

RELATED CORRESPONDENCE

12/1/80



UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

APPLICATION OF TEXAS UTILITIES
GENERATING COMPANY, ET AL. FOR AN
OPERATING LICENSE FOR COMANCHE
PEAK STEAM ELECTRIC STATION
UNITS #1 AND #2 (CPSSES)

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Docket Nos. 50-445
and 50-446

CASE'S SECOND SET OF INTERROGATORIES
TO APPLICANTS AND REQUESTS TO PRODUCE

NOTIFICATION

COMES NOW CASE (Citizens Association for Sound Energy), hereinafter referred to as CASE, Intervenor herein, and files this, its Second Set of Interrogatories to Applicants and Requests to Produce.

Pursuant to 10 CFR 2.740b and 2.741, please answer the following interrogatories in the manner set forth herewith. Each interrogatory should be answered fully in writing, under oath or affirmation, and include all pertinent information known to Applicants, their officers, directors or employees as well as any pertinent information known to their advisors or counsel. Each request to produce applies to pertinent documents which are in the possession, custody or control of Applicants, their officers, directors or employees as well as their advisors or counsel. Answer each interrogatory in the order in which it is asked, numbered to correspond to the number of the interrogatory; do not combine answers. Please identify the person providing each answer or response.

These interrogatories and requests to produce shall be continuing in nature. Thus, any time Applicants obtain information which renders any previous response

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incorrect or indicates that a response was incorrect when made, Applicants should supplement their previous response to the appropriate interrogatory or request to produce. Applicants should also supplement their responses as necessary with respect to identification of each person expected to be called at the hearing as an expert witness, the subject matter of his or her testimony, and the substance of that testimony. The term "documents" shall include any writings, drawings, graphs, charts, photographs, reports, studies, and other data compilations from which information can be obtained. We request that at a date or dates to be agreed upon by mutual consent, Applicants make available for inspection and copying all documents which CASE has specifically requested or subject to the requests set forth below. All interrogatories which do not request documents should be answered pursuant to 10 CFR 2.740b(b).

CASE'S INTERROGATORIES AND REQUESTS TO PRODUCE

Contention 5. The Applicants' failure to adhere to the quality assurance/quality control provisions required by the construction permits for Comanche Peak, Units 1 and 2, and the requirements of Appendix B of 10 CFR Part 50, and the construction practices employed, specifically in regard to concrete work, mortar blocks, steel, fracture toughness testing, expansion joints, placement of the reactor vessel for Unit 2, welding, inspection and testing, materials used, craft labor qualifications and working conditions (as they may affect QA/QC), lack of compliance, failure to report items of non-compliance, lack of methods of identification and control of nonconformance, program surveillance, procedural deficiencies, storage of electrical components, failure to follow pipe fabrication procedures, failure to follow equipment maintenance, and possible damage to the pressurizer, have raised substantial questions as to the adequacy of the construction of the facility. As a result, the Commission cannot make the findings required by 10 CFR 50.27(a) necessary for the issuance of an operating license for Comanche Peak.¹

¹ CASE has incorporated into the wording of this contention the Inspection and Enforcement Report subjects identified in ACORN's Offer of Proof of 8/29/80, pursuant to the Board's Rulings of 10/31/80.

1. CASE is now receiving copies of the Inspection and Enforcement Reports (I&E Reports) from the NRC Regional Office in Arlington, Texas.
 - a. Will Applicants please add CASE to their mailing list to begin receiving copies of Applicants' answers to such I&E Reports and other related correspondence at the same time Applicants send their responses to NRC?
 - b. If the answer to a. above is yes, please advise the date and I&E Report number of the first such answer CASE is to receive.
 - c. If the answer to a. above is no, why not?
2. CASE is now receiving copies of requests to Applicants from the NRC asking for further information, clarification of previously supplied information, etc., regarding information pertinent to CASE's Contention 5.
 - a. Will Applicants please add CASE to their mailing list to begin receiving copies of Applicants' responses to such requests and other related correspondence at the same time Applicants send their responses to the NRC?
 - b. If the answer to a. above is yes, please advise the date and specific information subject of the first such answer CASE is to receive.
 - c. If the answer to a. above is no, why not?
 - d. Will Applicants supply copies of such Applicants' responses, which CASE will specify, to requests previously made by the NRC which Applicants have not yet supplied as a supplement to their FSAR? (We mean will Applicants go ahead and send us copies of these, rather than just making them available for inspection and copying?)
 - e. If the answer to d. above is no, why not?

Regarding Questions 3 through 14 following: The following questions are regarding documents supplied by Applicants in response to CASE's First Request for Information. On October 2, 1980, CASE came to Applicants' offices and reviewed documents which were answers to specific CASE questions. Regarding those documents, please answer the following questions:

3. The dates covered by the Deficiency and Disposition Report (DDR) logs which CASE was supplied were 3/17/75 through 3/31/77.
 - a. Have DDR logs been replaced with some other type of reporting system?

3. (continued)

b. If the answer to 3.a. is yes, what type of reporting system replaced them?

c. If the answer to 3.a. is yes, when did the new reporting system go into effect?

