each repair in pour 216002 was cured, and who inspected the curing and who supervised it, (xiii) whether each person identified in response to other parts of (u) above still works at Harris, and if so, whether that person is available for deposition before March 16, 1984, and if not, whether that person's last known address will be made available to Wells Eddleman.

ANSWER: See answer to Interrogatory 65-18(r) and the pour package for information on items (i)-(viii).

(ix): CI and QA Inspection personnel are trained, qualified and certified to perform inspection functions and have ready access to all necessary procedures. See also Applicants' answer to Interrogatories 65-16(t), (u).

(x): No, only visual inspections during placement per TP-15 and as stated in answer to Interrogatory 65-1(c).

(xi): See answer to Interrogatory 65-18(u)(x), above.

(xii): Information on repair and cure is in the pour package and Cure Logs.

(xiii): See answer to Interrogatories 65-14(1), (m). Additionally, Carolina Power & Light employees R.G. Godwin and H.L. Wright no longer work at the Harris Plant site.

INTERROGATORY NO. 65-19. Why was no ultrasonic testing or inspection performed (i) on concrete at Harris, e.g. in the containment (ii) on pour 216001 (iii) on pour 216002? Please state all reasons for your answers. (cf. 5-12-83 at 32).

ANSWER: See Parsons Affidavit at 12.

INTERROGATORY NO. 65-20. Please explain the apparent discrepancy between your answer to 65-1(h) that there were 103 areas of voids/honeycombs out of approximately 500 placements in the Unit 1 containment Building that required structural repair (5-12-83 at 33) and your answer to 65-1(b) at p.9 of 11-11-83. Specifically, what concrete in the Unit 1 containment building that is NOT part of the base mat, exterior walls or dome, has honeycombing or voids in it? Were all 103 voids or honeycombs in pour 216002? Were samples of the repair concrete taken for all 106 repairs? Were any of these samples retained more than 30 days? Does CP&L and Daniel or anyone else known to you still possess any of them?

ANSWER: There is no discrepancy; Applicants' answer to Interrogatory 65-1(h) refers to 103 areas of voids/honeycombs in approximately 500 placements in the Unit 1 Containment Building that required structural repair, and Applicants' answer to Interrogatory 65-1(b) addresses 106 concrete placements for the Unit 1 Containment Building base mat, exterior wall, and dome. The supplemental response to Interrogatory 65-1(b) clarified this answer.

The containment interior wall and platforms inside the interior walls had voids and/or honey combing which required structural repair. Concrete placement ICBSL 216002 had one void and/or honeycomb which required structural repair. Concrete samples were molded from concrete when utilized for structural repair, and were retained for testing in accordance with ASTM specifications. Some of the concrete samples could have been retained more than 30 days, but none of these samples are still available in Applicants' concrete laboratory.

INTERROGATORY NO. 65-21. Who prepared each repair procedure used on voids/honeycombs (i) in pour 216002 (ii) elsewhere in Harris 1 containment? Ebasco? Daniel? CP&L? Who approved each, and when? Was this before or after each repair was made? Have any such repairs exhibited cracking or chipping to date to your knowledge (aa) in pour 216002 (bb) elsewhere in Unit 1 containment? (cf 5-12-83 at 33 and 34).

ANSWER: Structural concrete repair procedures are prepared and approved by CP&L and Ebasco engineers. See Applicants' answer to Interrogatory 65-1(i). In order for repair procedures to be utilized, they must and are prepared/approved prior to the repair work. To date, structural concrete repairs in the Unit 1 Containment Building have met or exceeded current industry standards and procedures. See Parsons Affidavit at 11.

INTERROGATORY NO. 65-22. Were any drawings prepared or made of the repairs to voids and/or honeycombs in (i) pour 216002 (ii) other pours in Harris 1 containment? If so, please identify each such drawing and which pour(s) it relates to (cf. 65-4(a) answer, 5-12-83 at 37).

