

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DOCKETED
USNRC

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

Glenn O. Bright
Dr. James H. Carpenter
James L. Kelley, Chairman

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AGO 13

8-09-84
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OFFICE OF PUBLIC AFFAIRS
DOCKETING SERVICE

In the Matter of

CAROLINA POWER AND LIGHT CO. et al.
(Shearon Harris Nuclear Power Plant,
Unit 1)

Docket 50-400 OL

Wells Eddleman's General Interrogatories
to Applicants Carolina Power & Light et al.

(10th Set)

6-14-84

Under 10 CFR 2.740, 2.741 and the Board's 9-22-82 Memorandum(s) and Order(s), Wells Eddleman requests Applicants to answer separately and fully in writing, under oath or affirmation, each of the following interrogatories, and to produce a permit inspection and copying of the original or best copy of all documents identified in response to interrogatories as set forth below.

and NC Dept of C&S + County emergency planners

These interrogatories are intended to be continuing in nature, and I request each answer to be promptly supplemented or amended as appropriate under 10 CFR 2.740(e), should CP&L, NCEMPA, any other or any contractor or consultant to any, some or all of those, Applicant, or any employee of any or some or all of them, or any individual acting on behalf of any or some of all of them, obtain or create any new or differing information responsive to these general interrogatories. The request for production of documents is also continuing and requests Applicants to produce promptly if not immediately any additional documents the Applicants and others acting on their behalf or employed by them, as listed in the previous

State of NC, State or County emergency response planner or personnel

sentence, obtain which are responsive to the request(s) for production of documents below.

Where identification of a document is requested, please briefly describe the document (e.g. book, notebook, letter, memo, report, notes, transcript, minutes, test data, log, etc.) and provide the following information as applicable: document name, title, number, author(s), date of writing or of publication or both, addressee, date approved, by whom approved, and the name and address of the persons having normal custody of the document, and name and address of any person other than the preceding having actual possession of the document. When identifying documents in response to these interrogatories and requests, please state the portion or portions of the document (e.g. sections, chapters, pages, lines) upon which Applicants rely or which Applicants swear or affirm is/are responsive to the applicable interrogatory or request.

DEFINITIONS herein:

"Harris", "Harris Plant", "SHNPP", or "plant" where not specified otherwise, all mean the Shearon Harris Nuclear Power Plant.

"Applicants" means all of the persons, employees, consultants, contractors and corporations as listed in the first sentence of the second paragraph on page 1 of this document, above.

"FSAR" means the Harris Final Safety Analysis Report.

"ER" means the Harris Environmental Report.

"Document(s)" means all writings and records of every type, including electronic and computer records, in the possession, control or custody of Applicants or any individual(s) acting on Applicants' behalf, including, but not limited to: reports, books, memoranda, correspondence, notes, minutes, pamphlets, leaflets, magazines, articles, surveys, maps, bulletins, photographs, speeches, transcripts,

voice recordings, computer printouts, information stored in computers or computer peripheral devices such as disks, drums, etc., voice recordings, microfilm, microfiche and all other writings or recordings of any kind(s); and copies of any of the preceding even though the original(s) are not in the possession of Applicants or in their custody or control. Document(s) shall be deemed to be within the control of Applicants or ^{any} individual(s) acting on their behalf if they have ownership, possession, or custody of the document(s) or a copy thereof, or have the right to secure the document(s) or a copy thereof, from any person or public or private entity having physical possession thereof.

Each definition given above applies within all other definitions above.

GENERAL INTERROGATORIES

G1 (a) Which contentions of Wells Eddleman do Applicants agree are now admitted in this proceeding, NPC Dockets 50-400/401 O.L.?

(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:

(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.

(d) please identify all facts concerning which each such person identified in response to G1(c)(1) above has first-hand knowledge.

(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.

(f) Please identify any other document(s) used ^{or relied upon} by Applicants in responding to the interrogatory.

(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.

(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.

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.

(b). Please identify each contention regarding which each such person is expected to testify.

(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.

(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.

(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.

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.

(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) of 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.

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 ^{form intent} or ~~intend~~ to use such document in cross-examination.

(b) please identify any undocumented information Applicants intend to use in cross-examination of each such witness for me.

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.

(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.

G-6(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 the 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, if any, upon which Applicants rely of the document,
 - (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 ^{or State of NC or any emergency planner} 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 contention(s) 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 such person for each document.
 - (xii) state whether Applicants have ever employed any author(s) of the document, identifying each such person for each document.
 - (xiii) identify all sources of data used in the document.
- Answers to all the above may be tabulated or grouped for efficiency.

G-7(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.

(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 G-7(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.

(c) Please identify which of the documents identified in response to (b) above ⁽¹⁾ 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.

G-10(a) Where the above general ^{and/or specific interrogatories below} interrogatories, 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 G-10(a)(ii) is other than affirmative, please state all reasons for your answer. (iv) If your answer to G-10(a)(i) above is other than affirmative, please state all reasons for your answer.

(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.

G-11 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.

G-12(a) In your previous answers where you have not identified documents, (i) have all relevant documents been produced in lieu of stating identification of each such document? (ii) do you rely on the entire document, since you have not identified parts or page numbers? (iii) if there are any particular parts or pages of each document produced, which you believe are responsive to an interrogatory or portion thereof, please identify each set of parts or pages in each document, together with the interrogatory or portion thereof (or interrogatories and/or portions thereof) to which it is responsive. (iv) where no documents are identified and identification of documents has been requested, are you saying such no documents exist? Or that no such documents are in your possession?

(b) In your present answers, are you actually identifying documents where identification of documents is requested? (c) If not, how are you going to provide identification of documents? Will that identification include statements of relevant pages or parts?

57-C-3-3(a) Is any consideration of temperature given in night-time notification of residents or transients within the EPZ (i) at all (ii) as regards turning off heating devices on cold nights, if sheltering is recommended (iii) as regards turning off air conditioners on warm or hot nights, if sheltering is recommended? (b) Have you (i) conducted any tests (ii) collected any information (iii) known any information, concerning the ability of each notification method you will use for Harris accidents at night, especially between 1 am and 6 am, to awaken persons within the EPZ? (c) If so, please identify all such information and all documents containing such information. (d) Does the emergency planning account for any delay in sleeping persons (asleep at the time of notification) receiving the information that a Harris accident is in progress? (e) If so, please explain all such sources of delay (e.g. delay due to awakening, delay due to sleepiness, grogginess or drowsiness, delay in preparing to evacuate, delay in travel due to tired or sleepy drivers, etc) and how each or any of them is taken into account in the planning for emergency conditions (nuclear accidents) at the Harris nuclear plant. (f) Please identify all documents concerning the matters inquired about in parts (a), (d), or (e) (or any subparts) above, which have not been previously identified, stating for each such document what specific interrogatory part(s) or subpart(s) it relates to.

57-C-3-4(a) Referring to your answer to 57-C-3-2, do any of the entities listed (including "other authorities") have any automatic telephone notification or dialing systems at all? (b) If so, please answer 57-C-3-2(b) with respect to the capabilities of each such system. (c) Do you have any opinion as to whether persons awakened by sirens in the Harris EPZ might use the telephone (i) to ask authorities what is going on (ii) to notify friends or relatives or others of the accident (iii) for other reasons? (iv) which, if any, of your opinions expressed re the questions (i), (ii) or (iii) above, would change if the awakening occurs during normal sleeping hours, e.g. from 1 am to 6 am? Please detail how each such opinion would change if the awakening occurred during people's normal sleeping hours. (d) Do you have any information concerning the response of persons to (i) siren (ii) telephone (iii) broadcast (iv) loudspeaker/sound truck (v) personal contact (e.g. door-knocking) notification of severe accidents where evacuation or sheltering may be necessary? (e) Please identify all information you have concerning the matters asked about in (d) above, telling for each what documents if any contain the information, and what subpart(s) the information relates to. (f) Is it your opinion that evacuation of the Harris EPZ could occur as rapidly during normal sleeping hours (e.g. between 1 am and 6 am) as it could during daytime hours, all weather or other conditions being equal? Please state all reasons and information supporting your opinion. (g) Is it your opinion that evacuation of the Harris EPZ could occur as rapidly during normal sleeping hours (1 am to 6 am) as it could under evening conditions, all weather or other conditions being equal? Please state all reasons and information supporting your opinion. (h) Is it your opinion that evacuation of the Harris EPZ would be more or less rapid during normal sleeping hours (1 am to 6 am) as it would be under (i) daytime conditions, similar weather (ii) evening conditions, up to about 10 pm, with similar weather? Please state all reasons and information supporting your opinion. Please identify all documents which contain information re answers to parts (f) (g) and (h) (including all sub-parts).

57-C-3-5(a) Is there any difference in rapidity of evacuation during normal sleeping hours (e.g. 1 am to 6 am) as compared to evacuation at other times? (b) please explain each such difference (c) are there differences in evacuation conditions during normal sleeping hours, and conditions for evacuation during other hours, that would tend to offset or cancel each other? (d) what are these differences, and how ~~do~~ do they act to offset each other? (e) Please identify all documents concerning differences in (i) evacuation conditions (ii) rapidity of evacuation (iii) evacuation times, for normal sleeping hours compared to other times. (f) are there any differences in evacuation conditions (see (c) above, e.g.) between sleeping hours (1 am -6 am) and other hours which would affect or could affect evacuation times? (g) What are these differences and how does (or could) each affect evacuation times? (h) Is there any actual experience with night-time evacuations which indicates differences in evacuation times under sleeping hours conditions? (j) Is there any consideration of increased likelihood of fog or precipitation during normal sleeping hours (1 am to 6 am) in the emergency planning for the Harris nuclear plant? (k) If so, what consideration, and how does it affect evacuation ~~time~~ time estimates? What amount of increase or decrease in the evacuation times due to these conditions is possible? Why? Why not more? Why not less?

(l) Does the State of NC, CP&L or any other responsible emergency preparedness agency intend to test (i) communications (ii) notification (iii) sheltering (iv) evacuation (v) other emergency response plan elements, during normal sleeping hours (1 am to 6 am or any time between these hours, i.e. between 1 am and 6 am)?

(m) If so, what tests will be done, by whom, and on about what dates (e.g. before fullscale plan test, during that test, before Jan.1, 1985, quarterly, once a year, etc)?

57-C-3-6(a) Does NUREG-0654, FEMA 43, or other applicable guidance (please identify all documents containing other applicable guidance) for the Harris offsite emergency plan require (i) both an alert signal and an informational or instructional message to the population on an arewa wide basis throughout the 10 mile EPZ, within 15 minutes? (ii) initial notification system assuring direct coverage of essentially 100% of the population within 5 miles of the site? (iii) special arrangements to assure 100% coverage within 45 minutes of the population who may not have received the initial notification within the entire plume exposure EPZ?

(b) How does the Harris offsite emergency plan notification procedure meet each notification requirement of FEMA 43 (Including (i), (ii) and (iii) of (a) above if applicable) during normal sleeping hours (e.g. 1 am to 6 am)? Please specify your answer in detail, describing the alerting systems used, the design report on each alerting means to be used, the ability to provide an informational or instructional message to persons who are asleep at the time of the alert/notification beginning; please specify all documents, opinions of experts, or other information you rely on in making your answer. Please answer separately for each requirement or criterion for notification in NUREG-0654 or FEMA 43, or other applicable guidance (as indicated in your answer to (a) above).

57-C-3-7(a) What, in your view, are the merits and /or negative aspects of the use of tone alert radios to notify sleeping persons of an accident at the Harris plant? (b) Isn't it true that FEMA 43

57-C-3-7(b) continued

section E.6.2.4 that tone alert radios are one of the methods of alerting not included in "special alerting methods"?

(c) Have you made any investigation as to the cost, effectiveness, or other aspects of tone alert radios for the Harris EPZ? (d) Please provide details of any investigation re tone alert radios that you have made, either for the Harris EPZ, or otherwise, identifying all documents containing information about the scope, plan, authorization, method of inquiry, results, or information obtained or developed in such investigation. (e) Are there any other sources of information re tone alert radios which you are aware of? Please identify each such. (f) Do you consider tone alert radios to be an alternative to (i) siren notification (ii) loudspeaker notification (iii) automatic ringdown telephone notification, for notification of Harris plant emergencies and/or providing informational or instructional messages to persons within the Harris plume exposure EPZ, during normal sleeping hours, e.g. 1 am to 6 am? (g) Please give all reasons for your answer(s) to each subpart of (f) above.

57-C-3-8(a) Does FEMA encourage the use or development of special alerting methods such as automatic telephone dialers or switching equipment where it is cost effective? (b) Please provide all basis for your answer to (a), identifying all documents or expert opinions you used in making that answer. (c) Have you made any study of the cost-effectiveness of any special alerting methods for the Harris EPZ during normal sleeping hours (e.g. 1 am to 6 am)? (d) Please identify all documents concerning, or used in, or identified during, any such study as inquired about in part (c) above. (e) Have you made any study of simultaneous dialing systems, e.g. those mentioned in section E.6.2.4.4 of FEMA 43, for use in the Harris EPZ, for notification during normal sleeping hours or for notification or delivery of instructional or informational messages? ~~generally~~ (f) Please provide details of any such study as inquired about in part (e) above, including identification of all documents related to such study, particularly any about the capability of simultaneous-dialing or simultaneous-ringing telephone equipment. (g) Was the message-delivering capability of simultaneous-ringing or dialing telephone equipment considered in any of ~~xxx~~ your studies? In which, and how? (h) What is your opinion concerning the usefulness of (i) simultaneous dialing (ii) automatic ringdown dialing telephone equipment for notification of persons within the Harris EPZ during normal sleeping hours? Please give all basis for your ~~opinion~~ opinion, identifying all documents used in ~~xxx~~ preparing or supporting your opinion. (j) (there is no part (i) since that is used for subparts, as (i), (ii)) What role did provisions for (i) calling back busy lines (ii) preventing subscriber overloading of the telephone system during use of telephone notification to Harris EPZ residents/transients play in your analysis or study of telephone notification within the Harris EPZ? (k) Would telephone system overloading by subscribers be less, more of, or about the same of a ~~problem~~ problem for telephone notification during normal sleeping hours? (l) Have you made, or collected, any other studies or reports or inquiries concerning notification systems or methods for people ~~xxx~~ (i) who are asleep at the time of notification (ii) whose whole households are asleep at the time of notification, for emergency planning/response purposes or other purposes? (m) Please describe in detail any studies/information asked about in (l) above.