Specifically, what was the date of the last DDR log entry, and what was the date of the first log entry under the new reporting system?

d. If the answer to 3.a. is no, what is the date of the most recent entry made on the DDR log as of the time you answer these interrogatories?

e. If the answer to 3.a. is no, was 3/31/77 the most recent DDR report which had been recorded as of 10/2/80?

f. If the answer to 3.e. is yes, how long does it take between the time a DDR report is written up and the time it is recorded on the DDR log?

g. If the answer to 3.e. is yes, why does it take so long between the time a DDR report is written up and the time it is recorded on the DDR log?

h. If the answer to 3.e. is no, why was CASE not supplied with the more recent DDR logs?

4. The dates covered by the Non-Conformance Report (NCR) logs for TUGCO were 7/10/80 through 8/4/80 (with five in progress). Regarding the NCR logs for TUGCO:

a. Do both Brown & Root and TUGCO still prepare NCR's?

b. What is the date of the most recent entry made on the NCR log for TUGCO as of the time you answer these interrogatories?

c. Was 8/4/80 the most recent NCR report which had been recorded as of 10/2/80?

d. If the answer to 4.c. is yes, how long does it take between the time an NCR report is written up and the time it is recorded on the NCR log?

e. If the answer to 4.c. is yes, why does it take so long between the time an NCR report is written up and the time it is recorded on the NCR log?

f. If the answer to 4.c. is no, why was CASE not supplied with the more recent NCR logs?

5. The dates covered by the Non-Conformance Report (NCR) logs for Brown & Root were 4/7/77 through 8/5/80. Regarding the NCR logs for Brown & Root:
- a. What is the date of the most recent entry made on the NCR log for Brown & Root as of the time you answer these interrogatories?
 - b. Was 8/5/80 the most recent NCR report which had been recorded as of 10/2/80?
 - c. If the answer to 5.b. is yes, how long does it take between the time an NCR report is written up and the time it is recorded on the NCR log?
 - d. If the answer to 5.b. is yes, why does it take so long between the time an NCR report is written up and the time it is recorded on the NCR log?
 - e. If the answer to 5.b. is no, why was CASE not supplied with the more recent NCR logs?
6. The dates covered by the Corrective Action Request (CAR) logs were 10/31/75 through 6/10/80.
- a. What is the date of the most recent entry made on the CAR log as of the time you answer these interrogatories?
 - b. Was 6/10/80 the most recent CAR report which had been recorded as of 10/2/80?
 - c. If the answer to 6.b. is yes, how long does it take between the time a CAR report is written up and the time it is recorded on the CAR log?
 - d. If the answer to 6.b. is yes, why does it take so long between the time a CAR report is written up and the time it is recorded on the CAR log?
 - e. If the answer to 6.b. is no, why was CASE not supplied with the more recent CAR logs?
7. Is it correct that the only audits which have been performed by insurers (industrial risk, builder's risk, etc.) on work done at the Comanche Peak plant are as follows; and are the referenced items all the items regarding such audits?
- 6-pages, 5/25/79, Brown & Root to National Board of Boiler & Pressure Vessel Inspectors
 - 1-page, 6/25/79, Brown & Root to National Board of Boiler & Pressure Vessel Inspectors
 - 6-pages, 6/8/79, from National Board of Boiler & Pressure Vessel Inspectors
 - 8-pages, 4/17/79, from National Board of Boiler & Pressure Vessel Inspectors

8. If the answer to Question 7 is no, list the other audits which have been done (we are not asking for copies to be provided for inspection and copying in this question; we want to know which other audits have been performed).
9. If the answer to Question 7 is no, provide for inspection and copying all other such audits.
10. If the answer to Question 7 is no, why was CASE not provided with these documents for inspection and copying on October 2?
11. Is it correct that the only outside or sub-contractor evaluations, studies or audits which have been conducted at CPSES (by sub-contractors or agents of sub-contractors or by consulting firms or others, etc.) was the Muenow Report regarding problems with the concrete "honeycombing" (approximately 200 pages or so) under a cover letter dated 5/5/80?
12. If the answer to Question 11 is no, list the other evaluations, studies or audits which have been done (we are not asking for copies to be provided for inspection and copying in this question; we want to know which other audits have been performed).
13. If the answer to Question 11 is no, provide for inspection and copying all other such audits.
14. If the answer to Question 11 is no, why was CASE not provided with these documents for inspection and copying on 10/2/80?
15. Inspection and Enforcement Report (I&E Report) 79-11 (under cover letter of 5/14/79) included an investigation of an allegation (Allegation 1) that "During a concrete pour on the Unit 1 containment dome in January 1979, a rain occurred which washed away part of the concrete. The affected area was repaired by the use of grout. Workers involved were requested to 'keep it quiet.' Two workers, who are still at the site, have knowledge of this occurrence." We are attaching a copy of I&E Report 79-11 (CASE pages 7 through 19); regarding it, answer the following questions:
 - a. The third paragraph on page 10 of the report (CASE page 17) states: "...it had become very clear that the licensee's Quality Assurance program had broken down for the entire evening of January 18, 1979, and that a substantial amount of concrete on the dome was of an unknown quality."
Since that time, have any tests been done on that concrete to try to ascertain its content and/or quality?
 - b. If the answer to 15.a. is no, why hasn't this been done?

Appendix A

NOTICE OF VIOLATION

Based on the results of the NRC investigation conducted during the periods April 2-3 and April 13-23, 1979, it appears that certain of your activities were not conducted in full compliance with the conditions of your NRC Construction Permit No. CPPR-126 as indicated below:

Failure to Implement the Quality Assurance Program For Civil Construction

10 CFR 50, Appendix B, Criterion II requires that a quality assurance program be established and implemented for the construction of the structures important to safety of the nuclear plant. The Texas Utilities Generating Company Comanche Peak Steam Electric Station Quality Assurance Plan affirms the intention to fulfill this requirement. The CPSES "Civil Inspection Manual" provides a body of inspection and testing procedures required to implement the Quality Assurance Plan.