ANSWER: Post-placement inspection reports prepared by QC/Construction inspectors depict the void and/or honeycomb either by a written or pictorial description. When repair procedures are detailed for a structural concrete repair, the responsible CP&L and Ebasco engineers may choose to utilize a drawing to clarify the repair method. See also pour package for pour 216002.

INTERROGATORY NO. 65-23(a). Were any nonstandard clearances between rebars involved in the area of (i) pour 216002 (ii) pour 216001 (iii) other pours in Exhibit 2 inside Harris containment? If so, please identify all documents stating the nonstandard clearance or the reason for it and/or requesting it or approving it.

ANSWER: Reinforcing steel inspection reports are maintained in the concrete placement package. When nonstandard reinforcing steel clearances are identified by a qualified Construction Inspector, he notifies the CP&L Area Engineer who investigates the clearance discrepancy and resolves the discrepancy with CP&L and Ebasco engineering prior to concrete placement. Documentation of the discrepancy resolution is referenced on the aforementioned reinforcing steel inspection reports.

INTERROGATORY NO. 65-23(b). Were any bars in (i) pour 216001 (ii) pour 216002 (iii) other pours inside Harris containment made with rebar more than 18" from center to center at any point, to your knowledge? If so, which ones, who approved it and when (e.g. before or after concrete placement, on what date) and was such approval in accord with any approved procedure? If so, identify all documents approving it and/or giving the procedure under which it was approved and/or requesting it.

ANSWER: See pour packages identified in response to Interrogatory 65-13(d).

INTERROGATORY NO. 65-24(a). What was the slump of each pour listed in Exhibit 2?

ANSWER: QA inspectors performed slump tests on concrete at a set frequency in accordance with current industry standards. These slump values are included in the pour package for each concrete placement.

INTERROGATORY NO. 65-24(b). What was the slump of pour 216002?

ANSWER: See pour package for pour 216002.

INTERROGATORY NO. 65-24(c). Does "fifty yards" in your answer to 65-4(g) of 5-12-83 refer to each fifty cubic yards of concrete?

ANSWER: Per previous answer to Interrogatory No. 65-4(g), "Every" precedes the words "fifty yards" which means "each without exception of one after another."

INTERROGATORY NO. 65-24(d). If not, what does "fifty yards" in that answer mean or refer to?

ANSWER: Not applicable.

INTERROGATORY NO. 65-24(e). Was the slump uniform across pour 216001? (ii) Across pour 216002? (iii) If not, please give all the slump levels for each pour, 216001 and 216002.

ANSWER: See answer to Interrogatory 65-24(a) above.

INTERROGATORY NO. 65-25(a). Is pour 216002 in the Harris containment wall?

ANSWER: No; see answer to Interrogatory 65-10.

INTERROGATORY NO. 65-25(b). Or is it in the base mat?

ANSWER: It is in the base mat; see answer to Interrogatory 65-10.

INTERROGATORY NO. 65-26(a). Was any concrete in pour 216002 rejected by any inspector or check at any time, and still poured in that pour?

ANSWER: No.

INTERROGATORY NO. 65-26(b). Was any concrete prepared for pour 216002 rejected? If so what was done with it? Does CP&L or Daniel know where it is now? If so, where is it? Does CP&L or Daniel know anything about where it would be or could be or is, regardless of knowing its exact location?

ANSWER: Yes. As to disposition of rejected concrete, see answer to Interrogatory 65-5(a). In addition rejected concrete is placed in a waste area located near the concrete batch plant.

INTERROGATORY NO. 65-27(a). Was any concrete in any pour identified in Exhibit 1 or 2 (to your 11-11-83 responses) found to be "out of specification" during or after the pouring?

ANSWER: No concrete placed in the base mat, exterior wall and dome of the containment has been found to be "out of specification." Concrete specifications and drawings require a specified compressive strength (see Parsons Affidavit at 7) for the containment structure to perform its design function. Concrete strength as placed in the aforementioned containment structure has an actual strength which exceeds design strength by an average of 27.9 percent.