57-C-3-9(a) Referring to your answer to 57-C-3-1(f), if not previously fully answered, does any documentation or records of any kind concerning the consideration of telephone notification of persons within the EPZ that was made during the Harris emergency planning process exist? (b) If so, what documentation? Please identify it fully; please fully identify any other records of this consideration which you know of. (c) If answer to (a) is "none" or an answer to that effect, or you believe you have fully answered (a) previously, please explain why no records of this consideration exist. (d) Do you remember anything about the consideration of telephone notification of persons within the EPZ that was made during the emergency planning process? (e) If so, what do you remember? (i) Do you remember what kinds of telephone notification (aa) methods (bb) systems, were considered? (ii) do you remember any reasons why telephone notification was rejected? (iii) do you remember whether night-time (normal sleeping hours) notification was part of the consideration of telephone notification for the Harris planning process (emergency response planning)? (iv) do you remember whether alternatives to telephone notification, e.g. tone alert radios, etc., were considered? Please explain what you remember, both in general, and for every subpart for which your answer is affirmative.

213-3(a) Refer to your answer to 213-1(d): Do you agree that the job titles or names of persons responsible for verifying (in the field) and/or receiving reports verifying (in the Emergency Operations Center) that persons on the Harris Lake have been notified of an accident at the Harris nuclear plant, should be part of the plan (off-site emergency response plan)? (b) Please fully explain all reasons for your answer to (a) and identify any documents or authorities you rely on in making that answer. (c) What is the job title of the person or persons responsible for receiving reports that notification of persons on or in the Harris Lake has been accomplished? (d) what is the job title of the person or persons responsible for notifying persons on or in the Harris lake of a nuclear accident at the Harris plant? If more than one job title is involved, please give all the titles, including those of back-up personnel. (e) Who is responsible for ordering the notification of persons on or in the Harris lake of an accident at the Harris nuclear plant? Please give name or job title.

213-4(a) What are the means for giving an instructional message or an informational message to persons on or in the Harris lake in the event of a nuclear accident at the Harris plant? (b) Please describe each such means in detail, explain why it was included (or will be included) in the emergency response plan, and identify all documents concerning these means, your authority or ability to use them, what personnel are required to operate these means, how many, where they ~~work~~ work, who their backup personnel are, where the backup personnel work, how many people are required to operate each means, all backup means of notification for persons on/in the Harris lake, and the above information for each backup means of notification. (c) What is the content of the instructional message for persons on/in the Harris lake in the event sheltering is ordered? Does it provide for sheltering at or near the lake? If not, what does it provide? What will persons on/in the Harris lake be told to do, if sheltering is the overall response for the EPZ that is ordered?

57-C-10-5(a) Please refer to your supplemented answer to 57-C-10-3-d. Were any methods for assessing sheltering effectiveness for structures in the Harris EPZ used, which were NOT intended to provide emergency planners with a data base for a wartime nuclear emergency? Please identify each such method and its results for structures within the EPZ, and all documents concerning the method and/or its results for such structures or other structures.

(b) Does "wartime nuclear emergency" mean (i) Nuclear war? (ii) nuclear weapons attack? (iii) explosion of nuclear weapons? (iv) conditions of fallout after a nuclear explosion or explosions? (v) something else? -- please specify what it means.

57-C-10-6(a) Were any differences between (i) wartime nuclear emergency conditions (ii) nuclear weapons fallout conditions, and likely ~~high~~ conditions for a serious accident at the Harris nuclear plant, considered in the sheltering effectiveness estimates made for structures in the Harris EPZ? (b) Please specify each such difference and how it was considered. Please identify all documents concerning the effect of each difference on the Protection Factor (PF) or sheltering effectiveness for structures or any specific structure(s) within the Harris EPZ.

(c) What account of infiltration of (i) radioactive gases (ii) radioactive particles, with incoming air, is taken in (aa) the sheltering effectiveness or PF estimates you now possess (bb) sheltering effectiveness or PF estimates for use in connection with a nuclear accident at the Harris plant? If there is no difference, or the estimates are the same, please say so.

(d) How long is the maximum sheltering time for a nuclear accident at Harris? (e) If you don't know a maximum sheltering time that might be required due to a nuclear accident at Harris, either (i) for the EPZ as a whole, (ii) for any part of the EPZ, or (iii) for any structure(s) or areas within the EPZ, please explain all reasons why you don't know. (f) What is the maximum sheltering time that has been considered (i) for the entire EPZ (ii) for any part(s) of the EPZ -- please specify which parts (iii) for any structure(s) or specific location within the EPZ -- please specify which structure(s) or specific locations.

(e) Do any PF estimates for structures within the Harris EPZ assume any sealing of air pathways (i) into the structure (ii) into sheltering areas within the structure? If so, please describe what sealing is assumed, what materials are needed to do this sealing, the availability of those materials at the structure, and the additional protection assumed or calculated or believed to result from such sealing.

(f) How long can occupants of any sealed area or structure (see (e) above) stay in shelter without exhausting their air supply? Have you made any calculations or estimates for any structures within the Harris EPZ?

(g) Do you know anything about the infiltration rates of (i) air (ii) particles, including particles of the size and characteristics of radioactive particles that might be released from Harris during a nuclear accident (iii) radioactive gases, into structures within the Harris EPZ or any such structure or structures? If so, how do such infiltration rates affect the radiation doses likely to be received by persons sheltering within those structures? Please detail all basis, documentary or otherwise, for your answers.

57-C-10-7(a) Where are "protection factor categories" as used in your assessment of PFs for structures within the EPZ, defined or explained? (b) Do you have any information about the specific PFs within each category, for structures within the Harris EPZ? (c) If so, what is that information? Please identify all documents containing such information.

57-C-10-8(a) Refer to your answer to 57-c-10-3-e. Is this all the information you have about typical housing within the Harris EPZ? (b) Does section 4.5.2 of the on-site emergency plan contain some seven lines (about 4 sentences) concerning housing within the Harris EPZ? (c) Why is this information in the on-site plan, but not in the off-site plan? (d) Are the PFs reported there based on any typical house shape or characteristics? (e) Please identify all documents that concern, or explain, how the PFs in section 4.5.2 of the Harris on-site emergency plan were calculated for typical housing. Please answer 57-c-10-3-e again insofar as your answer involves any definition of a "typical" structure or structures. (f) Please explain how the PFs of section 4.5.2 of the Harris on-site emergency plan were calculated, including base data used, calculation method(s) used, and all assumptions used or made in the calculation. Please also explain who did the calculation of these PFs and why it was done. (g) Do the PFs of Harris on-site plan section 4.5.2 take into account the effects of (i) radioactive gases (ii) radioactive particles, infiltrating into the houses/apartments within the Harris EPZ with normal air infiltration? If so, exactly how do they do so? Were any particular wind conditions used in estimating infiltration of radioactive gases or particles into structures typical within the Harris EPZ (houses, apartments or other structures)? If so, please specify the assumption.

57-C-10-9(a) How much space is considered to be space for one shelteree? Is this amount of space different for small children, for babies, for the ill or infirm? If so, how does it differ for different people? (b) How long are persons assumed to be able to remain in shelteree spaces within structures in the Harris EPZ? Is food provided in buildings within the Harris EPZ that are fallout shelters? Is that food in edible condition? Is there drinking water stored in or near high-PF areas of structures in the Harris EPZ? Has it been verified to be drinkable? If so, when? (most recent date or time if known) How long can shelterees be expected to stay in high-PF areas without (i) food (ii) water? What toilet facilities are provided in high-PF areas within structures in the Harris EPZ? Do you think people might leave high PF areas where toilet facilities are not available, e.g. briefly, to use the toilet?

57-c-10-10(a) How are ventilation systems, e.g. (i) heating (ii) cooling (iii) ventilation w/o heating or cooling, considered in assessing the PF of (aa) buildings (bb) houses (cc) apartments (dd) other structures, within the Harris EPZ? How long can such systems be turned off during sheltering? (b) How long can heating systems remain off for sheltering on cold nights (e.g. freezing temperatures, with winds of 10 mph or more) before adverse effects on shelterees (i) occur (ii) may jeopardize people's willingness to stay in shelter? (c) How long could cooling systems be turned off, with persons packed into shelteree spaces, on a hot summer day (e.g. temperatures in the 90s, high humidity) before

57-C-10-10-c, continued

adverse effects on shelterees (i) occur (ii) jeopardize people's willingness to remain in shelter?

(d) How long can external ventilation be turned off during sheltering before adverse effects on shelterees occur?

(e) Please describe any adverse effects to shelterees that may result from turning off of heating, or cooling, or ventilation systems during sheltering. Please also describe how (if at all) such effects are considered with respect to structures in which persons in the Harris EPZ might be asked to take shelter during a nuclear accident. Please identify all documents concerning (i) adverse effects of having heating, or cooling, or ventilation systems turned off during sheltering (or, in general); (ii) consideration of heating, cooling or ventilation with respect to structures in the Harris EPZ in which people might shelter; (iii) degree of adverse effects under which people may leave shelter during a nuclear power plant accident, or the difference between such conditions and the conditions under which people may leave shelters during a military nuclear emergency or nuclear war or nuclear bomb fallout situation; (iv) degree of adverse effects which would likely cause people to leave a shelter during a nuclear power plant accident.

(f) does shelter effectiveness analysis always assume ventilation is off?
57-c-10-11(a) How are construction techniques relating to the air tightness of walls, ceilings, floors, windows and doors considered in determining the sheltering effectiveness of structures within the Harris EPZ? (b) have any direct measurements of the air tightness of construction of such structures been made, e.g. with blower doors or other air-infiltration measuring equipment? (c) Please identify all documents concerning the matters inquired about in (a) and/or (b) above, particularly including estimates or measurements of the specific air-tightness of construction of structures within the Harris EPZ. (d) Why were food stores eliminated from consideration in the surveys of sheltering effectiveness of structures within the Harris EPZ? (e) Are food stores considered less safe shelters than other structures of similar construction?

57-c-10-12(a) Have any formal shelter location sketches been made for any structures within the Harris EPZ? (b) Please identify all documents containing shelter location sketches, formal or informal, for any structures within the Harris EPZ. (c) Please identify all documents showing where the highest PFs are located in structures within the Harris EPZ. Please identify any document showing such areas within any such structure.

57-C-13-3(a) Is your answer to 57-C-13-1 complete, e.g. with respect to parts (g) and (h)? If not, please provide answers. (b) what (i) medical supplies (ii) toilet facilities, are available in high-PF areas within hospitals or nursing homes within the Harris EPZ? (c) Why havent "best" PF determinations for hospitals or nursing homes within the Harris EPZ been made? Please give all reasons. (d) What PF determinations have been made, if any, for any (i) hospital (ii) nursing home, within the Harris EPZ?

57-C-13-4(a) Are there any hospitals, nursing homes, or other care facilities within the Harris EPZ besides those listed in ~~Annex~~ Table 4-5 of the Evacuation Time Estimates (ETE) which the state or county emergency planners are aware of?

(b) Have any factors, such as increased sensitivity of ill or elderly persons to radiation exposure, been considered in PF determinations for hospitals or ~~hospitals~~ in nursing homes or other care facilities within the Harris EPZ?

30-3(a) With respect to your answer to 30-2(d), are there any places in the Harris emergency response (off-site) plan where specific quantities of KI or other radioprotective drugs are mentioned?

(b) are you aware of any reports, or recent declarations of policy or resolutions of health-profession associations, which address the ~~availability~~ desirable availability of KI or other radioprotective drugs during radiological emergencies? Please identify all documents containing or reporting on such reports, resolutions or policies.

(c) How, if at all, do the reports, declarations or policies you ~~do~~ identify in response to (b) above (or that you were asked to identify in (b) above), affect your answers to 30-2(a) and 30-1 subparts (b) thru (f)?

30-4(a) Have you made any evaluation of the Harris Emergency Response Plan's plans for distribution of KI, as far as its compliance with NUREG-0654 or other applicable guidance is concerned? (b) Please identify all documents relating to such evaluation(s), the applicable guidance, and the results of each such investigation. (c) Do you plan to make any such investigation? If so, when? When do you expect to complete this investigation?

30-5(a) Are there any applicable FEMA or NRC guides for any of the items inquired about in 30-4(b) thru (f)? If so, please specify the guidance for each item and the document or documents which identifies that guidance. Please identify all documents and page references which ~~do~~ contain each such item of guidance.

30-6(a) Does the State of NC maintain no reserve of KI at any place for use during nuclear plant accidents?

