

A-170

GPC EXHIBIT II-170  
WEBB EX. B

ALM rewrite

DOCKETED  
USNRC

'95 OCT 20 P3:49

Numerous sensor calibrations (including jacket water temperatures), special pneumatic leak testing, and multiple engine starts and runs were performed under various conditions. In addition, the control systems for both engines were subjected to a comprehensive test program. After completion of the control logic test sequence, an under voltage test was performed. Including the under voltage test each engine has been successfully started eleven times with no start failures.

SECRETARY  
OFFICE OF SERVICE  
DOCKETING BRANCH

NUCLEAR REGULATORY COMMISSION

Docket No. 50-424/425-OLA-3 EXHIBIT NO. GPC II-170

In the matter of Georgia Power Co. et al., Vogtle Units 1 & 2

Staff  Applicant  Intervenor  Other

Identified  Received  Rejected Reporter SD

Date 09-06-95 Witness Webb

August 14, 1995

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of :  
: Docket Nos. 50-424-OLA-3  
GEORGIA POWER COMPANY, et. al. : 50-425-OLA-3  
: :  
(Vogtle Electric Generating Plant, : Re: License Amendment  
Units 1 and 2) : : (Transfer to  
: Southern Nuclear  
: ASLBP No. 93-671-OLA-3

PREFILED REBUTTAL TESTIMONY

OF

THOMAS E. WEBB

ON

DIESEL GENERATOR REPORTING ISSUES

PREFILED REBUTTAL TESTIMONY OF THOMAS E. WEBB

1 Q: PLEASE STATE YOUR FULL NAME.

2 A: My name is Thomas Edmund Webb.

3 Q: WHAT ARE YOUR PROFESSIONAL QUALIFICATIONS?

4 A: A summary of my professional qualifications is attached  
5 hereto as Exhibit A.

6 Q: WHAT POSITION DID YOU HOLD IN 1990?

7 A: In 1990 I held the same position which I hold now, which  
8 is Senior Engineer in the Nuclear Safety and Compliance  
9 (NSAC) group in the Technical Support Department of the  
10 Vogtle Electric Generating Plant.

11 Q: WHAT WERE YOUR RESPONSIBILITIES IN THAT POSITION AND TO  
12 WHOM DID YOU REPORT?

13 A: My responsibilities encompassed regulatory/licensing  
14 assistance to the Plant, including the preparation of  
15 Licensee Event Reports ("LERs") for submittal to the NRC  
16 pursuant to 10 CFR § 50.73. My supervisor at the time  
17 was Mr. Rick Odom who, in turn, reported to John  
18 Aufdenkampe.

19 Q: WHAT WAS YOUR INVOLVEMENT IN THE PREPARATION OF THE APRIL  
20 19, 1990 LER ASSOCIATED WITH THE MARCH 20, 1990 SITE AREA  
21 EMERGENCY EXPERIENCED?

1 A: I prepared various drafts for review and approval by my  
2 supervisor and by the Vogtle Plant Review Board ("PRB").  
3

4 Q: MR. MOSBAUGH STATES THAT YOU RECOUNTED TO HIM "THE  
5 HISTORY OF HOW GPC PERSONNEL KNEW THE LER WAS  
6 QUESTIONABLE BEFORE IT WAS SIGNED OUT." (ALLEN MOSBAUGH  
7 RETYPED PREFILED TESTIMONY AT 37). PLEASE DESCRIBE THE  
8 HISTORY OF EFFORTS IN PREPARING THE LER.

9 A: Shortly after the March 20, 1990 event, Mr. Odom directed  
10 me to prepare a draft LER for the event. I completed the  
11 first draft and submitted it for review to my "acting"  
12 supervisor, Mr. Mehdi Sheibani, and Mr. Aufdenkampe. On  
13 or about April 9, 1990, Mr. Aufdenkampe instructed me to  
14 include a Unit 1 Diesel Generator-related statement about  
15 starts which Georgia Power had previously provided the  
16 NRC in the April 9, 1990 confirmation of action response  
17 letter (McCoy Exh. K; GPC Exh. II-13). On April 10, I  
18 completed another draft of the LER, received additional  
19 comments from him, and on April 11, 1990 completed a  
20 third draft of the LER. This draft was telecopied to Mr.  
21 Norman "Jack" Stringfellow in the Vogtle Project office  
22 in Birmingham and submitted to the PRB.