Contrary to the above:

On January 18, 1979, personnel of the civil construction labor force placed an undetermined amount of concrete of an unknown quality on the dome of the Unit 1 containment without the knowledge of your Quality Assurance organization and without benefit of required inspections and testing of the concrete.

This is an infraction.

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION IV

Report No. 50-445/79-11; 50-446/79-11

Docket No. 50-445; 50-446

Category A2

Licensee: Texas Utilities Generating Company
2001 Bryan Tower
Dallas, Texas 75201

Facility Name: Comanche Peak, Units 1 & 2

Investigation at: Comanche Peak Steam Electric Station, Glen Rose, Texas

Investigation Conducted: April 2-3 and April 13-23, 1979

Inspectors: *W. Crossman*
for R. G. Taylor, Resident Reactor Inspector, Projects
Section

5/10/79
Date

R. E. Hall
for D. P. Tomlinson, Reactor Inspector, Engineering
Support Section (April 13, 1979, Interview)

5/10/79
Date

R. E. Hall
for A. B. Beach, Reactor Inspector, Engineering
Support Section (April 23, 1979, Interview)

5/10/79
Date

Approved: *W. Crossman*
W. A. Crossman, Chief, Projects Section

5/10/79
Date

R. E. Hall
R. E. Hall, Chief, Engineering Support Section

5/10/79
Date

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Investigation Summary:

Investigation on April 2-3 and April 13-23, 1979 (Report 50-445/79-11;
50-446/79-11)

Areas Investigated: Special investigation of allegations received indicating that concrete had been placed on the Unit 1 dome during a rainstorm in January 1979, without QC or documentation; that pipe with sandblasted-off markings was being used in Unit 1; that steam system pipe was damaged by a handling accident and covered up; and that welders were not being properly qualified. The investigation involved thirty-six inspector-hours by the Resident Reactor Inspector and three inspector-hours by two Region IV based inspectors.

Results: The allegation relative to the concrete placement was confirmed (noncompliance - failure to implement the QA program - infraction). No items of noncompliance or deviations were identified relative to the balance of the allegations.

INTRODUCTION

Comanche Peak Steam Electric Station (CPSES), Units 1 and 2, are under construction in Somerville County, Texas, near the town of Glen Rose, Texas. Texas Utilities Generating Company is the Construction Permit holder with Brown and Root, Inc., as the constructor and Gibbs and Hill, Inc., as the Architect/Engineer.

REASON FOR INVESTIGATION

The Region IV Reactor Construction and Engineering Support Branch office received a telephone call from a former CPSES employee who reported several allegations indicating a potential breakdown in the CPSES Quality Assurance program.

SUMMARY OF FACTS

On March 30, 1979, the Region IV Reactor Construction and Engineering Support Branch received a telephone call from a party who identified himself as a former CPSES employee. The call was taken by an on-duty Reactor Inspector in the Projects Section who in turn provided the information to the assigned Resident Reactor Inspector at CPSES on April 2, 1979. The allegations, as received on March 30, 1979, were:

1. During a concrete pour on the Unit 1 containment dome in January 1979, a rain occurred which washed away part of the concrete. The affected area was repaired by the use of grout. Workers involved were requested to "keep it quiet." Two workers, who are still at the site, have knowledge of this occurrence.
2. The identity of a lot of "Q" and "non-Q" pipe (6" or less) being used for Unit 1 has been lost due to obliteration of heat numbers by sandblasting and loss of identifying tags. Workers are guessing as to the proper identification of the pipe.
3. A steam pipe intended for the Unit 1 turbine fell off of a truck and struck a railroad track. It was taken back to a storage area and hidden.
4. Third class helpers are being qualified in less than three months and are being used for safety related welding on Unit 1.

On April 13, 1979, the Resident Reactor Inspector assigned to CPSES and accompanied by another Region IV inspector interviewed the alleged in an effort to obtain additional information on the allegations. The additional information is summarized as follows:

1. The concrete used for the repair was not grout as originally indicated but was known to contain gravel. The concrete came from the batch plant where it was mixed on the ground and carried in a bucket to a tower crane at the Unit 1 Containment Building and hoisted to the dome area. The work was accomplished sometime during the middle of the second shift, possibly around 10:00 to 10:30 p.m. (January 1979, no day specified).
2. The pipe in question was not prefabricated pipe but rather bulk pipe joints. Sometimes, the pipe is sandblasted on the outside (rate of occurrence not identified) which removes all of the heat marking used for traceability.
3. The steam pipe was being moved during the second shift from the "Dodd's Spur" storage area to the plant area when it was dropped off the truck. A couple of the large "cherry-picker" type cranes were dispatched to the incident to pick up the pipe and place it back on the truck. The crew with the truck decided instead to put the pipe back into the storage area and leave it there for another shift to pick up and perhaps be blamed for damaging the pipe. The alleged did not know if the pipe had actually suffered any damage. He was aware the pipe in question was "non-Q" but expressed a concern that if the craft could get away with a cover-up on "non-Q," they probably are also doing it on the "Q" pipe and other equipment.
4. The alleged indicated he was concerned with what must be incompetent welders working on "Q" welds, since they could not have very much experience and still only be considered third class labor.