(b) What provisions for KI use are established for (1) the Brunswick nuclear plant (2) the McGuire nuclear plant, and how do these provisions differ, if at all, from those for KI use in emergency conditions at the Harris plant?

(c) Please identify all documents concerning matters inquired about in (a) or (b) above. Please tell for each the matter(s) it relates to.

PRODUCTION OF DOCUMENTS

Wells Eddleman hereby requests that the original or best copy of each document identified in response to interrogatories above or below be produced for inspection and copying at a mutually agreeable time and place.

additional interrogatories to Applicants and State of NC and County emergency planners, re contentions 215 and 224:

224-3(a) Were the analyses in ER section 2.3.1 (or FSAR sections 2.3.1 or 2.3.2) made specifically for adverse weather in the Harris EPZ? (b) Which of the items in your response to 224-1-b(aa) thru (hh) were made for the Harris EPZ? (c) What information do you possess that indicates that the FSAR adverse weather frequencies (i) are (ii) may not be (iii) are not representative of the frequencies of such weather in the Harris EPZ? Please identify all documents and all reasons concerning your answers to (i), (ii) or (iii) or underlying such answers. (d) Does the State or the County emergency planners possess any information on the frequency of adverse weather conditions in the Harris EPZ (i) different from (ii) in addition to, that in the Harris FSAR and ER as shown in the responses to interrogatory 224-1(a), (b) and (c)? (e) If so, please identify all information, and all documents containing information, responsive to (d)(i) or (d)(ii) above.

224-4(a) Is it true (compare your answers to 224-2) that the Harris evacuation time estimates only consider adverse weather with respect to heavy rains? (b) What other adverse weather scenarios were considered, when heavy rains was selected as the adverse weather scenario for the evacuation time estimates (ETEs)? Please identify all documents concerning these scenarios, who prepared them, how the selection was made, who made it, and why. (c) Who were the state, and the local, emergency preparedness officials who had discussions on which adverse weather scenario(s) to use in the Harris ETE? (d) What does each such official recall concerning those discussions? (e) What does each CP&L or HMM participant recall concerning those discussions? (Your answers to (d) and (e) should include, if known, the date(s), length of time, and nature of the discussions, the information reviewed or referenced in the discussions, what positions if any were taken by the persons involved in the discussions, and any documents concerning such discussions should be identified, be it notes, handwritten notes, minutes, memoranda, tape recordings, or other records of any kind).

224-5(a) Is it possible, in your view, that evacuation times under adverse weather conditions other than heavy rain could be (i) greater (ii) lesser, than those for the heavy rain scenario? (b) Please identify all adverse weather scenarios for which you believe the Harris evacuation times would be (i) greater (ii) lesser (iii) about the same as (give range of uncertainty, e.g. within 5 minutes), as the evacuation time estimate for heavy rains. (c) Please identify all information you possess concerning (i) roadway capacity (ii) travel speeds (iii) accident frequency (iv) weather-related complications, due to adverse weather conditions including (aa) ~~xxxxxxx~~ thru (hh) of interrogatory 224-1(b). Note that item (ee) of that list is "heavy rain" as used in the ETE. (d) Please identify any information you have concerning the effect of fog, ice, snow, rain, heavy rain, hail, tornados, freezing rain, ice storms, or other adverse weather on (i) visibility (ii) travel speeds (iii) ability of people to control vehicles or avoid accidents, ~~xx~~ under conditions such as documented for the Harris EPZ as having occurred or being possible (e.g. as documented in the FSAR or ER), particularly on winding, two lane roads with slopes and/or curves like those in the Harris EPZ. Please identify all documents containing such information, and all documents re this in possession, e.g. of the state Dept of Transportation, Highway Patrol, etc. also.

215-10(a) Do the State, or County emergency planners, have or have access to any information concerning the numbers of persons (or percent of population) in the Harris EPZ that is at home at various times of the day or year (i) with transportation (ii) without transportation (iii) without regard to whether they have transportation, just that they are home, ?
(b) Does the State, or county emergency planning personnel, have any plans to analyze either the questions asked in 215-10(a) above, or that asked in ~~215~~ 215-2(a)?

215-11(a) In concurring ~~xx~~ with the evacuation time estimates made for CP&L by HMM associates, what did the state and county emergency planners do to analyze (i) the accuracy (ii) the degree of conservatism, of those estimates? Please answer specifically what you did to review those time estimates and exactly how you determined that you concurred with them. If you do not now concur with the estimates, please give all reasons for your non-concurrence.
(b) Have you made any analysis of how accurate the one-family-per-vehicle assumption is for the Harris EPZ (i) under any conditions (ii) under the specific condition that people are asked to help evacuate persons without transportation (iii) at night, e.g. during normal sleeping hours (iv) in conditions of snow, ice, or ice storms or freezing rain? Please identify all documents concerning each such analysis and succinctly state your analysis.

215-12(a) Is all the documentation concerning the assumptions of the ETE re (i) vehicle occupancy (ii) anticipated evacuation characteristics (compare your answer to 215-3(c)) fully referenced or documented in the ETE report by HMM associates? For any that are not, please give full references and identify all documents in which these assumptions are documented. (b) Are you aware of any information disputing the validity of these assumptions, or any of them? Please identify all documents you are aware of in which any of these assumptions (please specify which) is disputed or questioned. ("these assumptions" are the ones in the HMM ETE report concerning vehicle occupancy and evacuation characteristics associated with each individual population category) (c) what "federal guidance" do you say is consistent with your one vehicle per household assumption? (d) are you saying the federal guidance requires such an assumption? If so, please identify what guidance you maintain requires it. (e) Are other assumptions about the numbers of vehicles per evacuating household also consistent, in your view, with federal guidance applicable to ETEs?

215-13 (refer to your answers to 215-4): (a) Do you have any information or studies which support your assumptions concerning evacuation behavior of persons as stated in your answer to 215-4(a)? Please identify all documents containing such information or studies.
(b) Is there any inconsistency between your answer to 215-4(a) and your response to 215-3(c) appearing immediately above the answer to 215-4(a), which refers to "empirical data on past evacuations, indicating the tendency of family units to unite and evacuate as a unit", particularly as regards evacuation from recreational facilities, workplaces, or special facilities? Please explain how or why these answers are (i) consistent (ii) inconsistent. please also identify all documents concerning ~~empirical~~ empirical data from past evacuations, specifying which were evacuations from around nuclear plants due to nuclear accidents.

215-13 continued

(c) Please detail the review of the assumptions in responses to interrogatories of the past (215-1 thru 9, all parts and subparts) which were made (or was made) by state and local emergency preparedness officials (see response to 215-4(a)). Specifically, which officials reviewed these assumptions, when did they do it, are there any documents related to their review (including notes or recordings, etc) (please identify all such documentation), and what was the specific result of their review as to each assumption, most particularly re (i) one vehicle per household (ii) evacuation directly from work, school, care facilities, and workplaces (iii) evacuation from recreation facilities (e.g. would these people go home to check their families first if their families live in the EPZ) (iv) vehicle occupancy rates, (v) number of persons to be evacuated who do not own cars (vi) furnishing of rides by neighbors during an evacuation (vii) furnishing of rides to persons without transportation due to coordinated efforts by state and county emergency preparedness officials; (viii) one vehicle per household for the non-auto-owning population; (ix) that vehicle departures from households would be distributed over a two-hour period. (d) Was any evaluation made by state or county emergency preparedness officials of CP&L's ~~data~~ "demographic data report"s? If so, who made it, when, and with what results? Did the State rely on these reports in evacuation planning? Have the reports been checked by anyone? If so, with what results? Did the counties rely on these reports in evacuation planning?

215-14(a) Do you have any vehicle occupancy rate data for evacuations (i) that actually occurred (ii) that were estimated for other nuclear plants in NC? Please identify all documents containing such data. (b) Do you have any data on how many vehicles are registered to each household in the Harris EPZ? On the capacity of ~~the~~ vehicles registered in the EPZ (e.g. pickup trucks, 4-person, 5-person or 6-person cars)? Please identify all documents containing such data. (c) Do you have any data on the number of persons in households w/o transportation within the Harris EPZ? Please identify all documents containing such data. (d) Do you have any documentation of the basis for previously developed evacuation plan standards' estimates of likelihood that evacuees will use the "best available" automobile when evacuating? Do you have any information on use of more than one vehicle by evacuating families or groups? Please identify all documents containing such information. (e) what is your exact basis for ~~x~~believing that "more than sufficient capacity will be available to accommodate persons in households without transportation? Please identify all documents, analysis or calculations you believe show this is true. (f) How long will it take to get the non-auto-owning population into vehicles for evacuation? Please identify all documents and information concerning how long this would take. (g) Precisely who "accepts" the traffic flow relationships used in NETVAC? Has NETVAC been independently evaluated re these relationships? Please identify all documents concerning these matters. (h) Are the traffic activities on each roadway segment, for each reporting interval, available in the ETEs? If not, please identify all documents containing this information. (j) Please explain how the numbers of persons beginning to evacuate in each time interval is evaluated in NETVAC, or how it is determined. (k) Please explain whether any counterflow traffic (e.g. families uniting) is assumed in the Harris ETEs? If not, why not? (l) what is the sensitivity of the Harris ETEs to (i) preparation times (ii) mobilization times? Please identify any documents re these matters.

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Date 7-13-87

Documents to be Copied

<u>Document No.</u>	<u>Title</u>	<u>Pages</u>
PIPE HANGER W.D.R. LOG BOOK	Vol 08 CD'S CE'S & CFS	AS clipped + all pink sheets NOT CLIPPED
ditto ALL VOLUMES * * * 1 thru * * 3 * at least (MATT... ?)	ALL PINK SHEETS	PLEASE COPY DARK
Vol 36		AS CLIPPED + PINK
Vol 37		(ALL PINK) ALL
{ Vol 31		ALL
{ Vol 30		ALL
Vol 29		ALL
Vol 27		AS AS CLIPPED + PINK
Vol 01	(last set down)	AS CLIPPED + PINK
Vol 6		ALL
Vol 3		ALL
Vol 4		ALL
Vol 35		AS CLIPPED + PINK
Vol 34		ALL
Vol 9	CH'S	CLIPPED + PINK
{ Vol 021	(21) MYSIA'S LT'S + MISC	ALL
{ Vol 12	CS'S 1100-3999	ALL
Vol 20	FP'S & FW'S	ALL

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<u>Document No.</u>	<u>Title</u>	<u>Pages</u>
re 41-7	Exh 2, T4C training Welder training class	all, of 1 document binder clipped
re 41-11	2/23/83, 3/24/82, 4/28/82 NRC, CP&L reports	all, 3 documents stapled
re 41-16	ASME Procedure CQA-1	all, 1 document stapled
re 41-36	Permanent Waivers Field Change Requests Design Change Ntifs	} SOME ARE EXTRA LIGHT - please copy D all - 1 stack in rubberband
BLUE PRINTS	re 65-4(a)	- all - est cost \$1/sk
41-36	3 notebooks Rework packages	- all
Pipe Hanger		
Weld Log Book # ²² MS's + NT's		all
#18	EAs ES's FD's	as clipped
#19	FD's & FP's	all From 1 st clips to end
#13	CT's & CW's	as clipped + from big clips to end
#07	CC/H	all (last 100+ ps)
THIS PAGE		

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Contention (41) - Nothing on 65 produced

Documents to be Copied

Document No. Title Pages

274 - 327 inclusive	41-3 41-3 reinsp reports	ALL of ALL Note a few are
328 - 475 inclusive	41-5(i)-(k) Field change Pipe Hangers	ALL printed on back → note - some are lousy copies; please try to do on high contrast
476 - 493 inclusive	41-5(i)-(k) Permanent Waivers + field change requests - HVAC + Conduit hangers	ALL of all - please try to get copies readable on fuzzy pages
494 - 512 inclusive	Welder Training & Procedures	ALL of all

THIS PAGE

WE Com from
SPP+T
7/12/83

5.1
AA Access Control Area Ventilation
AC RAB 1 and 2 Common Building
ACD Acid Caustic Drain
ACE Auxiliary Condensate
AD Auxiliary Dam and Spillway
AE Air Evacuation
AEP Auxiliary Electric Power
AF Auxiliary Feedwater
ALD Automatic Load Dispatch
AR Airborne Radioactivity Removal
ARS Auxiliary Reservoir Separating Dike
ARM Area Radiation Monitoring
AS Auxiliary Steam
AV Auxiliary Building Ventilation (General)
BC Boron Concentration Measurement
BD Blowdown
BR Boron Recycle
BT Boron Thermal Regeneration
CA Caustic and Acid
CB Containment Building
CBPV Containment Building Pressure & Vacuum Relief
CC Component Cooling
CD CRDM Cooling
CE Condensate
CF Chemical Feed
CG Carbon Dioxide
CH Chilled Water Supply (HVAC)
CI Containment Isolation

CI Chlorination
CM Containment Building Hydrogen Control (Purge and Make-up)
CP Containment Building Purge
CO Compressed Air
CR Control Rod Drive Mechanisms
CS Chemical and Volume Control
CSS Chemical Sampling
CT Containment Spray
CV Containment Building Ventilation
CW Circulating Water
CX Chilled Water Return (HVAC)
CZ Control Room Ventilation
DG Diesel Generator Building
DV Diesel Generator Building Ventilation
DR Drain Line (HVAC)
DW Demineralized Water
EA Emergency Air
ECC Emergency Core Cooling
ED Equipment Drain
EE Emergency Electric Power
ES Extraction Steam
ESI Engineered Safety Feature Instrumentation
FRST Filter Backwash Storage and Transfer System
FD Floor Drain
FHS Fuel Handling System
FH Fuel Handling Building
FM Primary Filter Make-up Water
FO Fuel Oil
FP Fire Protection
FV Fuel Handling Building Ventilation
FW Feed Water
GFF Gross Failed Fuel Detection