23 Q: WAS THIS DRAFT LER APPROVED?

24 A: No. The PRB members reviewed this draft during the April  
25 12, 1990 PRB meeting and returned it to me with

1 instructions to rewrite it so that the LER would be no  
2 longer than eight pages; the draft which I had submitted  
3 was substantially longer than that.

4 Q: DID YOU SUBMIT ANOTHER DRAFT LER TO THE PRB?

5 A: Yes. On April 13, 1990, I completed a fourth draft of  
6 the LER and submitted it to Mr. Aufdenkampe. Mr.  
7 Aufdenkampe had additional comments, including a comment  
8 to the effect that the "18 and 19 starts" language in the  
9 draft LER might not be correct. At my suggestion, the  
10 draft was revised to read "Since 3-20-90, DG1A and DG1B  
11 have been started several times and no failures or  
12 problems have occurred during any of these starts." This  
13 was incorporated in the fifth draft which I sent to Mr.  
14 Stringfellow. On April 16 I received comments on this  
15 fifth draft from the corporate office which did not  
16 concern the diesel generator starts statement. On April  
17 17, 1990, I completed the sixth draft of the LER,  
18 received additional comments from Mr. McCoy (via Mr.  
19 Aufdenkampe) and completed the seventh draft of the LER.  
20 This, also, I forwarded to Mr. Stringfellow.

21 On April 18, 1990, the PRB reviewed the seventh  
22 draft of the LER and approved it by unanimous vote  
23 subject to a number of comments. The minutes of this PRB  
24 meeting (No. 90-59) are attached to Mr. Aufdenkampe's  
25 testimony as Exhibit B (GPC Exh. II-28).

1 Q: MR. MOSBAUGH INDICATES THAT ON APRIL 19 THE PRB EXPRESSED  
2 CONCERN ABOUT THE DIESEL STARTS NUMBERS (ALLEN MOSBAUGH  
3 RETYPED PREFILED TESTIMONY AT 53). DID ANY OF THE  
4 COMMENTS FROM THE EARLIER APRIL 18 PRB PERTAIN TO DIESEL  
5 GENERATOR STARTS STATEMENT?

6 A: Yes. One of the various PRB comments on April 18 was  
7 that the word "several" in the seventh draft should be  
8 replaced with the actual number of starts. After the PRB  
9 meeting, I initiated a review of diesel generator start  
10 data and, upon completion that same day, concluded that  
11 21 and 23 starts should be used in lieu of 18 and 19,  
12 respectively. I reached this conclusion by adding  
13 additional starts without problems or failures occurring  
14 after April 9, 1990 to the numbers of starts identified  
15 in the April 9 letter. I identified these additional  
16 starts by reviewing the control room logs for the period  
17 April 10 through the morning of April 18, inclusive, and  
18 by speaking to Mr. Ken Stokes. Mr. Stokes informed me of  
19 one additional start on the 1B diesel generator on April  
20 18th. I incorporated the PRB comments into the eighth  
21 draft of the LER, sent a copy of it to Mr. Stringfellow,  
22 and submitted it to Mr. George Bockhold, the Plant



1 General Manager, who approved it without comment. The  
2 revised statement read:

3 Numerous sensor calibrations (including jacket water  
4 temperatures), special pneumatic leak testing, and  
5 multiple engine starts and runs were performed under  
6 various conditions. Since 3-20-90, DG 1A and DG 1B have  
7 been started more than twenty times each and no failures  
8 or problems have occurred during any of these starts. In  
9 addition, an undervoltage start test without air roll was  
10 conducted on 4-6-90 and DG1A started and loaded properly

11 Q: WAS THIS APRIL 18 DRAFT LER SENT TO THE NRC?

12 A: No. Although it had been approved by the site, further  
13 comments were received from the corporate office.

14 Q: WHAT WERE THE CORPORATE OFFICE COMMENTS RELATED TO DIESEL  
15 GENERATORS?

16 A: On April 19, Mr. Aufdenkampe received several comments.  
17 One comment from the corporate office was to verify the  
18 "more than twenty times each" language in the eighth  
19 draft. I was directed by Mr. Odom to verify the "more  
20 than twenty times each" language. I, and, I believe, Mr.  
21 Herb Beacher (another employee in the NSAC group) then  
22 reviewed the control room logs for the period of March  
23 20, 1990 through April 18, 1990, inclusive. The control  
24 room logs consisted of the Unit Control Log and the Shift  
25 Supervisor Log. I knew the Engineering Support  
26 Departments' Diesel Start Log was not up-to-date because  
27 there was a lag in the log updating. I also did not have  
28 available the individual diesel generator start sheets  
29 (i.e., the "Completion Sheets" from procedure 13145),

1           which are supposed to be filled out by operators for each  
2           start.