Previous interrogatory answers (65-5(c) and 65-5(e)) refer to rejected and "out of specification" concrete which refers primarily to fresh concrete tests, slumps, air content, unit weight, etc., and these tests are utilized as indicators to evaluate the compressive strength at a cylinder age of 7 and 28 days.

INTERROGATORY NO. 65-27(b). If so, how did it get by the careful inspection you say is done on the concrete mix?

ANSWER: Not applicable.

INTERROGATORY NO. 65-27(c). For each such pour, please state which discrepancy reports apply to (i) pours inside Harris containment (ii) pour 216001 (iii) pour 216002 (iv) other pours listed in Exhibit 2, identifying each such discrepancy report and all documents containing it.

ANSWER: Not applicable.

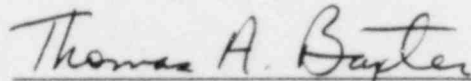
INTERROGATORY NO. 65-27(d). For (i) thru (iv) of (c) above, identify each deficiency and disposition report that applies to each discrepancy report for each such pour. If you think it burdensome, do only (ii) thru (iv).

ANSWER: Not applicable.

INTERROGATORY NO. 65-27(e). For (i) thru (iv) of (c) above, please state which civil Non-Conformance Report(s) apply to that pour and/or each discrepancy report or deficiency and disposition report for that pour. Are these reports (discrepancy report, civil non-conformance report, deficiency and disposition report) identified in the pour package for each such pour. If so, will you make the identification available for inspection and copying? If not, where if anywhere are they listed or referenced in your records? Will you produce any records listing them or referencing them for inspection and copying, at least for the pours listed on Exhibits 1 and 2? If not, why not?

ANSWER: If an out-of-specification condition exists, reports would be identified in the placement pour package. Copies of records for the concrete placements listed in Exhibits 1 and 2 of Applicants' Supplemental Responses dated November 11, 1983 will be produced to Mr. Eddleman.

Respectfully submitted,



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Counsel for Applicants

DATED: March 23, 1984

Senior Construction Specialist

I. Date of Birth - April 20, 1947

II. Education

A. W. W. Holding Technical Institute - Civil Engineering - Associate in Applied Science.

B. Campbell College - Business Administration - three years.

III. Experience

A. May, 1969 to May, 1971

1. U.S. Army, Fort Gordon, Georgia

a. Military Police.

2. McLamb Builders, Dunn, NC

a. House construction. Wanted to further education. Was interested in civil engineering.

C. March, 1972 to May, 1972

1. NC State Highway Commission

a. Surveying, cross-sections, asphalt paving, concrete analysis, roadway construction. First Co-Op work period.

D. August, 1972 to November, 1972

1. NC State Highway Commission

a. Surveying, bridge building, culvert and catch basin layout. Second Co-Op work period.

E. March, 1973 to May, 1973

1. Kenneth D. Close, Raleigh, NC

a. Surveying, timber cruising, property surveys. Third Co-Op work period.

F. March, 1974 to Present

1. Carolina Power & Light Company

a. March 4, 1974 - Employed as Engineering Technician II in the Nuclear Construction Section of the Power Plant Construction Department. Located at the Harris site, New Hill, NC.

Duties included:

- 1) Field Surveying and Construction layout.
- 2) Cross sections for earthwork and pay quantities.
- 3) Computations of earth quantities from field notes and plotted cross sections.
- 4) Soils Inspections to include:
 - a) Soils Field - Inspection of excavated material and areas; soils compaction; field testing using sand cone, drive tube, and rubber balloon methods; construction of test fills to determine compaction criteria using various compaction equipment and perform large scale density and permeability tests in the test fills; soils classification and documentation of all daily inspections for record and control.
 - b) Soils Laboratory - Performed soils tests on field samples to include moistures, proctors, check plugs, sieve analysis, liquid and plastic limits using laboratory equipment. Documented testing and results for record and control.