4C Yard Work
 HD Heater Drain
 HR Hydrogen Recombiner
 HV Heater Vent
 HZ Hydrogen
 IA Instrument Air
 ICI In-Core Instrumentation
 IS ESW Intake Structure
 LC ESW Screen and Drainage Structure
 LO Lube Oil
 LR Low Level Release System (Main Dam)
 LT Leak Rate Testing
 MD Miscellaneous Drains
 MDS Main Dam Spillway
 MEP Main Electric Power
 MG Main Generator
 MP Make-Up Plant Water
 MS Main Steam
 MT Main Turbine
 MW Make-Up Water
 NI Nitrogen
 NN Nuclear Instrumentation
 OC Diesel Fuel Storage Tank Building
 OX Oxygen
 PIC Process Instrumentation Control
 PM Primary Make-Up Water
 PP Penetration Pressurization
 PRM Process Radiation Monitoring
 PW Potable Water
 RA Reactor Auxiliary Building
 RC Reactor Coolant
 RFD Radioactive Floor Drain System
 RFI Reactor Fuel and Internals

RH Residual Heat Removal
 RP Reactor Support and Primary Shield Cooling
 RPC Reactor Plant Control
 RPT Reactor Protective
 RT Resin Transfer
 RV Reactor Vent
 RW Refueling Water
 SA Service Air
 SC Screen Wash
 SF Spent Fuel Pool Cooling and Cleanup
 SFP Spent Fuel Pool
 SG Steam Generator
 SI Safety Injection
 SP Sampling (Nuclear) Radiation Monitoring
 SRCT Spent Resin & Concentrates Storage & Treatment System
 SW Service Water
 TA Turbine Accessories
 TB Cooling Tower Blowdown
 TK Tank Building
 TC Turbine Components
 TG Turbine Generator Building
 TV Turbine Building Ventilation
 TW Treated Water
 VAC AC Distribution
 VDC DC Distribution
 VL Valve Leakoff
 WC WPB Cooling Water
 WG Gaseous Waste Processing
 WL Liquid Waste Processing
 WN Waste Neutralization
 WP Waste Processing Building
 WS Solid Waste Processing

Notebook 05

EDDLEMAN 41

HARRIS WELD DATA

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

I	1. UNIT 1	2. BUILDING RAB	3. ELEV 236	4. LOCATION ZONE 2	5. COMPONENT / HANGER ID CC-H-105		
	6. DRAWING(S), REV & SHEET NOS A-2-236-1-CC-H-105 3/D			7. WELD PROCEDURE(S) & REV. NO'S AW124		8. WELD METAL TYPE E7018	9. WELDER SYMBOL(S) D61
	DISCIPLINE ENGINEER <i>Walter P. ...</i>			DATE 2-18-81	WELDING ENGR. / FOREMAN <i>Dick ...</i>		DATE 2-24-81

II	FOREMAN	ALL ITEMS	1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION WELDS. 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES. 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS. 4. INFORM QA FOR HOLD POINTS (H) & FINAL WELD INSPECTION.				FOREMAN N/A	DATE N/A
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III	WELDING QA	ALL ITEMS	1. WELD TYPES & CONFIGURATION CHECKED WITH DRAWINGS & COMPONENT/HANGER CONFIGURATION CHECKED WITH DRAWINGS ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/>		NCR NO. N/A		INSP INT'L S. DATE 12/12/81	
			2. WELDER QUALIFICATION ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/>		3. MATERIAL STATUS ACCEPT <input checked="" type="checkbox"/> HOLD <input type="checkbox"/>		NCR NO. N/A	

IV	WELDING QA	ALL WELD JOINT	* JOINT IDENTIFICATION OR DESCRIPTION & QTY. OF WELDS	PREHEAT		FINAL LAYER										INSPECTOR'S INITIALS	DATE								
				VT		MT/PT		RT		UT		PWHT		VAC BOX			WELDED	INSP.							
				N	A	H	T	A	R	N	A	A	R	N	A				A	R	H	A	A	R	N
			RR 52																					<i>Finan</i>	4/13/81
			<i>all welds 3/D</i>																					<i>DL</i>	12/12/81
			PP 1 TOP 3/D																					<i>DL</i>	12/12/81

V	FIT-UP INSPECTION	FP WELDS MANDATORY	FILLETS OPTIONAL	* JOINT IDENTIFICATION	FIT-UP			DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK	INSPECTOR'S INITIALS	RELEASED FOR ROOT/WELDOUT (DATE)
					H	A	R			

VI	WELDING QA	FP TEE ROOT PASS	* JOINT IDENTIFICATION	FIT-UP						DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK	INSPECTOR'S INITIALS	RELEASED FOR WELDOUT (DATE)	
				VT		MT/PT		RT					
				H	A	R	H	A	R				

USE QA-34A FORM TO LIST ADDITIONAL WELDS.
QA INSPECTION & NOE HOLDPOINTS VERIFIED BY:

JS 2-24-81
INITIALS DATE

LEGEND:

- A = ACCEPT
- H = HOLDPOINT
- R = REJECT
- FP = FULL PENETRATION
- NA = NOT APPLICABLE
- T = TEMPERATURE (> °F)

N/A N/A
QA SPECIALIST DATE

COPY

SEISMIC WELD DATA REPORT (PROCEDURE CQC-19)

I	1. UNIT 1	2. BUILDING RAC	3. ELEV. 226	4. LOCATION ZONES	5. COMPONENT/HANGER I.D. CG-H-462	6. DRAWINGS & SHT. # A-5-226-1	7. WELD PROC. 1A7	9. WELD INSTRUCTIONS Partial Pen. Weld (Yellow) Full Pen. Weld (Green)								
	DISCIPLINE ENG./DEG.		DATE	WELDING ENG./FOREMAN		DATE	8. WELD ML. TY. E7018	1A3 (ROOT) 1A3 or 1A4 (WELD OUT)								
	QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY:						INITIALS KHC	DATE: 11/25/82								
II	MAT'L STATUS A <input type="checkbox"/> R <input type="checkbox"/>		NCR/DDR #			CLOSED <input type="checkbox"/>		QC INSPECTOR 7		DATE:						
	* JOINT ID OR DESCRIPTION & QTY. OF WELDS		DWG (a) REV.	WPS REV.	WLDR SYM (s)	WLDR QUAL (s)	1. PREHEAT °F MIN.	2. FITUP	ROOT NDE 3. VT 4. MT 5. PT 6. VT 7. RT 8. UT 9. VAC BOX			10. PWHT	INSP. INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, INITIAL & DATE HOLD POINT, ETC.	
III	Pg. 1 (SHANK)					150										
	Pg. 3 TO EMBED (E)															
	Pg. 3 TO EMBED (W)															
	C into EMB		QC	*	*											

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS: * PREHEAT FOR SHANK
11/25/82
KHC

QA/QC SPECIALIST/DESIGNER

DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

I. UNIT	2. BUILDING	3. ELEV.	4. LOCATION		6. DRAWINGS & SHT. #	7. WELD PROC.		9. WELD INSTRUCTIONS															
			5. COMPONENT/HANGER I.D.	WELDING ENG./FOREMAN		DATE	8. WELD ML. TY.		DATE														
I	RAB	230	zone 3	CC-H-372	A3-236-1	1A4	N/A																
	C. Gulleton	9/28/82	Barbara Morris	9/29/82	CC-H-372	E7018																	
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY:																							
MATERIAL STATUS			QC INSPECTOR			DATE:																	
Y A R			NCR / DDR #			INITIALS																	
* JOINT ID OR DESCRIPTION & QTY. OF WELDS	WPS REV.	WELDR SYM(S)	WELDR QUAL(S)	1. PREHEAT OF MIN.		2. FITUP		3. ROOT NDE		4. M/T/PT		5. M/T/PT		6. M/T/PT		7. RT		8. UT		9. VAC BOX		10. POINT	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR INITIAL & DATE HOLD POINT, ETC
				H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	H	A		
ALL FIELD welds	3/D	R1	D-11	N/A																			Pre Rev. 3/79
STEEL FURN	3/D	R1	N/A																				Should've been Ins'd
PC1 to PC2	4S1	R3	D-11	N/A																			Not welded per drawings
PC 4 to PC2	4S1	R3	D-11	N/A																			Not welded per drawings
All other Field welds	4S1	R3	D-11	N/A																			Not welded per drawings
All Shop welds	4S1	N/A																					TOP + bottom
Ann Field welds	3/D	R3	D-11	N/A																			
Ann Shop welds	3/D	N/A																					
All Field welds	4S1	R3	D-11	N/A																			
All Shop welds	4S1	N/A																					
LATE PHASE 1 COMPLETE																							

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS: ~~Att From Old WDR.~~
~~* Weld Station Acc. In Progress~~

QA/QC SPECIALIST / DESIGNEE _____ DATE _____
* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

I	1. UNIT 1	2. BUILDING RAB	3. ELEV. 236	4. LOCA. Zone 3	5. COMPONENT/HANGER ID. CC-H-344	6. DRAWINGS, REV. & SHT. # CC-H-344 A.3-236-1	7. WELD PROC. 1A4R1	9. WELD INSTRUCTIONS N/A
	DISCIPLINE, ENG. Jim Carter		DATE 6/29/82	WELDING ENG./FOREMAN Barbara Morris		DATE 6/29/82	8. WELD ML. TY. E 7018	

II

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
 4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: N/A DATE: N/A

III

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) R RE DATE: N/A

2. WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR # _____ QA/QC INSPECTION _____ DATE: _____

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP		ROOT NDE				FINAL NDE				PWHT	INSP INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.			
		H	TEMP	H	A	H	A	H	A	H	A	H	A					H	A	VAC BOX
Bottom P2 to P3 Inside South Weld	752 D11 SA40 SB73																undersized by 1/8" undercut weld spatter			
Bottom P2 to P1 Inside South Weld	752 SA40 SB73 D11																undersized by 3/16" Pin Holes			
Bottom P2 to P1 Bottom Weld	752 SA40 SB73 D11																undersized by 1/8"			
P1 to P25 Bottom Southside	752 SA40 D11 SB73																undersized 3/8"			
P2 Bottom to P1 Top weld	752 SA40 D11 SB73																undersized 1/8"			
P11 Top weld	752 SA40 D11 SB73																undersized			
P1 to P2 bottom weld	752 SA40 SB73 D11																undersized Pin Holes Toolmarks			
P1 to P2 Top P1	752 D11 SA40 SB73																undersized			
P3 to EM3 North East side	752 D11 SA40 SB73																undersized			
P1 to EM3 Southside	752 SB73 SA40 D11																undersized by 1/8" East			
P1 spacer South East Center	SB73 SA40 D11																undersized			
P11 spacer Bottom Top South East	SB73 SA40 D11																undersized overlap weld spatter			

IV

LEGEND: H = HOLDPOINT
 A = ACCEPT
 R = REJECT
 T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY: SA INITIALS DATE: 6-29-82

REMARKS: Need to remove Temp. Attachments that still remain, and blend. *MAT'L STATUS ACC. REC'D 1-8-85

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC I WELD DATA REPORT
CONTINUATION SHEET

I	1. UNIT	2. BUILDING	3. ELEV.	4. LOCATION		5. COMPONENT/HANGER ID																							
	1	RAB	236	Zone 3		CC-H-344																							
	JOINT ID. OR DESCRIPTION & QTY. OF WELDS	WELDER SYMBOL(S)	PRE-HEAT	FIT-UP	ROOT NDE				FINAL NDE								PWHT	INSP INITIALS	DATE	DESCRIPTION OF DEFICIENCY REPAIR OR REWORK NCR/DDR, ETC.									
			H	TEMP	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R	H	A	R				
	Pc 11 spacer Top & Bottom N side	752 SB 73 SA40 R11																									ALT	7/6/82	Toolmarks Slag Pit Hole
	Pc 1 spacer North side	752 SB 73 D11 SA40																									ALT	7/6/82	Toolmarks Spatter overlap pinholes EAST side - U.S. 1/8"
	Spacer to Pc 8 Bottom SKT	752 RSB 79																									ALT	8/13/82	
	Pc 7 to Pc 2	752 RSB 79																									ALT	8/13/82	Top East Corner South Side ARC STRIKE
IV	Pc 1 to Pc 2	752 RSB 79																									ALT	8/13/82	mid South East side overlap
	Pc 2 to Pc 1	752 RSB 79																									ALT	8/13/82	Bottom West side overlap
	Pc 8 to EMB EAST	752 RSB 79																									ALT	8/13/82	West U.S. 1/8 for 3"
	Pc 7 to Pc 2	752 RSB 79																									ALT	8/13/82	North mid ARC STRIKE
	Pc 7 to Pc 2 WEST	752 RSB 79																									ALT	8/13/82	West North side spatter ARC STRIKE 2 places Top side Plate Slag
	All Other Field Welds	752 RSB 79																									ALT	8/13/82	All deficiencies repaired
	above 8/17/82 rejects	752 R-D-11																									SAO	12/21/82	corrected