CONCLUSIONS

Research of various records and interviews with both craft labor and Brown & Root QC personnel produced the following conclusions:

1. The allegation relative to the concrete placement on the dome of Unit 1 is essentially correct and is evidence of a breakdown in the licensee's Quality Assurance program. The incident will be considered an item of noncompliance.

2. The allegation relating to the loss of pipe traceability markings could not be confirmed. The Resident Reactor Inspector's finding was that on occasion the sandblasting, with attendant loss of readily visible markings, probably does occur through human error, but that there are other means which will re-establish the identity of the pipe without guessing on the part of the craft labor force.
3. The piping in the "Dodd's Spur" storage area is for the turbine portion of the plant and is not safety related from a nuclear standpoint and is therefore not within the jurisdiction of the NRC inspection program. The more generalized concern of cover-up of improper handling practices is not consistent with the observations of the Resident Reactor Inspector and other NRC inspectors made during the course of routine inspections. The allegation cannot be verified or refuted at this time, but should subsequent observations verify that the alleged situation is occurring, appropriate action will be taken.
4. Welders are qualified in accordance with the provisions of the ASME Boiler and Pressure Vessel Code, Section IX, "Welding and Brazing Qualifications," as required by NRC regulations and the licensee's commitments as contained in the Safety Analysis Report submitted to obtain a Construction Permit. The labor classification, and therefore the pay, of the welders is not an element of the ASME Code welder qualification program, only the ability of the person being tested to weld on a specified weld coupon.

DETAILS

1. Persons Contacted

Non-Licensee or Contractor Persons

The alleged is a former employee of Brown & Root (the site general contractor). The person identified himself as a former equipment operator and foreman of equipment operators.

Principal Licensee Employees

Construction Manager, Texas Utilities Generating Co.
Supervisor of Product Assurance, Texas Utilities Generating Co./
Gibbs & Hill

Brown & Root, Inc.

Project General Manager
Construction Project Manager
General Foreman, Building Department
Superintendent, Building Department
Quality Control Inspector, Civil

2. Preliminary Investigation - April 2-3, 1979

- a. Allegation 1: The Resident Reactor Inspector (RRI) initiated a preliminary investigation of the allegation as soon as received. The RRI was aware that a number of concrete placements had been necessary to complete the dome area of Unit 1 and that a substantial portion of these placements occurred in January 1979. Schedule completion data indicated that five of the total of thirteen dome placements occurred in January 1979. Rainfall data for January was then obtained from the licensee's meteorology unit which indicated rain had fallen on January 15, 1979 (with the rainfall totalizer reset to zero) and again in the period between January 15 and 22, 1979, when the totalizer was again zeroed. The data suggested that placement 101-8805-013, the final placement on the dome, was the most likely candidate since 2.72 inches of rain had occurred about the placement date of January 18, 1979. The RRI then examined the QC inspection records for the placement which stated, "Pour stopped at 8:00 p.m. 1/18/79 due to inclement weather. Pour was topped out all but to a 30' radius which was cleaned up and finished 1/19/79."

The RRI then interviewed the QC inspector of record for the placement and was informed that the placement had started under good weather conditions on January 18, but that the

weather subsequently developed into a light mist and drizzle which did not interfere with the placement. By late evening, the weather deteriorated further and became a full rainstorm with thunder and lightning. By 7:30 p.m. or so it was decided that the placement would have to be stopped for reasons of personnel safety. The placement area was covered to keep the rain off the fresh concrete and the second shift was instructed to water blast and clean up the area so the placement could be resumed the following day.

- b. Allegations 2, 3 & 4: No attempt was made to perform a preliminary investigation of these allegations since the information was too vague.

3. Licensee/Contractor Report of Allegations

During the course of the above preliminary investigation, personnel of the licensee's management and QA organizations approached the RRI and stated that they too had received an allegation relative to the dome placement. It was stated that licensee management had received a telephone call on or about March 19, 1979, on the subject and that licensee management had visited the alieger at his home on March 20, 1979, to ascertain the facts of the allegation. The alieger then was invited to visit the site and discuss the allegation, which the alieger is reported to have done on March 26, 1979. On the basis of these interviews, the licensee's Product Assurance personnel undertook an investigation which concluded that the allegation had no merit.

4. Interview with Alieger by NRC Personnel

The Region IV office made several attempts to establish contact with the alieger during the period following March 30, 1979, when the allegation was received, through April 12, 1979, when the interview date and location were established. The RRI and another NRC inspector met with the alieger and a friend on April 13, 1979.

The alieger provided the following information about himself:

- a. He had been employed by Brown & Root at CPSES for 2-1/2 to 3 years and had quit in mid-March because he was dissatisfied with how the night shift equipment operators were being dispatched and supervised.
- b. He had been an equipment operator, primarily on cherry-pickers, and also a foreman for equipment operators at an earlier time.

- c. He stated that he had made the allegations to licensee management and Brown & Root management earlier but had not been at all satisfied with the answers he had received to his allegations.

The allegor provided the following additional information relative to each of the allegations:

Allegation 1: The incident occurred well after the time that the placement had been stopped. He could not be sure of the time but thought it was probably 10:00 to 10:30 p.m. when some equipment was dispatched to the concrete batch plant to bring down a bucket of concrete to Unit 1 and thought it strange. The concrete was taken to the dome by a tower crane. He was sure that the concrete was not batched by the batch plant and certainly was not delivered by the usual concrete mix truck.