- b. February 28, 1976 - Promoted to Engineering Technician I in the Nuclear Construction Section of the Power Plant Construction Department. Located at the Harris site, New Hill, NC.
Duties Included:

- 1) Field Surveys of Plant building, roads and drainage, make-up water line, site facilities.
- 2) Soils placement and compaction for building foundations and substructure.
- 3) Contractor surveillance during construction of plant buildings which consisted of foundation preparation, reinforcing steel placement, concrete placement and building frame erection, contractor time and manhours.
- 4) Special projects/assignments, i.e.
 - Sutton Plant - Precipitator outage
 - Brunswick Plant - Cooling Tower Construction
 - Cape Fear Plant - Topographical Surveys
- 5) Performed inspections on surfaces excavated to grade in the Power Block in preparation for geological mapping and placement of concrete.
- 6) Helped develop mix designs for a shotcrete mix to be used on the vertical shapes of the Power Block excavation to include testing and mix qualification and qualifying of application personnel. Inspected the application of the shotcrete for conformance to specifications and design drawings and insured proper cure was achieved. Cored and tested samples of the completed work to insure proper mix strength and proper application.
- 7) Perform pre-placement, placement, and post placement inspections of concrete for construction of the plant.
- 8) Perform inspections of rebar fabrication and placement, embed and penetration installation to insure conformance to procedures.
- 9) Documentation of inspections for record and control.
- 10) Trained incoming inspectors in Concrete and Reinforcing Steel placement.

- c. May 19, 1979 - Promoted to Construction Specialist in the Nuclear Construction Section of the Power Plant Construction Department. Located at the Harris site, New Hill, NC. Duties include those of the Construction Inspection Supervisor - Civil to:

- 1) Develop inspection procedures from codes, specifications and work procedures for inspections of the following items: Concrete, Reinforcing Steel, Embed Items, Grout Placement, Drilled-In-Anchors, Masonry Block Walls Soils Field and Soils Laboratory inspections at the Plant Areas, Main and West Dams.
- 2) Hire, train and supervise inspectors in the performance of inspections on the above items.
- 3) Review documentation of above inspections for completeness, accuracy and conformance to established specifications, and audit inspectors in the performance of their assigned duties.
- 4) Assist Engineering in resolution of field problems and work with the Construction Inspection Unit Supervisor in performing job assignments.

- d. October 31, 1981 - Promoted to Senior Construction Specialist in the Harris Site Management Section of the Nuclear Plant Construction Department. Located at the Harris site, New Hill, NC. Continue to perform duties of the Construction Inspection Supervisor in the activities noted above with the addition of Structural Steel and Nuclear Coatings inspection. Duties:

- 1) Continue to perform activities of the Civil Construction Inspection Supervisor in Concrete, Reinforcing Steel and Embedded Items, Grout Placement, Drilled-In-Anchors and Masonry Block Walls, Soils Field and Soils Laboratory, Structural Steel and Coatings Application Inspection.

EDUCATION:

B.S. - June 1971 University of Tennessee
Major - Civil Engineering with emphasis on construction

M.S. - August 1975 University of Tennessee
Major - Soil Mechanics and Foundation Engineering
Minor - Construction Materials

WORK EXPERIENCE:

February 1983 - Present

Principal Office Engineer with CP&L at SHNPP. Responsible for following: Preparation of civil architectural-structural permanent plant material requisitions; Disposition of civil and architectural-structural nonconformances as assigned; construction of temporary facilities; coordination of construction drawings between Nuclear Engineering & Licensing Department and Harris Plant Construction Section.

January 1982 - February 1983

Civil Discipline Engineer with CP&L at SHNPP. Responsible for following: Provide engineering assistance to cooling tower contractor and monitor construction activities for CP&L; Provide engineering assistance to prime contractor (Daniel) with emphasis on general yard piping, backfill operations, and support buildings; Review actual construction versus planning schedules for improvement in attaining milestones.