LATE PHASE 1 COMPLETE

George Caputo 2/7/83

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

I	1. UNIT 1	2. BUILDING RAB	3. ELEV. 236	4. LOCA. ZONE 3	5. COMPONENT/HANGER ID. CC-H-344	6. DRAWINGS, REV. & SHT. #	7. WELD PROC. 1A4 R1	8. WELD INSTRUCTIONS N/A
	DISCIPLINE ENG. R.J. Cooley	DATE 4-27-81	WELDING ENG./FOREMAN D. Hill	DATE 4-27-81	CC-H-344 A-3 236-1	8. WELD ML. TY. ETC1B		

II

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION

2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES

3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: N/A DATE: N/A

III

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) ALL DATE: 6/22/81

2. WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR # N/A QA/QC INSPECTION D. Cooley → G10 DATE: 6/22/81 3/30/82

* JOINT I.D. OR DESCRIP. 3 QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP		ROOT NDE				FINAL NDE				PWHT	INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.
		H	TEMP	H	A/R	VT	MT/PT	VT	MT/PT	RT	UT	VAC BOX					
		H	A	R	H	A	R	H	A	R	H	A	R				
12 - fillets 6/6	SA40 D11																SM 6/22/81 overlap, lack of fusion
12 fillets 6/6	SA40																DGC 6/22/81
PC 4.5 : both R II 751	SI-3 SB-73																GAE 3/30/82

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY JM 4/28/81
INITIALS DATE

REMARKS:
SA40

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

1. UNIT 1	2. BUILDING RAB	3. ELEV. 236	4. LOCATION ZONE 7	5. COMPONENT/HANGER ID. CC-H-338	6. DRAWING, SHT. NO. & CONTRACT NO. A7-236-1 CC-H-338	7. WELD PROC. 1A4	9. WELD INSTRUCTIONS N/A																
DISCIPLINE ENGR. B. Kendrick		DATE 3/31/83	WELDING ENGR./FOREMAN Barbara Morris		DATE 3/31/83	8. WELD MTL. TY. E 7018																	
RELEASE FOR WELDING QA/QC SPECIALIST: George Cuperta DATE: 3/31/83				NCR/DDR NO.	CLOSED <input type="checkbox"/>	MAT'L STATUS A <input type="checkbox"/> R <input type="checkbox"/>																	
JOINT ID. OR * DESCRIPTION & QUANTITY OF WELDS		REVISION DWG WPS	WLDR SYM(S)	I. PREHEAT		II. FIT UP																	
				ROOT EXAMINATION				FINAL EXAMINATION				16. PWHT				DEFICIENCY * * DESCRIPTION							
				12. VISUAL				13. NDE				14. VISUAL				15. NDE							
				TEMP H A R INSP DATE				H A R INSP DATE				REQ H A R INSP DATE				REQ H A R INSP DATE				H A R INSP DATE			
Pc 2 to Pc 1		3/D R2	S162																			US E 1/16"	
Pc 3 to Pc 1		3/D R2	S162																			S.I. Bottom	
Pc 4 to Pc 1		3/D R2	S163																			US 1/16 E+N	
All. Ther. F. W. Welds		3/P R2	S163																				
All reject welds		5	051																				
LATE PHASE 1 COMPLETE																							
<i>George Cuperta 3/31/83</i>																							

* USE QA-34 A TO LIST ADDITIONAL WELDS

* * QUANTITATIVE DATA MUST BE LISTED FOR ALL REJECTS

LEGEND : H - HOLDPOINT ✓ IN H COLUMN MEANS HOLD FOR QC
A - ACCEPT
R - REJECT

REMARKS: ** Pc Pc WDR*
S163 accept 3-31-83
051 accept, R# 4/22/83

QA/QC SPECIALIST

DATE

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

I	1. UNIT N/A	2. BUILDING N/A	3. ELEV. N/A	4. LOCA. N/A	5. COMPONENT/HANGER ID. N/A	6. DRAWINGS, REV. & SHT. # A-1-236-1-CC-11-338	7. WELD PROC. 1A4 E 7018	9. WELD INSTRUCTIONS PREHEAT: P.C. 4 (SHANK) When welding strut adjustment.
	DISCIPLINE ENG. Jane Arthur	DATE 3/24/82	WELDING ENG./FOREMAN Barbara Morris	DATE 3/25/82				

- II
1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
 4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

III

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) (Y/N) DATE: 5-19-82

2. WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR # _____ QA/QC INSPECTION DATE: 5-22-82

FOREMAN: Sykes

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		ROOT NDE						FINAL NDE						PWHT	INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.
		°F MIN.	H	FITUP			VT			MT/PT			RT	UT	VAC BOX				
				H	A	R	H	A	R	H	A	R							
P.C. 4 (SHANK)		✓	150																
All other Field welds ^{3/P}	51-63																	RF Test	

IV

LEGEND: H = HOLDPOINT
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T = TEMP GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY BP INITIALS DATE 3-29-82

REMARKS: P.C. 4 (SHANK) Tack ONLY

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

* USE 0A-34A TO LIST ADDITIONAL WELDS

SEISMIC WELD DATA REPORT (PROCEDURE CQC-19)

1. UNIT 1	2. BUILDING COWT	3. ELEV. 236	4. LOCATION ZONE 1	5. COMPONENT/HANGER ID. CC-H-176	6. DRAWING, SHT. NO. & CONTRACT NO. C-1-236-1	7. WELD PROC. 1A4	9. WELD INSTRUCTIONS (YELLOW) <i>Full Pen Weld (Green) BACK GAUGE TO SOUND METAL PRIOR TO WELDING FROM SECOND SIDE</i>																											
DISCIPLINE ENG. Mar Nowlin		DATE 4-28-83	WELDING ENG./FOREMAN Barbara Morris		DATE 4/28/83	8. WELD MTL. TY. E7018																												
RELEASE FOR WELDING QA/QC SPECIALIST: Midge Carpenter				DATE: 5/1/83	NCR / DDR NO.	CLOSED <input type="checkbox"/>	MAT'L STATUS A <input type="checkbox"/> R <input type="checkbox"/>	INSP INIT.	DATE:																									
JOINT ID. OR * DESCRIPTION & QUANTITY OF WELDS	REVISION DWG/WPS	WLDR SYM(S)	10. PREHEAT				11. FIT UP				ROOT EXAMINATION				FINAL EXAMINATION				16. PWHT	DEFICIENCY * * DESCRIPTION														
			12. VISUAL		13. NDE		14. VISUAL		15. NDE																									
			TEMP	H	A	R	INSP	DATE	H	A	R	INSP	DATE	H	A	R	INSP	DATE	REQ	H	A	R	INSP	DATE	H	A	R	INSP	DATE	H	A	R	INSP	DATE
A235																																		
Pc.4 TO EMBED R.																																		
A235 23																																		
Pc.4 TO EMBED R.																																		

* USE QA-34 A TO LIST ADDITIONAL WELDS

* * QUANTITATIVE DATA MUST BE LISTED FOR ALL REJECTS

LEGEND : H - HOLDPOINT ✓ IN H COLUMN MEANS HOLD FOR QC.
A - ACCEPT
R - REJECT

REMARKS :

QA / SPECIALIST _____

DATE _____

WELDING & WELD DATA REPORT

PROCEDURE CQC-19

ZONE 2

RAB 236

7. WELD PROC.

1A4 R-3

AR-236-1-02-H-110

N/A

Ann Carter 8/11/82 Barbara Morris 8/11/82

E 7018

DATE: 9-9-82

FOREMAN: Cam

DATE: 9/13/82

DATE: N/A

DATE: _____

REASON FOR DEFICIENCY, REPAIR OR REWORK, ETC.

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QA/QC INSPECTOR

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REASON FOR DEFICIENCY, REPAIR OR REWORK, ETC.

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SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

I. UNIT	2. BUILDING	3. ELEV.	4. LOCATION	5. COMPONENT/HANGER I.D.		6. DRAWINGS & SHT.#	7. WELD PROC.	9. WELD INSTRUCTIONS									
				WELDING ENG./FOREMAN	DATE			9. WELD ML. TY.									
I	EAB	236	ZONE 3	CC-H-488		A3-236-1 CC-H-488	IA4	N/A									
	C. Butcher	9-23-82	Subbarao Mervus	9/24/82			E7018										
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY:																	
INITIALS: BP DATE: 9-28-82																	
II	MAT'L STATUS		NCR/DDR#		QC INSPECTOR		DATE:										
	* JOINT ID OR DESCRIPTION & QTY. OF WELDS	WPS REV.	WLDR SYM	WLDR VOL	1. PREHEAT OF MIN.	2. FITUP	3. ROOT NDE	4. M/PT	5. VT	6. M/PT	7. RT	8. UT	9. JAC BOX	10. PWHT	INSP INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, INITIAL & DATE HOLD POINT, ETC
	All Field Welds	3/0	A1A A5	SB79	ALT 10,248									ALT	10/24/82		
	All Shop Welds	3/0	A1A A5											ALT	10/24/82		
	All Field Welds	4/E	1A4 A3	SB79	ALT 10,248									ALT	10/24/82		
	All Shop Welds	4/E	1A4 A3											ALT	10/24/82		APPR App. by Grinding
III	LATE PHASE 1 COMPLETE																
	<i>George Papantou 11/3/82</i>																

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

QA/QC SPECIALIST / DESIGNEE _____ DATE _____
* USE QA-34A TO LIST ADDITIONAL WELDS

REMARKS: MATERIAL STATUS ACC G-AC 11/1/82
NCR 85 Taken from the WDR at 11/1/82

2

VOL

No. 35

Clipped & Pink

EDDLEMAN 41
HARRIS WELD DATA
NOTE

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

1. UNIT <i>N/A</i>	2. BUILDING <i>N/A</i>	3. ELEV. <i>N/A</i>	4. LOCA. <i>N/A</i>	5. COMPONENT/HANGER ID. <i>N/A</i>	6. DRAWINGS, REV. & SHT. # <i>NS-2361-4-WG-H-545</i>	7. WELD PROC. <i>1A4</i>	9. WELD INSTRUCTIONS <i>N/A</i>
DISCIPLINE ENG. <i>Chun Carter</i>		DATE <i>9-22-82</i>	WELDING ENG./FOREMAN <i>Barbara Morris</i>		DATE <i>4/26/82</i>	8. WELD ML. TY. <i>E7018</i>	

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: *N/A* DATE: *N/A*

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A R DATE: *N/A*

2. WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR QA/QC INSPECTION DATE: *N/A*

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT	FITUP	ROOT NDE								FINAL NDE								PWHT	INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC	
				VT				MT/PT				RT				UT								VAC BOX
				H	A	R	T	H	A	R	T	H	A	R	T	H	A	R	T					
<i>N.E. SIDE</i>	<i>5'S1</i>																							
<i>PE 1 TO WG-H-543</i>	<i>E-15</i>	<i>N/A</i>																			<i>9/17/82</i>	<i>Porosity ARC-STRIKES 1/4" UNDRUNT 1/8"</i>		
<i>S.E. SIDE</i>	<i>5'S1</i>																				<i>9/17/82</i>	<i>ARC-STRIKES 1/4" 3/16" SPATTER</i>		
<i>PE 1 TO WG-H-543</i>	<i>E-15</i>	<i>N/A</i>																			<i>9/17/82</i>	<i>UNDRUNT 1/4" 3/16" 10.</i>		
<i>S.W. SIDE</i>	<i>5'S1</i>																				<i>9/17/82</i>			
<i>PE 1 TO WG-H-543</i>	<i>E-15</i>	<i>N/A</i>																			<i>9/17/82</i>			
<i>PE 2 TO PE 1</i>	<i>E-15</i>	<i>N/A</i>																			<i>9/17/82</i>	<i>All WELDS INCOMPLETE BY 1/4" TO 1/2"</i>		
<i>5'S1</i>																					<i>9/17/82</i>			
<i>ALL OTHER FIELD WELDS</i>	<i>E-15</i>	<i>N/A</i>																			<i>9/17/82</i>			
<i>SNOP WELDS</i>		<i>N/A</i>																						
<i>5'S1</i>																					<i>9/17/82</i>	<i>N.E., N.W., S.E., S.W., SIDES</i>		
<i>PE 2 TO PE 3</i>		<i>N/A</i>																			<i>9/17/82</i>	<i>ALL UNDRUNTED 1/4"</i>		
<i>5'S1</i>																					<i>9/17/82</i>			
<i>ALL OTHER SNOP WELDS</i>		<i>N/A</i>																			<i>9/17/82</i>			
<i>SH-98</i>	<i>E-15</i>	<i>N/A</i>																	<i>N/A</i>	<i>DMB</i>	<i>10-23-82</i>	<i>N.E., S.E., N.W., S.W., TOP</i>		
<i>ALL REJECTED WELDS ABOVE SSI</i>																						<i>UNDER 1/2" = 1/16"</i>		
<i>BOTH PES</i>																								
<i>PE 2 TO PE 1</i>	<i>SH-98</i>	<i>N/A</i>																	<i>N/A</i>	<i>DMB</i>	<i>10-23-82</i>			
<i>5'S1</i>																					<i>11/4/82</i>	<i>All DEFICIENCIES REPAIRED</i>		
<i>ALL FIELD WELDS</i>	<i>SH-98</i>	<i>N/A</i>																			<i>11/4/82</i>			
<i>5'S1</i>																					<i>11/4/82</i>	<i>All DEFICIENCIES REPAIRED</i>		

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED
AND/OR VERIFIED BY *BP* DATE *4-29-82*
INITIALS DATE

REMARKS: **SH-98 ACC D1222 10-23-82*
E-15 WAS CARRIED UNTIL 6-1X-X2, AT WHICH TIME NO TERMINATED SSI. OK 11-2-82
** Mat'l Status ACC D1222 11/12/82*