Allegation 2: The allegor made it clear that he was not referring to completed pipe spools but rather to bulk pipe. The cherry-picker operators routinely move the pipe from one location to another on the site and that the pipe involved was bulk pipe or joints. He stated that the pipe was sometimes sandblasted in such a way as to obliterate the heat number markings or tags and that he was pretty sure that there was a lot of unidentified pipe in the safety systems in Unit 1. This sandblasting sometimes happened to various steel forms used to make supports.

Allegation 3: The allegor described being dispatched with his equipment out to "Dodd's Spur" to pick up a length of pipe that had fallen off a truck after being loaded. The pipe had fallen on the spur railroad track. The RRI was not familiar with the term "Dodd's Spur." The allegor stated it was the area where the turbine components are stored. When he (the allegor) arrived at the site of the incident, he was told not to reload the pipe on the truck but to take it back into the storage area and put it down. The pipe crew indicated to him that they hoped that a day shift crew would come for the pipe and would probably be blamed for any damage that might have occurred to pipe when it fell. He stated that he did not know if the pipe had been damaged. He stated that he knew it was "non-Q" pipe but thought the NRC should be aware that such things were going on at the site.

5. Final Investigation - April 16-23, 1979

- a. Allegation 1. The RRI obtained the craft labor time sheets for both shifts for January 18 and 19, 1979. Review of the time sheets for the day shift on January 18 indicated that a portion of that shift worked on placement 101-8805-013. The records indicated that the day shift was terminated at approximately

8:30 p.m. relative to the placement as were the personnel at the concrete batch plant. The batch plant has no second shift operators. The RRI found that a large number of people, well in excess of fifty, had then worked on the placement during a substantial portion of the second shift. One crew of twelve people was shown by the time sheets to have been placing concrete, a notation not consistent with the fact that the batch plant was closed during the shift. The RRI then utilized the time sheets to develop a list of persons to be interviewed in connection with the incident with special concentration on the persons listed on the time sheet indicating "placing concrete 101-8305-013." The B&R personnel office records indicated that eight of the ten names included in this specific crew had been terminated at various times since January 18; the records did not suggest that any action was being taken to get rid of possible confirmatory personnel.

Late on April 17, 1979, two of the senior B&R construction management personnel very informally asked the RRI how the investigation of the allegations was coming along. The RRI responded that the on-site phase appeared to be complete and that NRC personnel would undertake the effort to locate and interview selected personnel immediately since it appeared that the allegation might be well founded. They asked the RRI if they could check with their people down to the General Foreman level as to the incident the night of January 18. The RRI indicated that such an inquiry on their part would probably not interfere with any future investigative action by the NRC.

On April 18, 1979, the licensee's Product Assurance Supervisor informed the RRI that he had information which indicated that the incident had occurred and that the craft General Foreman was the person responsible.

On April 23, 1979, the RRI, accompanied by another NRC Inspector, interviewed the General Foreman and his immediate supervisor, the night shift B&R Building Department Superintendent. These men related that on the night of January 13 the weather seemed to worsen and got to the point where the rain was so heavy that the people could hardly see. The freshly placed concrete developed into a problem when the plastic cover could not take the rainfall water load. Some of concrete began to sag back down the dome slope and one small area actually washed out and fell to the ground below. These men related that they and their entire crew of up to about one hundred-fifty worked on into the night trying to save a very bad situation. The sagged concrete was worked back into position and the crew protected it in any way they could to allow it to take a set.

The General Foreman went to the batch plant, got it open and operated the plant himself to make enough material to patch the washed out area. He stated that he found the design mix data used for the concrete on the dome and calculated the necessary weight of ingredients to prepare a half a cubic yard of concrete. The required data was put into the control system for the back-up dry batch plant, dropped into a skiff, and carried over to the quarter yard concrete mixer at the site test laboratory. It was mixed in two batches and placed into a skiff and carried to the dome where most of the half yard was used as a patch in the washed out area.

Both the General Foreman and his Superintendent were aware that there were no Quality Control personnel around to observe any of these actions since they had all gone home when the weather got really bad. Both men related to the RRI a picture of almost panic proportions in which the presence or absence of Quality Control simply did not matter; they were going to save a concrete placement from what they considered a disastrous situation, regardless. They indicated that while the night shift Assistant Construction Project Manager was generally aware of the situation on the dome that night, he probably was unaware of the fact that Quality Control personnel were not there or of the batching of the concrete under the conditions indicated.

In response to a question from the General Foreman as to "what happens now" the RRI stated that the NRC had no choice but to issue a Notice of Violation to the licensee since it had become very clear that the licensee's Quality Assurance program had broken down for the entire evening of January 18, 1979, and that a substantial amount of concrete on the dome was of an unknown quality.

- b. Allegation 2. The RRI visited the paint shop sandblasting area during the course of the final investigation to ascertain if this allegation could reasonably happen. The RRI interviewed a foreman of painters who is also in charge of the sandblasting activity and was told that three main categories of piping material routinely are sandblasted. These are:
- (1) Completed carbon steel spool pieces which are blasted on the outside prior to painting. The identity of these pieces is on an attached stainless steel band on which the identifying is encoded by stamping. Should the band come off, the spool piece identity can be re-established by the pipe fabrication shop since each spool is unique and is fully described by isometric drawings.