July 1979 - January 1982

Area Engineer and Civil Discipline Engineer with CP&L at SHNPP. Monitor construction operations of contractor and coordinate requisition and delivery of owner-supplied materials for earth-rock dams, concrete spillways and separating dike. Prepare and coordinate field construction changes with design consultant. Provide engineering assistance to contractor and inspection personnel with respect to drawings and specifications. Review and maintain all construction documents which pertain to the structures. Perform borrow investigations to obtain suitable impervious and rock fill material for the dams and separating dike.

September 1978 - July 1979

Staff Engineer with Power Plant Construction Department at Carolina Power and Light Company headquarters in Raleigh, N.C. Primary duties consist of the following: Providing soils engineering assistance to other staff engineers and conducting soils investigations for various projects (small buildings to ash pond dams) - Prepare internal reports on all soils investigations - Review soils reports submitted by subsurface investigation consultants. Assist consultant during dam safety inspections and gather information for inclusion in dam safety reports.

WORK EXPERIENCE (CONTD):

February 1977 - September 1978

Civil Engineer with USDA, Soil Conservation Service in South Technical Service Center, Fort Worth, Texas. Assigned special complex tests and interpret test data dealing with engineering properties of soil and rock. Prepared soil mechanics reports which include design and construction recommendations for earth-rock embankments and channels. Participated in conducting training meetings at the STSC. Gave soil mechanics assistance to state engineers and their staff, and engineering geologists in selection of representative samples for engineering property tests for foundation and earth-fill materials.

February 1976 - February 1977

Civil Engineer with USDA, Soil Conservation Service in Granada, Ms. Assisted Project Engineer in coordinating work and scheduling activities of field survey parties and construction inspectors. Inspected construction projects (earth dams and channel realignments) to insure compliance with plans and specifications. Assisted Project Engineer in selection of borrow materials for lime treatment and performed laboratory tests on soils prior to and following lime treatment, with emphasis on long-time effectiveness of lime treatment.

August 1975 - February 1976

Construction coordinator with housing contractor in Knoxville, Tn.

May 1975 - August 1975

Graduate Research Assistant at University of Tennessee. Master's Thesis - Investigation of Mechanisms Related to Non-Woven Fabric Filtration. Performed laboratory and field work with consulting geotechnical engineer in Knoxville, Tn.

June 1971 - May 1973

Associate Design Engineer with Newport News Shipbuilding and Dry Dock Company. Performed stress analysis and design of structural steel foundations on submarines and aircraft carriers.

PROFESSIONAL ORGANIZATIONS:

American Society of Civil Engineers
International Society of Soil Mechanics and Foundation Engineering

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)

CAROLINA POWER & LIGHT COMPANY)
and NORTH CAROLINA EASTERN)
MUNICIPAL POWER AGENCY)

Docket Nos. 50-400 OL
50-401 OL

(Shearon Harris Nuclear Power)
Plant, Units 1 and 2))

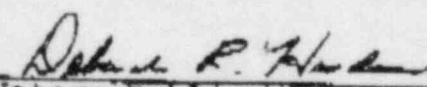
AFFIDAVIT OF ROLAND M. PARSONS

County of Wake)
State of North Carolina) ss:

Roland M. Parsons, being duly sworn according to law, deposes and says that he is Project General Manager - Shearon Harris Nuclear Power Plant of Carolina Power & Light Company; that the answers to Interrogatories on Contention 65 contained in "Applicants' Responses to Wells Eddleman's General Interrogatories and Interrogatories on Contention 65 to Applicants Carolina Power & Light Company, et al., (Seventh Set)" are true and correct to the best of his information, knowledge and belief, and that the sources of his information are officers, employees, agents and contractors of Carolina Power & Light Company.


Roland M. Parsons

Sworn and subscribed to before me
this 23rd day of March, 1984.


Notary Public

My Commission Expires: My Commission Expires 4-20-85