QA/QC SPECIALIST / D. GNEE DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC WELD DATA REPORT (PROCEDURE CQC-19)

QA-34
REV. 5
12/21/82

PAGE _____ OF _____

1. UNIT	2. BUILDING	3. ELEV.	4. LOCATION		5. COMPONENT/HANGER ID.	6. DRAWING, SHT. NO. & CONTRACT NO.		7. WELD PROC.	9. WELD INSTRUCTIONS
			WELDING ENG./FOREMAN	DATE		DATE	CONTRACT NO.		
DISCIPLINE ENG.			DATE		DATE		B. WELD MTL. TY.		REQUIRED NDE - A-MT/B-PT/C-RT/D-UT PLACE APPROPRIATE LETTER IN REQ. BLK.
DATE			DATE		DATE		E TO 18		
RELEASE FOR WELDING			DATE		DATE		INSIP INIT.		DATE
QA/QC SPECIALIST			DATE		DATE		A		DATE
JOINT ID OR * DESCRIPTION: #			DATE		DATE		R		DATE
QUANTITY OF WELDS			DATE		DATE		A		DATE
REVISION			DATE		DATE		A		DATE
WLD (SYMS)			DATE		DATE		A		DATE
DWG/WPS			DATE		DATE		A		DATE
TEMP			DATE		DATE		A		DATE
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SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

I	1. UNIT <i>TWPB</i>	2. BUILDING <i>236</i>	3. ELEV. <i>ZONE 6</i>	4. LOCA. <i>WG-H-541</i>	5. COMPONENT/HANGER ID. <i>WG-H-541</i>	6. DRAWINGS, REV. & SHT. # <i>WG-236-1</i>	7. WELD PROC. <i>1A4</i>	9. WELD INSTRUCTIONS <i>N/A</i>
	DISCIPLINE <i>Jerry Kelly</i>	DATE <i>1/5/82</i>	WELDING ENG./FOREMAN <i>Garland Morris</i>		DATE <i>1/5/82</i>	<i>WG-H-680</i>	8. WELD ML. TY. <i>E7018</i>	

II'

1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION

2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES

3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS

4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: *N/A* DATE: *N/A*

III

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A R DATE: *1/18/82*

2. WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR # *N/A* QA/QC INSPECTION *JM* DATE *1/18/82*

* JOINT ID. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP		ROOT NDE				FINAL NDE				PWHT	INSTR. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.				
		H	TEMP	H	A	R	H	A	R	H	A	R	H					A	R	UT	VAC BOX
<i>all welds 351</i>	<i>SH98</i>														<i>JM</i>	<i>1/18/82</i>					
<div style="position: absolute; top: 0; left: 0; right: 0; bottom: 0; background: linear-gradient(to top right, transparent 49%, black 49%, black 51%, transparent 51%); pointer-events: none;"></div>																					

LEGEND: H = HOLDPOINT
 A = ACCEPT
 R = REJECT
 T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED
 AND/OR VERIFIED BY *JM* *1/5/82*
 INITIALS DATE

REMARKS:

QA/QC SPECIALIST / DESIGNEE DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC I WELD DATA REPORT
(PROCEDURE CQC-19)

1. UNIT	2. BUILDING	3. ELEV	4. LOCATION	5. COMPONENT / HANGER ID
1	LLPS	336	ZONE 5	LLG-H-541
6. DRAWING(S), REV & SHEET NOS LLG-5-230-1-4-WG-H-541				
7. WELD PROCEDURE(S) & REV NOS & WELD METAL TYPE & WELDER SYMBOLS				
DISCIPLINE ENGINEER OR FOREMAN				
DISCIPLINE ENGINEER		DATE		
FOREMAN		DATE		

II FOREMAN		ALL ITEMS	
1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION WELDS.		1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES.	
2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS NOT REQUIRING ADDITIONAL INSTRUCTIONS.		3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS.	
4. INFORM QA FOR HOLD POINTS (H) & FINAL WELD INSPECTION.		FOREMAN	
1. WELD TYPES & CONFIGURATION CHECKED WITH DRAWINGS & COMPONENT/HANGER		ACCEPT <input type="checkbox"/> REJECT <input type="checkbox"/>	
2. WELDER QUALIFICATION CHECKED WITH DRAWINGS		ACCEPT <input type="checkbox"/> REJECT <input type="checkbox"/>	
3. WELDER QUALIFICATION		ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/>	
2. WELDER QUALIFICATION		3. MATERIAL STATUS	
ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/>		ACCEPT <input type="checkbox"/> HOLD <input type="checkbox"/>	
INSPECTION DATE		INSPECTION DATE	
1/22/81		1/22/81	

III WELDING		ALL ITEMS	
* JOINT IDENTIFICATION OR PREHEAT		DESCRIPTION & QTY. OF WELDS	
VT MT/PT RT UT PWT VAC BOX		N/A H T A R N A A R N A A R N A A R N A A R	
INSPECTOR'S INITIALS		DATE	
INS		1-22-81	
* JOINT IDENTIFICATION		DESCRIPTION OF DEFICIENCIES & REPAIR OR REMARK	
RT-UP H A R			
INSPECTOR'S INITIALS		DATE	
INS		1-22-81	

IV WELDING		ALL WELD JOINT	
* JOINT IDENTIFICATION		DESCRIPTION OF DEFICIENCIES & REPAIR OR REMARK	
VT MT/PT H A R H A R			
INSPECTOR'S INITIALS		DATE	
INS		1-22-81	

V WELDING		FP TEE ROOT CLASS	
* JOINT IDENTIFICATION		DESCRIPTION OF DEFICIENCIES & REPAIR OR REMARK	
VT MT/PT H A R H A R			
INSPECTOR'S INITIALS		DATE	
INS		1-22-81	

USE GA-34A FORM TO LIST ADDITIONAL WELDS.
GA INSPECTION & HOLDPOINTS VERIFIED BY: _____
INITIALS _____ DATE _____
GA SPECIALIST _____ DATE _____
COPY _____
A = ACCEPT
H = HOLDPOINT
R = REJECT
FP = FULL PENETRATION
NA = NOT APPLICABLE
T = TEMPERATURE
(SEE REVERSE SIDE FOR INSTRUCTION)

SEISMIC WELD DATA REPORT (PROCEDURE CQC-19)

QA-34
REV. 5
12/21/82

OF _____
IS _____

1. UNIT 1		2. BUILDING WPB		3. ELEV. 236		4. LOCATION zone 5		5. COMPONENT/HANGER ID. WG-H-537		6. DRAWING, SHT NO. & CONTRACT NO. W-5-236-1		7. WELD PROC. 1A4		9. WELD IN																	
DISCIPLINE ENG. <i>John Mascia</i>		DATE 3/15/83		WELDING ENG./FOREMAN <i>Wright</i>		DATE 3-17-83		WG-H-537		8. WELD MTL TY. E7018		REQUIRE PLACE A		MT/B-PT/C-RT/D-UT E LETTER IN REQ BLK																	
RELEASE FOR WELDING QA/QC SPECIALIST: <i>C.E. Garcia</i>				DATE: 3-18-83				NCR / DDR NO.		CLOSED <input type="checkbox"/>		MAT'L STATUS <input type="checkbox"/> A <input type="checkbox"/> R <input type="checkbox"/>		INSP INIT		DATE:															
JOINT ID. OR * DESCRIPTION & QUANTITY OF WELDS		REVISION DWG WPS		WLDR SYM(S)		10. PREHEAT				11. FIT UP				ROOT EXAMINATION				FINAL EXAMINATION				DEFICIENCY * * DESCRIPTION									
														12. VISUAL				13. NDE				14. VISUAL				15. NDE					
PC 3 to ENBED		4/5 2		S/11																											
PC (2) to PC (5)		4/E 2		S/11																						US, AS, COF					
Both (Field) PC 5 to PC 3		4/E 2		S/11																						S & SIDE Top of welds US 1/16" - 3"					
Both (Shop) PC 2 to PC 1		4/E		N/A																						welds US 1/16" - 1/2"					
Top (Field) PC 5 to PC 3		4/E		S/11																						weld MISSING Top					
Bottom PC 5 to PC 3 (Field)		4/E		S/11																						weld MISSING Bottom					
Top + Bottom (Field) PC 6 to PC 5		4/E		S/11																						welds MISSING N & S.					
(Shop) END CAP WELDS		4/E		N/A																											
ALL SHOP WELDS		4/E		N/A																											
ALL FIELD WELDS		4/E		S/11																											

MATERIAL STATUS SUBMITTED

* USE QA-34 A TO LIST ADDITIONAL WELDS

* * QUANTITATIVE DATA MUST BE LISTED FOR ALL REJECTS

LEGEND: H - HOLDPOINT ✓ IN H COLUMN MEANS HOLD FOR QC
A - ACCEPT
R - REJECT

REMARKS: WELDER QUALIFIED OK - FILE 3/21/83
INSP Per FCL # 979 RSG 3/21/83
* WELDER'S QUALIFIED 4-13-83 G.H.J.

QA/C SPECIALIST

DATE

SEISMIC WELD DATA REPORT
CONTINUATION SHEET

1. UNIT	2. BUILDING		3. ELEV.		4. LOCATION				5. COMPONENT/HANGER ID.																														
1	WPB		236		ZONE 5				WG-H-537																														
JOINT ID. OR * DESCRIPTION & QUANTITY OF WELDS	REVISION		10. PREHEAT				11. FIT UP				ROOT EXAMINATION				FINAL EXAMINATION				16. PWHT				DEFICIENCY * * DESCRIPTION																
	DWG	WPS	WELDR SYM(S)								12. VISUAL		13. NDE		14. VISUAL		15. NDE																						
		TEMP	H	A	R	INSP	DATE	H	A	R	INSP	DATE	H	A	R	INSP	DATE	REQ	H	A	R	INSP	DATE	H	A	R	INSP	DATE	REQ	H	A	R	INSP	DATE	H	A	R	INSP	DATE
<p>LATE PHASE 1 COMPLETE</p> <p><i>Dodge Carpenter 5/6/83</i></p>																																							
<p>MATERIAL STATUS SUBMITTED 5-9-83</p>																																							

SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

I. UNIT	2. BUILDING	3. ELEV.	4. LOCATION	5. COMPONENT/HANGER I.D.		6. DRAWINGS & SHL. #	7. WELD PROC.	9. WELD INSTRUCTIONS								
				WELDING ENG./FOREMAN	DATE											
I	WP	236	Zone 5	WF-H-535	WF-H-535	W-5-236-1	1A4	N/A								
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY:				Barbara Morris		1/11/83	E 7018									
MATERIAL STATUS		NCR / DDR		QC INSPECTOR		DATE:		INITIALS								
A		R		GAC		1/12/83										
* JOINT ID OR DESCRIPTION & QTY. OF WELDS	WPS REV.	WLDR SYM(S)	WLDR QUAL(S)	1. PREHEAT OF MIN.	2. FITUP	3. ROOT NDE	4. M/T/PT	5. M/T/PT	6. M/T/PT	7. RT	8. UT	9. VAC BOX	10. PWHT	INSP INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR INITIAL & DATE HOLD POINT, ETC
West Shank weld	252														9/85 1/17/83	Tacked only
All other field welds	252														9/85 1/17/83	
All shop welds	252														9/85 1/17/83	
LATE PHASE I COMPLETE																
APR 16 1983																

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS: * Fees previous WDR. 8/8/17/83

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

* USE QA-34A TO LIST ADDITIONAL WELDS

REINSPECTION _____

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

DISCIPLINE ENGINEER OR FOREMAN	1. UNIT <u>1</u>	2. BUILDING <u>WPB</u>	3. ELEV <u>236</u>	4. LOCATION <u>ZONE 5</u>	5. COMPONENT / HANGER ID <u>WG-H-533</u>		
	6. DRAWING(S), REV. & SHEET NOS <u>W-5-236-1-4-WG-H-533</u> <u>Rev 9/A</u>			7. WELD PROCEDURE(S) & REV. NO'S <u>N/A</u>		8. WELD METAL TYPE <u>N/A</u>	9. WELDER SYMBOL(S) <u>A 18</u>
	DISCIPLINE ENGINEER <u>N/A</u>			DATE <u>N/A</u>	WELDING ENGR. / FOREMAN <u>N/A</u>		DATE <u>N/A</u>

II FOREMAN	ALL ITEMS	1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION WELDS. 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES. 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS. 4. INFORM QA FOR HOLD POINTS (H) & FINAL WELD INSPECTION.					FOREMAN <u>N/A</u>	DATE <u>N/A</u>
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III WELDING QA	ALL ITEMS	1. WELD TYPES & CONFIGURATION CHECKED WITH DRAWINGS & COMPONENT/HANGER CONFIGURATION CHECKED WITH DRAWINGS		ACCEPT <input type="checkbox"/>	REJECT <input type="checkbox"/>	NCR NO <u>N/A</u>	INSP. INT'L S <u>REC</u>	DATE <u>1-22-81</u>
		2. WELDER QUALIFICATION	ACCEPT <input type="checkbox"/>	REJECT <input type="checkbox"/>	3. MATERIAL STATUS	ACCEPT <input type="checkbox"/>	HOLD <input type="checkbox"/>	NCR NO <u>N/A</u>