- (2) Carbon steel cut lengths, but otherwise in an unfabricated condition, are sent to sandblasting to have the inside cleaned prior to further fabrication. The outside, which usually carries the heat marking in paint is supposed to be untouched.
- (3) Bulk carbon steel pipe materials used for making equipment stands and supports is blasted and painted prior to fabrication. The material is used for such items as instrument supports.

The RRI found a number of examples of each of the above categories as well as steel shapes in the sandblast area. During the tour of the area, the RRI did not find any material that could not be identified except that in category three. The RRI interviewed one of the sandblasting personnel and came to the conclusion that the person might make an occasional mistake on category 2 material since he seemed confused when asked what he was going to do with a number of pieces ready for him to work on. It appeared that he might well blast the outside of a pipe when he should blast the inside.

Subsequent discussions with the paint shop foreman and with a Brown and Root Quality Control inspector in the pipe fabrication shop revealed that all cut, but unfabricated material, is transferred to the paint shop by memo which details the size, schedule and length of the cut section and the pipe spool isometric drawing involved. Should the outside of the pipe be inadvertently blasted, the piece can be reidentified relatively easy by measuring its size, schedule and length. The isometric drawing used to make the cut length is annotated with the pipe heat number prior to the cutting operation and verified by QC. It appeared most unlikely to the RRI that two otherwise identical pieces but with different heat numbers would be inadvertently blasted within the same time period.

The RRI concluded that the allegers remark that "workers are guessing on the identity of pipe" might be true, but that there was an adequate cross-check system built into the quality assurance program to preclude untraceable pipe from being installed in the safety related systems.

All of the steel shapes used in safety related supports for pipe and cable tray that have been examined by the RRI and other NRC inspectors have been sufficiently marked to establish their origin. These materials are also subject to a system of quality control verifications at various stages of fabrication sufficient to make it very unlikely that any improperly identified or unidentified material is used and installed.

- c. Allegation 3: Based on the interview with the alleged, no further action was taken to investigate the specifics of the allegation since the pipe in question was clearly not safety related and therefore not within the jurisdiction of the NRC inspection program. The more general concern that the pipe handling incident was a possible indicator of the general attitude of the craft personnel, particularly the riggers and pipefitters, appeared to be unfounded. The RRI has observed during many plant tours over the past nine months (since August 1978) that the material handling activities of the craft personnel have been accomplished under well controlled conditions in so far as they relate to safety related equipment and materials. An allegation of possible cover-up of improper actions by the craft personnel in behalf of other craft personnel is almost impossible to either confirm or completely refute.
- d. Allegation 4: No further investigation was made into the charge that third class welders are being used to perform safety related piping system welds on the basis that the welders are all qualified under a program prescribed by the ASME Boiler and Pressure Vessel Code Section IX, "Welding and Brazing Qualification." The application of the Section IX program has been reviewed a number of times by the RRI and other NRC inspectors since it was implemented at CPSES. The implementation has been found to be consistent with the requirements. These requirements, however, do not address themselves to the experience or inexperience of the person seeking qualification as a welder, but rather to whether he can accomplish a weld in one or more of the Code prescribed positions that will pass the test criteria imposed by the Code. The terminology "third class," as it applies to the labor force, relates primarily to the pay category in which a person is hired and previous experience is a factor in this determination.

15. (continued):

- c. If the answer to 15.a. is no, do Applicants have any plans for such testing in the future?
- d. If the answer to 15.c. is yes, what are these plans and when will they be done?
- e. Regarding 15.c. and 15.d., have such plans been set forth in writing to the NRC from Applicants?
- f. If the answer to 15.e. is yes, was this a response from Applicants to the NRC regarding I&E Report 79-11?
- g. If the answer to 15.f. is no, what was the designation assigned to such plans and what was the date of the communication in which this was transmitted to the NRC?
- h. Provide for inspection and copying the documents referenced in 15.c through g above.
- i. What is the present status of the concrete on the dome of the Unit 1 containment:
 - (1) Has it been tested to ascertain its content and/or quality?
 - (2) Has testing determined that its content and quality is satisfactory and within the requirements of Applicants and the NRC?
 - (3) If testing has been done, describe briefly what kinds of tests were performed, who performed such tests, whether or not TUGCO qa/qc inspector present, whether or not NRC qa/qc inspectors were present, whether or not TUGCO and NRC inspectors both agreed that the content and quality is satisfactory and within the requirements of Applicants and the NRC.
 - (4) If testing has been done, what were the results of such tests?
 - (5) Provide justification for your answers to i(1) through (4) above for inspection and copying.
- j. Provide the name of the individual or individuals who answered questions 15.a. through i above; if more than one person answered, specify which person answered each specific portion of the questions.
- k. Does the person(s) referenced in 15.j. above have personal first-hand knowledge of what happened regarding this particular Unit 1 dome concrete pour?