IV WELDING QA	ALL WELD JOINT	* JOINT IDENTIFICATION OR DESCRIPTION & QTY. OF WELDS	PREHEAT			FINAL LAYER												INSPECTOR'S INITIALS	DATE	
			N	A	T	VT		MT/PT		RT		UT		PWHT		VAC BOX			WELDED	INSP.
						A	R	A	R	A	R	A	R	A	R	A	R			
		<u>4 - Fillets</u>																	<u>REC</u>	<u>1-22-81</u>
		<u>1 Fillet</u>																	<u>REC</u>	<u>1-22-81</u>
		<u>1 Fillet</u>																	<u>CR</u>	<u>2/20/81</u>

FIT-UP INSPECTION	FP WELDS MANDATORY	FILLET'S OPTIONAL	* JOINT IDENTIFICATION	FIT-UP			DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK	INSPECTOR'S INITIALS	RELEASED FOR ROOT/WELDOUT (DATE)
				H	A	R			

FIT-UP INSPECTION	FP WELDS MANDATORY	FILLET'S OPTIONAL	* JOINT IDENTIFICATION	VT			MT/PT			DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK	INSPECTOR'S INITIALS	RELEASED FOR WELDOUT (DATE)
				H	A	R	H	A	R			

WE USE QA-34A FORM TO LIST ADDITIONAL WELDS.
 QA INSPECTION & HOLDPOINTS VERIFIED BY:

N/A N/A
 INITIALS DATE

LEGEND:

- A = ACCEPT
- H = HOLDPOINT
- R = REJECT
- FP = FULL PENETRATION
- NA = NOT APPLICABLE
- T = TEMPERATURE (°F)

N/A N/A
 QA SPECIALIST DATE

COPY

SEISMIC WELD DATA REPORT

1. UNIT: *N/A* 2. BUILDING: *N/A* 3. ELEV.: *236* 4. LOCAL: *N/A* 5. COMPONENT/HANGER ID.: *N/A* 6. DRAWINGS, REV. & SHT. #: *W5-236-1* 7. WELD PROC.: *1A4* 9. WELD INSTRUCTIONS: *N/A*
 DISCIPLINE ENG: *N/A* WELDING ENG./FOREMAN: *W.C. H530* DATE: *8-25-81* FOREMAN: *N/A* DATE: *N/A*
 1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
 4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

* JOINT I.D. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP		ROOT NDE		FINAL NDE		PWHT	INSPECTION INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.
		H	TEMP.	H	A	R	H	A	R				
<i>Pl. # D to tubestruct 9/E</i>	<i>SH-1</i>			<i>5BS</i>								<i>12/16/81</i>	
<i>Pl. # D to I beam 9/E</i>	<i>SH-1</i>											<i>12/16/81</i>	
<i>clip to R. # D 7/E</i>	<i>SH-1</i>											<i>12/16/81</i>	
<i>all welds accepted</i>	<i>SH-1</i>											<i>12/16/81</i>	
<i>R. # D not welded</i>													

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED: *8/25/81* DATE: *N/A*
 AND/OR VERIFIED BY: *[Signature]* INITIALS: *N/A* DATE: *N/A*
 QA/QC SPECIALIST / DESIGNEE: *N/A* DATE: *N/A*
 REMARKS: *All inspections done by [Signature] [Signature] [Signature] [Signature]*

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC WELD DATA REPORT (PROCEDURE CQC-19)

I. UNIT 1	2. BUILDING WPB	3. ELEV. 236	4. LOCATION ZONE 5	5. COMPONENT/HANGER I.D. WG-H-518	6. DRAWINGS & SHT.# W-5.236-1	7. WELD PROC. 1A4	9. WELD INSTRUCTIONS N/A
DISCIPLINE ENG./DEG. B. Kenbrook		DATE 12/8/82	WELDING ENG./FOREMAN Barbara Morris		DATE 12/8/82	8. WELD ML. TY. E7018	
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY:					INITIALS BP	DATE: 2-8-82	

II. MAT'L STATUS Call 2-22-83A <input checked="" type="checkbox"/> R <input type="checkbox"/>	NCR / DDR** CLOSED <input type="checkbox"/>	QC INSPECTOR	DATE:
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* JOINT ID OR DESCRIPTION & QTY. OF WELDS	DWG(s) REV.	WPS REV.	WLDR SYM(s)	WLDR QUAL(s)	1. PREHEAT °F MIN.	2. FITUP	ROOT NDE								FINAL NDE								10. PWHT	INSP. INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, INITIAL & DATE HOLD POINT, ETC	
							3. VT		4. MT/PT		5. VT		6. MT/PT		7. RT		8. UT		9. VAC BOX								
							H	A	H	A	H	A	H	A	H	A	H	A	H	A	H	A					
Welds 12-22-82	251	R2	C93	12-22-82															OK	12/22/82	Perk. 1/25 to PLATE END						
All Shop welds	251																		OK	12/22/82							
Pc 3 to P. 4	251	R2	C97	12-22-82															OK	12/22/82	Slag and North side						
All other Field welds	251	R2	C93	12-22-82															OK	12/22/82							
Pc-3 to P-4	251	R3	S1	12/24/82															OK	12/30/82							
LATE PHASE 1 COMPLETE																											

George Bryant **APR 16 1983**

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS: *Per Proc WDR 12-22-82*
Note Reel H 025 12-22-82

QA/QC SPECIALIST / DESIGNÉE

DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

REINSPECTION *12/16 APR 16 1983*

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

1. UNIT N/A	2. BUILDING WFB N/A	3. ELEV. 230m N/A	4. LOC. 200E/5 N/A	5. COMPONENT/HANGER ID. N/A WG-H-518	6. DRAWINGS, REV. & SHT. # W-5-236-1 WG-H-518	7. WELD PROC. 1A4	9. WELD INSTRUCTIONS N/A
DISCIPLINE ENG. Henry Paul		DATE 2-18-82	WELDING ENG./FOREMAN Barbara Morris		DATE 2/18/82	8. WELD ML. TY. E7018	

- 1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
- 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
- 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
- 4. INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: COMDNER DATE: N/A

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A R DATE _____

2. WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR N/A QA/QC INSPECTION _____ DATE: _____

* JOINT I.D. OR DESCIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP		ROOT NDE				FINAL NDE				PWHT	INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.
		H	TEMP.	H	A	R	VT	MT/PT	VT	MT/PT	RT	UT	VAC BOX				
		H	A	R	H	A	R	H	A	R	H	A	R				
Pe. 3 to Pe. 4 ²⁵¹ #	C93				✓				✓	✓					JR	4/1/82	Undersize
Pe. 3 to Embed ²⁵¹	C93								✓	✓					JR	4/1/82	Undersize
all other completed welds ²⁵¹	C93														JR	4/1/82	
<div style="position: absolute; top: 50%; left: 50%; transform: translate(-50%, -50%); opacity: 0.5; font-size: 4em;">X</div>																	

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED
AND/OR VERIFIED BY KAD 2-26-82
INITIALS DATE

REMARKS: * Holdpoint not needed as hanger was welded prior to WDR being received 4/1/82 JR

QA/QC SPECIALIST / ENGINEER _____ DATE _____

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

I. UNIT 1	2. BUILDING WPB	3. ELEV. 236	4. LOCATION TAYE 5	5. COMPONENT/HANGER I.D. WG-H-483	6. DRAWINGS & SHT # W-5236-1	7. WELD PROC. 1A4	9. WELD INSTRUCTIONS N/A												
I	DISCIPLINE ENG./DEG. Kenny Paul	DATE 12/83	WELDING ENG./FOREMAN Bill Sull	DATE 1-21-83	WG-H-483	8. WELD ML. TY. E-7018													
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY:					INITIALS G.P.C.	DATE: 2/11/83													
II	MAT'L STATUS A <input type="checkbox"/> R <input type="checkbox"/>	NCR/DDR**	CLOSED <input type="checkbox"/>	QC INSPECTOR	DATE:														
III	* JOINT ID OR DESCRIPTION & QTY. OF WELDS	DWG(s) REV.	WPS REV.	WLDR SYM(s)	WLDR QUAL(s)	1. PREHEAT °F MIN.	2. FITUP	ROOT NDE	FINAL NDE	10. PWHT	INSP. INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, INITIAL & DATE HOLD POINT, ETC.						
								3. VT	4. MT/PT	5. VT	6. MT/PT	7. RT	8. UT	9. VAC BOX					
	Pc 3 to Pc 7 (Top)	752	2	* SH98	* Rm												Rm 2/7/83	Top 45 1/4" i BMK	
	Pc 2 (shank)	752	N/A	N/A	N/A													Rm 2/7/83	Tacked only
	clip to Pc 3	752	2	* SH98	* Rm													Rm 2/7/83	no weld symbol
	All other Field welds	752	2	* SH98	* Rm													Rm 2/7/83	
	Pc 3 to Pc 7	752	1A4 R-3	R-30	2/4 mx	N/A												mx 3/4/83	ABOVE DEFICIENCY REPAIRED
	Pc 2 (clip) to Pc 3	752	N/A															mx 2/4/83	MISSING WELD SYMBOL
	CLIP TO Pc. 3	753	2	SH98	CW	5-13-83												CW 5/13/83	NO SHOP WELDS
	LATE PHASE 1 COMPLETE																		5-17-83

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS: * From old WDR 2/7/83

QA/QC SPECIALIST/DESIGNEE

DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

REINSPECTION

SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

1. UNIT 1	2. BUILDING WPB	3. ELEV. 236	4. LOCATION ZONES	5. COMPONENT/HANGER I.D. WG-H-467	6. DRAWINGS & SHT.# WG-6.236-1	7. WELD PROC. IA4	9. WELD INSTRUCTIONS N/A
DISCIPLINE ENG./DEB. B. Kendrick		DATE 9-23-82		WELDING ENG./FOREMAN Barbara Morrow		8. WELD ML. TY. E7018	
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/GR VERIFIED BY:				INITIALS B			
DATE 9-28-82				DATE:			

I. MAT'L STATUS * A <input type="checkbox"/> R <input type="checkbox"/>	II. NCR / DDR**	III. WPS REV.	WLDR SYM(S)	WLDR QUAL(S)	I. PREHEAT OF MIN.	2. FITUP		3. ROOT NDE		4. ROOT NDE		5. ROOT NDE		6. FINAL NDE		10. PWHT	INSP. INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDH, INITIAL & DATE HOLD POINT, ETC
						H	TEMP	H	A	R	H	A	R	H	A				
		251	1A4 SH 98	98														12/1/82	not a field weld.
		251	shop weld															12/1/82	not a field weld.
		251	shop weld															12/1/82	not a field weld.
		251	shop weld															12/1/82	not a field weld.
		251	shop weld															12/1/82	not a field weld.
		251	1A4 SH 98	98														12/1/82	not a field weld.
		251	1A4 SH 98	98														12/1/82	not a field weld.

LATE PHASE I COMPLETE

REMARKS:
 1. Mat'l Status Acc. DMM 12-23-82

LEGEND: H = HOLDPOINT
 A = ACCEPT
 R = REJECT

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

1. UNIT <i>1</i>	2. BUILDING <i>WPA</i>	3. ELEV. <i>236</i>	4. LOCA. <i>20461</i>	5. COMPONENT/HANGER ID. <i>N/A WE-H462</i>	6. DRAWINGS, REV. & SHT. # <i>W-5-236-1</i> <i>WG-H-462</i>	7. WELD PROC. <i>1A4</i>	9. WELD INSTRUCTIONS <i>N/A</i>
DISCIPLINE ENG. <i>Barry Kull</i>		DATE <i>3/23/82</i>	WELDING ENG./FOREMAN <i>Barbara Merrin</i>		DATE <i>3/23/82</i>	8. WELD ML. TY. <i>E7018</i>	

- NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
- NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
- COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
- INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A R DATE _____

2 WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR * QA/QC INSPECTION DATE _____

* JOINT I.D. OR DESCIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP		ROOT NDE				FINAL NDE				PWHT	INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.				
		H	TEMP.	H	A	R	H	A	R	H	A	R	H					A	R	UT	VAC BOX
All Field Welds 3D	1A4 RS S1198																	QJM 2/21/83 welders Quals OK.			
All shop welds 3D																		QJM 2/21/83 undersize, Arc Strike.			
All Field Welds 3D	1A4 RS ES2*																	QJM 2/18/83 stencil too close			
All Shop welds 3D	1A4 RS ES2*																	QJM 2/18/83 stencil too close.			
above rejects 3/D	E-52 1A4 R/S																	GAD 2/18/83 corrected			

LATE PHASE 1 COMPLETE

George Casanova 6/18/83

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION & NDE HOLDPOINT ASSIGNED
AND/OR VERIFIED BY *BP* 3/24/82
INITIALS DATE

REMARKS: **E52 welders Quals. C.*
GAD 2/18/83

QA/QC SPECIALIST / DESIGNEE _____ DATE _____

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

1. UNIT 1	2. BUILDING WPB	3. ELEV. 236	4. LOCAL ZONE 5	5. COMPONENT/HANGER ID. WG-H-452	6. DRAWINGS, REV. & SHT. # W5-236-1-WG-H-452	7. WELD PROC. 1A4 R-3	9. WELD INSTRUCTIONS N/A
DISCIPLINE Crew Coater		DATE 1/30/02	WELDING ENG./FOREMAN Barbara Morris		DATE 7/30/02	8. WELD ML. TY. E7018	

- NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION
- NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES
- COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS
- INFORM QA/QC FOR HOLD POINTS (H) & FINAL WELD INSPECTION

FOREMAN: N/A DATE: N/A

1. WELD TYPE & CONFIGURATION CHECKED WITH DWG(S) & COMPONENT/HANGER CONFIGURATION CHECKED WITH DWG(S) A R DATE: N/A

2. WELDER(S) QUALIFICATION A R 3. MAT'L STATUS A R NCR/DDR * QA/QC INSPECTION DATE:

* JOINT ID. OR DESCRIP. & QTY. OF WELDS	WELDER SYMBOL(S)	PREHEAT		FITUP		ROOT NDE				FINAL NDE				PWHT	INSP. INITIALS	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, ETC.			
		H	TEMP	H	A	H	A	H	A	H	A	H	A					H	A	VAC BOX
		H	A	H	A	H	A	H	A	H	A	H	A					H	A	H
Other All Field Welds 2/E	SH1																			
Other All Shop Welds 2/E	N/A																			
Pc 3 to EMB 3/c	SH1																Bottom SKT Undersized 1/8"			
Pc 5 to Pc 4 Shop 3/c	N/A																Top Front to Back Corners Undersized 1/8"			
Pc 1 (slip) to Pc 4 3/c	SH-98 SF-65 SH-1																Pin Holes & POLARITY on EAST/WEST SIDES / VARIOUS DIR			
Pc 3 to Pc 4 3/c	SH-98 SF-65 SH-1																SKW T&B Undersized 1/8"			
All OTHER Field Welds 2/c	SH-98 SF-65 SH-1																			
All SHOP WELDS 3/c																				
Pc 1 to Pc 4 2/c	SH98 SF65 SH1																welders Quals OK			
Pc 3 to Pc 4 2/c	SH98 SF65 SH1																welders Quals OK.			