15. (continued):

1. Do Applicants plan to have the individual(s) referenced in 15.j. and 15.k. above testify during the operating license hearings?
 - m. If the answer to 15.l. above is yes, will such individual(s) be prepared to answer cross-examination questions regarding this incident?
 - n. If the answer to 15.l. above is no, will such individual(s) be available to depose regarding this incident?
 - o. If the answer to 15.n. above is no, why not?
16. With regard to I&E Report 80-01 (2/15/80), unresolved item, Class 1-to-Class 2 Transition Orifices (see CASE 12/1/80 Supplement to CASE's Answers to Applicants' First Set of Interrogatories and Requests to Produce, hereinafter referred to as CASE's 12/1/80 Supplement to Answers, page 3):
- a. Has this matter now been resolved?
 - b. If the answer to 16.a. above is no, what is the current status of this matter?
 - c. If the answer to 16.a. above is yes, how was the oversize hole through the pipe wall reduced to achieve the configuration required?
 - d. Provide for copying and inspection documentation of your answers to 16.a. through c. above.
17. With regard to I&E Report 80-01 (2/15/80) and (1/23/80), regarding securing Class IE Battery Chargers to the building structure (see CASE's 12/1/80 Supplement to Answers, page 3):
- a. Has this matter now been resolved?
 - b. If the answer to 17.a. above is no, what is the current status of this matter?
 - c. If the answer to 17.a. above is yes, how was such welding accomplished?
 - d. Provide for copying and inspection documentation of your answers to 17.a. through c. above.

and (4/18/80)

18. With regard to I&E Report 80-08 (4/2/80), Failure to report a significant construction deficiency regarding "honeycomb" in certain interior walls of the Unit Two containment building (see CASE's 12/1/80 Supplement to Answers, page 4):
- a. Has this matter now been resolved?
 - b. If the answer to 18.a. above is no, what is the current status of this matter?
 - c. If the answer to 18.a. above is yes, what was the final resolution of this matter?
 - d. Was there any other analysis or report done regarding this problem by any other outside consultant other than the single Muenow Report referenced in CASE Question 11 preceding?
 - e. If the answer to Question 18.d. above is yes, describe briefly what this other analysis or report consisted of, who performed it, and the conclusions reached.
 - f. I&E Report 80-08 (4/18/80) states on page 7: "...it appeared that an extensive engineering review had occurred either for the purpose of determining the method of repair or to develop a basis for possibly not needing to make the repair at all for other than cosmetic reasons; i.e., that the structural soundness of the walls was not affected sufficiently to have a safety impact." Regarding this, please answer the following questions:
 - (1) What was the purpose of such extensive engineering review?
 - (2) What determination was made as a result of such review?
 - (3) What determination was made regarding the safety significance of this problem?
 - (4) What was the legal and/or technical basis for the determination made referenced in f(3) above?
 - (5) Is it anticipated that Applicants' personnel who participated in such engineering review who have personal first-hand knowledge of such review will testify during the operating license hearings?
 - (6) Provide the name(s) of the individual(s) who answered questions f(1) through (4) above; if more than one person answered, specify which person answered which specific portion of the questions.

18. f. (continued):

- (7) Are the individual(s) who answered questions f(1) through (4) above the same individual(s) referenced in Question f(5) above?
- (8) If the answer to f(7) above is no, provide the name(s) of the individual(s) who participated in such engineering review who have personal first-hand knowledge of such review.
- (9) If the answer to f(5) preceding is no, will such individual(s) be available to depose regarding this problem?
- (10) If the answer to f(5) preceding is yes, will such individual(s) be prepared to answer cross-examination questions regarding this problem?
- (11) If the answer to f(9) above is no, why not?

19. Please refer to the attached page 7 from I&E Report 80-01, under cover letter dated 2/15/80 (CASE Page 24 of this pleading), and answer the following questions regarding the honeycombing in the concrete of the Unit 2 Containment Interior Walls:

- a. In the third paragraph of item 5, the Resident Reactor Inspector (RRI) states: "...the microseismic (sonic) investigative technique is unique to the consultant, Mr. Meunow, who developed it and is the only known person able to interpret the oscillographic data obtained." (Emphasis added.)
Is this statement which was made by the RRI true?
- b. If the answer to 19.a. is yes, how can Applicants or the NRC know whether Mr. Meunow's interpretation is correct?
- c. If the answer to 19.a. is no, how is it not correct?
- d. If the answer to 19.a. is no, do you have any idea why the RRI would have made such a statement, and what do you think the reason was?
- e. If the answer to 19.a. is no and Applicants' personnel or sub-contractors' personnel can also interpret the oscillographic data obtained, provide the following information:
 - (1) The names of each and every such employee.
 - (2) The title, credentials, background, experience, training, etc. of each such person.

This matter was brought to the licensee's attention as a potential deviation to the FSAR and design requirements and will be considered an unresolved matter until such time as the branch connections are actually welded and the through-wall holes are no longer measureable.

No items of noncompliance or deviations were identified.

5. Unit 2 Containment Interior Concrete Walls

Throughout the last several months of 1979, the RRI noted that the construction labor force was removing "honeycomb" on the exterior face of the wall areas around and above the reactor area sometimes referred to as the core walls. Such "honeycombing" removal is not unusual in concrete work provided that it is neither very large nor very deep into the structure.

On December 13, 1980, the licensee notified the RRI that further removal of the "honeycomb" was being suspended pending an in-depth investigation and engineering review since the area and depth appeared be exceeding expected levels. The licensee indicated that he considered the situation to be under review as a significant construction deficiency, but that decision on formal reportability could not be made until the investigation and review were completed. The licensee further indicated that he was planning on utilizing the services of a consultant, Meunow and Associates, to attempt, by microseismic means, to obtain information on the total extent of the problem.

The RRI observed a portion of the microseismic examination of the area during this period and has reviewed the consultant's report for that area observed being examined. As discussed in inspection report 50-445/79-24; 50-446/79-23, the microseismic (sonic) investigative technique is unique to the consultant, Mr. Meunow, who developed it and is the only known person able to interpret the oscillographic data obtained.

The RRI and other NRC inspectors will closely follow the repair activities relative to these walls during future inspections.

6. Electrical Equipment Qualification Testing and Installation

The RRI selected the Unit 1 Class IE safety-related battery chargers for an examination of the licensee's program for assuring that such components have been tested, qualified and installed in accordance with FSAR commitments. The battery chargers, identified as BCIED1-1,

19. e. (continued):

- (3) The specific credentials, background, experience, training, etc., which enables each such person to interpret the oscillographic data obtained.
 - (4) Do Applicants plan to have any or all such persons testify during the operating license hearings?
 - (5) If the answer to (4) above is yes, name each such person who will testify.
 - (6) If the answer to (4) above is yes, will any or all such persons be prepared to answer cross-examination questions regarding this problem?
 - (7) If the answer to (6) above is yes, name each such person who will be prepared to answer such questions.
 - (8) If the answer to (4) above is no, will any or all such persons be available to depose regarding this problem?
 - (9) If the answer to (8) above is yes, name each such person who will be available to depose.
 - (10) If the answer to (8) above is no, why not?
20. Please state in your own words what you believe the meaning of Contention 5 to be.
21. Do you intend to call any witness in the upcoming hearing with regard to Contention 5?
22. If the answer to Question 21 above is yes, supply the following information regarding each such witness:
- a. Name, address, and telephone number of the witness.
 - b. Company affiliation and title.
 - c. A summary of the witness's professional and educational background.
 - d. Any other information bearing on the witness's specific qualifications to testify with respect to Contention 5.

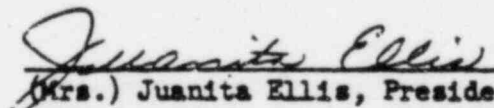
22. (continued):

- e. The nature of the witness's testimony and a brief summary of such testimony.
 - f. List or identify any and all documents which that witness intends to rely on in giving their testimony.
 - g. State whether or not such witness has conducted any research or made any studies on which such witness will rely.
 - h. If the answer to g. above is yes, state briefly the scope and nature of such research or study.
 - i. Provide copies of the witness's testimony.
 - j. Provide for inspection and copying any documents on which the witness relied in such testimony.
23. Have you read the Construction Permits for Comanche Peak, Units 1 and 2?
24. If the answer to 23 above is no, why not?
25. If the answer to 23 above is yes, provide the following information:
- a. What do you believe to be the underlying reasons for the provisions in such Permits?
 - b. Do you believe it is desirable for you to adhere to those provisions?
 - c. Do you believe it is essential for you to adhere to those provisions?
 - d. Do you believe the consequences which could result from your failure to adhere to those provisions would be insignificant? (See CASE's 12/1/80 Supplement to Answers for the definition which we wish you to use in your answer of "failure to adhere.") page 11,
Question 10,
 - e. Do you believe the consequences which could result from your failure to adhere to those provisions would be significant?
 - f. What is your definition of the meaning of "significant" in your response to Question 25.e. above? (i.e., what would you call significant?)
 - g. Do you believe the consequences which could result from your failure to adhere to those provisions would be serious?
 - h. What is your definition of the meaning of "serious" in your response to Question 25.g. above? (i.e., what would you call serious?)

25 (continued):

- i. Do you believe the consequences which could result from your failure to adhere to those provisions would be essential?
- j. What is your definition of the meaning of "essential" in your response to Question 25.i. above? (i.e., what would you call essential?)
- k. What do you believe to be the most serious possible consequences which could result from your failure to adhere to those provisions?
- l. Provide the name of the person(s) who answered Questions 25 a. through k. above. If more than one person answered, specify which sub-part each person answered.
- m. Is it anticipated that the person(s) referenced in (l) above will testify during the operating license hearings?
- n. If the answer to m. above is yes, specify which person(s) will be testifying.
- o. Provide the following information regarding each such person referenced in n. above:
 - (1) Company affiliation, title, credentials, background, experience, training, etc. of each such person.
 - (2) Any other information bearing on the witness's specific qualifications to testify with respect to the Applicants' position on these matters.
 - (3) The nature of the witness's testimony specifically with regard to these questions and answers.

Respectfully submitted,



(Mrs.) Juanita Ellis, President
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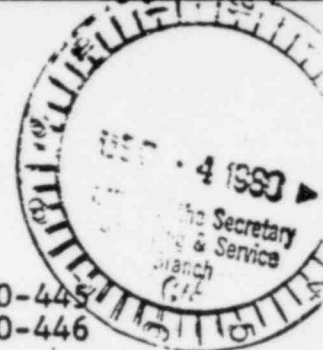
UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

APPLICATION OF TEXAS UTILITIES
GENERATING COMPANY, ET AL. FOR AN
OPERATING LICENSE FOR COMANCHE
PEAK STEAM ELECTRIC STATION
UNITS #1 AND #2 (CPSES)

Docket Nos. 50-445
and 50-446



CERTIFICATE OF SERVICE

By my signature below, I hereby certify that true and correct copies of CASE's Second Set of Interrogatories to Applicants and Requests to Produce have been sent this 1st day of December, 1980, to the names listed below via First Class Mail (in the case of names marked *, with Certificate of Mailing):

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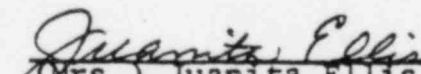
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