LATE PHASE 1 COMPLETE

George Carpenter 11/24/02

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT
T = TEMP. GREATER THAN LISTED

QA/QC INSPECTION * & NDE HOLDPOINT ASSIGNED
AND/OR VERIFIED BY AD 8-2-02
INITIALS DATE

REMARKS:
* Mat'l status Acc Dir 11/23/02

QA/QC SPECIALIST / DE NEE DATE

SEISMIC WELD DATA REPORT (PROCEDURE CQC-19)

I. UNIT 1	2. BUILDING WPB	3. ELEV. 236	4. LOCATION ZONE 5	5. COMPONENT/HANGER I.D. WG-H-411	6. DRAWINGS & SHT.# WS-236-1 WG-H-411	7. WELD PROC. 1A4	9. WELD INSTRUCTIONS N/A
DISCIPLINE ENG./DEG. E. Kendrick		DATE 12/8/82	WELDING ENG./FOREMAN Barbara Morris		DATE 12/8/82	8. WELD ML. TY. E7018	
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY: BP					INITIALS BP	DATE: 12-8-82	

II. MAT'L STATUS A <input type="checkbox"/> R <input type="checkbox"/>	NCR/DDR** CLOSED <input type="checkbox"/>	QC INSPECTOR	DATE:
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* JOINT ID OR DESCRIPTION & QTY. OF WELDS	DWG (a) REV.	WPS REV.	WLDR SYM (s)	WLDR QUAL (s)	1. PREHEAT °F MIN.	2. FIT UP	ROOT NDE										FINAL NDE										10. PWHT	INSP. INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, INITIAL & DATE HOLD POINT, ETC
							3. VT		4. MT/PT		5. VT		6. MT/PT		7. RT		8. UT		9. VAC BOX											
							H	TEMP	H	A	H	A	H	A	H	A	H	A	H	A	H	A	H	A						
Pc4 to Emb	251	2	SH98	SH74																		12/8/82	TOP US 1/16							
Pc4 to Pc3	251	2	SH77	SH77																		12/8/82	BOTTOM US 1/16							
Pc4 to Emb south	251	2	SH98	SH74																		12/8/82	INACCESSIBLE							
Clip to Pc3	251	5	SW																			12/8/82								
Pc4 to Emb. ^{see}	251	R/2	S1	CE-7																		12/8/82	SOUTH END OF WELD INACCESSIBLE							
Pc4 to Pc3	251	R/2	S1	CE-7																		12/8/82								
LATE PHASE 1 COMPLETE																														
<i>George Carpenter</i> 41161A3																														

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS:

MATERIAL STAT. VERIFIED 1-11-83 CE-7

QA/QC SPECIALIST / DESIGNEE

DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

REINSPECTION

SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

I	1. UNIT	2. BUILDING	3. ELEV.	4. LOCATION	5. COMPONENT/HANGER I.D.	6. DRAWINGS & SHT.#	7. WELD PROC.	9. WELD INSTRUCTIONS
	DISCIPLINE ENG./DEG.	DATE	WELDING ENG./FOREMAN	DATE	8. WELD ML. TY.			

QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY: _____ INITIALS: *G.F.C.* DATE: *1/22/83*

II	MAT'L STATUS	NCR/DDR**	CLOSED <input type="checkbox"/>	QC INSPECTOR	DATE:
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* JOINT ID OR DESCRIPTION & QTY. OF WELDS	DWG (REV.)	WPS (REV.)	WLDR (SYM)	WLDR (QUAL)	1. PREHEAT °F MIN.	2. FITUP	ROOT NDE										10. PWHT	INSP. INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, INITIAL & DATE HOLD POINT*, ETC.		
							3. VT	4. MT/PT	5. VT	6. MT/PT	7. RT	8. UT	9. VAC BOX	H	HA	HB					HC	HD
Pe 3 to Emb. S. End.	2/C	1A1 R-2	B-7 B-32	DMB														DMB 12885	Porosity - Bottom weld			
All other Field welds	2/C	1A1 R-2	B-7 B-32	DMB														DMB 12885				
Clip to Pe 3	2/C	N/A	N/A	N/A														DMB 12885	Top + Bottom wrong weld symbol			
All other Shop welds	2/C	N/A	N/A	N/A														DMB 12885	Pe 2 to Pe 3 (2 endcaps)			
Pe 3 to Embed	4/E	1A4 AS	E 52	DMB														DMB 5/18/83	E. weld, Inaccessible			
Clip to Pe 3	4/E	shop	welds	DMB														DMB 5/18/83	Hrc strike			
Pe 3 to emb	4/E	5	E 52	DMB														DMB 6/7/83	Undercut			

LATE PHASE 1 COMPLETE *George Carpenter 6/15/83*

Material Status Submitted 6-16-83

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS: * As Per Prev. WDR DMB 12885

QA/QC SPECIALIST / DESIGNÉE _____ DATE _____

* USE QA-34A TO LIST ADDITIONAL WELDS

SEISMIC WELD DATA REPORT
(PROCEDURE CQC-19)

1. UNIT 1-4	2. BUILDING WRO	3. ELEV. 236	4. LOCATION ZONE 5	5. COMPONENT/HANGER I.D. WG-H-584	6. DRAWINGS & SHT.# W-5-236-1-4	7. WELD PROC. 1A4	9. WELD INSTRUCTIONS N/A									
I DISCIPLINE ENG./DEG. Charles M. Fawcett	DATE 1-21-83	WELDING ENG./FOREMAN W. Hill	DATE 1-22-83	WG-H-584	8. WELD ML. TY. E-7018											
QC INSPECTION & NDE HOLDPOINT ASSIGNED AND/OR VERIFIED BY:					INITIALS G.N.C.	DATE: 1/22/83										
II MAT. STATUS 2-24-83 A <input checked="" type="checkbox"/> R <input type="checkbox"/>	NCR/DDR	CLOSED <input type="checkbox"/>	QC INSPECTOR	DATE:												
* JOINT ID OR DESCRIPTION & QTY. OF WELDS	DWG. REV.	WPS REV.	WLD. SYM.	WLD. QUAL.	1. PREHEAT °F MIN.	2. FIT UP	ROOT NDE	FINAL NDE	10. PWHT	INSP. INT.	DATE	DESCRIPTION OF DEFICIENCY, REPAIR OR REWORK NCR/DDR, INITIAL & DATE HOLD POINT, ETC.				
ALL FIELD WELDS	3/D	AWI R-4	SH 93	1/31/83			VT	MT/PT	VT	MT/PT	RT	UT	VAC BOX	9/29	1/31/83	
ALL SHOP WELDS	3/D	N/A	N/A	N/A										9/29	1/31/83	SHOP WELDS ARE NOW FIELD WELDS AND ARE INACCESSIBLE.
III LATE PHASE 1 COMPLETE										George Carpenter		APR 16 1983				

LEGEND: H = HOLDPOINT
A = ACCEPT
R = REJECT

REMARKS:

QA/QC SPECIALIST/DESIGNEE

DATE

* USE QA-34A TO LIST ADDITIONAL WELDS

REINSPECTION G.A.E. APR 16 1983

SEISMIC I WELD DATA REPORT

(PROCEDURE CQC-19)

DISCIPLINE ENGINEER OR FOREMAN	1. UNIT <i>1</i>	2. BUILDING <i>WPB</i>	3. ELEV <i>236</i>	4. LOCATION <i>Zone 5</i>	5. COMPONENT / HANGER ID <i>WG-H-584</i>		
	6. DRAWING(S), REV & SHEET NO'S <i>(310)</i> <i>W-5-236-1-4 WG-H-584</i>			7. WELD PROCEDURE(S) & REV NO'S <i>AWI</i>		8. WELD METAL TYPE <i>E7018</i>	9. WELDER SYMBOL(S) <i>N/A</i>
	DISCIPLINE ENGINEER <i>Chen H. Ritterow</i>			DATE <i>3/3/81</i>	WELDING ENGR / FOREMAN <i>Neil Stelt</i>		DATE <i>3-13-81</i>

II FOREMAN	ALL ITEMS	1. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS FOR FULL PENETRATION WELDS. 2. NOTIFY DISCIPLINE ENGINEER FOR ADDITIONAL INSTRUCTIONS ON JOINTS INVOLVING ENGINEERED PLATES. 3. COMPLETE WELDOUT OF JOINTS NOT REQUIRING ADDITIONAL INSTRUCTIONS. 4. INFORM QA FOR HOLD POINTS (H) & FINAL WELD INSPECTION.	FOREMAN <i>N/A</i>	DATE <i>N/A</i>
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III WELDING QA	ALL ITEMS	1. WELD TYPES & CONFIGURATION CHECKED WITH DRAWINGS & COMPONENT/HANGER CONFIGURATION CHECKED WITH DRAWINGS ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/>	NCR NO <i>N/A</i>	DATE <i>5/23/81</i>
		2. WELDER QUALIFICATION ACCEPT <input checked="" type="checkbox"/> REJECT <input type="checkbox"/>	3. MATERIAL STATUS ACCEPT <input checked="" type="checkbox"/> HOLD <input type="checkbox"/>	NCR NO <i>N/A</i>

IX WELDING QA	ALL WELD JOINT	JOINT IDENTIFICATION OR DESCRIPTION & QTY OF WELDS	PREHEAT		FINAL LAYER												INSPECTOR'S INITIALS	DATE	
			NA	H	VT	MT/PT	RT	UT	PWHT	VAC BOX		WELDED	INSP.						
										NA	AR	NA	AR	NA	AR	NA		AR	NA
		<i>2 Flares Rejected for undersize - Length 1/2" short</i>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					<i>N/A</i>	<input checked="" type="checkbox"/>		<i>5/12</i>	<i>5/16/81</i>	
		<i>2 Flares Above 1/8"</i>			<input checked="" type="checkbox"/>												<i>5/19/81</i>	<i>5/23/81</i>	

X WELDING QA	FIT-UP INSPECTION FP WELDS MANDATORY FILLET'S OPTIONAL	JOINT IDENTIFICATION	FIT-UP						DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK	INSPECTOR'S INITIALS	RELEASED FOR ROOT/WELDOUT (DATE)
			H		A		R				

XI WELDING QA	FP TEE ROOT PASS	JOINT IDENTIFICATION	FIT-UP						DESCRIPTION OF DEFICIENCIES & REPAIR OR REWORK	INSPECTOR'S INITIALS	RELEASED FOR WELDOUT (DATE)
			H		A		R				

WE USE QA-34A FORM TO LIST ADDITIONAL WELDS.
QA INSPECTION & NDE HOLDPOINTS VERIFIED BY:

Tom *3/13/81*
INITIALS DATE

- LEGEND:**
- A = ACCEPT
 - H = HOLDPOINT
 - R = REJECT
 - FP = FULL PENETRATION
 - NA = NOT APPLICABLE
 - T = TEMPERATURE (> °F)

QA SPECIALIST DATE

COPY

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

2

In the matter of CAROLINA POWER & LIGHT CO. Et al.
Shearon Harris Nuclear Power Plant, Unit 1

Docket 50-400
O.L.

CERTIFICATE OF SERVICE

DOCKETED
USNRC

WE Notice of Documents Relied Upon and I hereby certify that copies of Previously Served, As Testimony-in-Chief and case-in-chief on Joint Contention I and Eddleman 65, and of Proposed W.E. Exhibits on Contention 116 and of Interrogatories to Staff & FEMA + to Applicants/DC Emergency Planners and E-41 Exhibit, HAVE been served this 9 day of August 1984, by deposit in

the US Mail, first-class postage prepaid, upon all parties whose names are listed below, except those whose names are marked with an asterisk, for whom service was accomplished by _____

Due to copy center problems, Judge Kelley orally approved filing as much of this as I can tonight (8-09) + the rest tomorrow. I had discussed this w/ applicants' attorney, Butler before contacting Judge Kelley.
Judges James Kelley, Glenn Bright and James Carpenter (1 copy each)
Atomic Safety and Licensing Board
US Nuclear Regulatory Commission
Washington DC 20555

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USNRC Washington DC 20555

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Washington DC 20555

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