3           Q:   DID YOU DEVELOP ANY DOCUMENTATION OF THE STARTS?

4           A:   Yes, I developed a list of all the documented starts.  
5           The list identified some starts which had experienced  
6           problems or failures. My efforts began in the early  
7           afternoon of April 19th (around lunch time) and continued  
8           until after normal quitting time. During the process, I  
9           was periodically contacted by Messrs. Odom and  
10          Aufdenkampe, and they requested my completed list.  
11          Basically, the list included the date and time of a start  
12          and would note any problems annotated in the control room  
13          logs.

14          Q:   WHAT DID YOU DO WITH YOUR LIST?

15          A:   I delivered my list to Mr. Odom who, I believe, then  
16          provided the list to Mr. Aufdenkampe or Mr. Mosbaugh late  
17          in the afternoon of April 19, 1990.

18          Q:   IS THE LIST YOU PREPARED THE SAME AS GPC EXHIBIT 71?

19          A:   Yes, GPC Exhibit II-71 is a photocopy of my original  
20          list. However, some of the information shown on GPC  
21          Exhibit II-71 is not my handwriting and was not on the  
22          list delivered to Mr. Odom, including the information in  
23          red ink and in black ink on the original of the document



1 identified as GPC Exhibit II-71. The line near the top  
2 of the page is crossed out in pencil, probably by me.

3 Q: DID YOU PERSONALLY VERIFY THE FINAL LER STATEMENT  
4 CONCERNING DIESEL GENERATOR STARTS WHICH REFERRED TO THE  
5 "COMPREHENSIVE TEST PROGRAM" OF THE CONTROL SYSTEMS?

6 A: No. While I thought that I was tasked by Mr. Odom to  
7 verify the diesel start statement in the LER which had  
8 been approved by the PRB, no one ever got back to me to  
9 further review the LER wording after I compiled my list.

10 Q: MR. MOSBAUGH HAS TESTIFIED THAT HE FIRST SAW THE TEXT OF  
11 THE FINAL LER 90-006 A DAY OR SO AFTER IT WAS SENT TO THE  
12 NRC. (ALLEN MOSBAUGH RETYPED PREFILED TESTIMONY AT 53).  
13 WHEN DID YOU FIRST OBTAIN AND REVIEW A COPY OF THE FINAL  
14 LER WHICH HAD BEEN SIGNED BY MR. HAIRSTON AND SENT TO THE  
15 NRC?

16 A: On April 20, 1990. As I recall, Mr. Mosbaugh was with me  
17 when I first reviewed the telecopy of the final LER from  
18 the corporate office on April 20th. I was surprised to  
19 see words similar to "subsequent to the test program"  
20 inserted into the LER. I wasn't sure what it meant.  
21 This phrase, I thought, could cause the LER statement to  
22 be incorrect, since I recalled identifying on April 19th  
23 only about 10 or 11 starts following the return to  
24 operability of the diesel engines. I recall Mr. Mosbaugh

1 looking over my shoulder as I read the final LER. I said  
2 something to the effect of "Oh, [expletive]. That's  
3 wrong. What does 'subsequent to the test program' mean?"  
4 In response to my question Mr. Mosbaugh said, in effect,  
5 that he knew the LER statement appeared to be wrong, but  
6 he also said he did not know what the statement  
7 "subsequent to the test program" meant.

8 Q: DID YOU REVISE THE LER?

9 A: After I had informed Mr. Mosbaugh that the LER appeared  
10 to be incorrect, I also informed Mr. Odom, I believe. On  
11 or about April 30, 1990, Mr. Odom informed me that the  
12 LER would be revised to reflect a current diesel  
13 generator statement. At that time, I first received two  
14 hand-written sets of diesel generator starts data from  
15 Mr. Mosbaugh. One set was entitled "DG1A Start History  
16 for March and April," Intervenor Exhibit II-150, which  
17 had been prepared by Mr. Stokes. The second set of data  
18 was entitled "DG1B" (GPC Exhibit II-70) and had been  
19 prepared by Mr. Mosbaugh. I prepared a draft revision.

20 Q: DID YOU DEVELOP AND SUBMIT TO THE PRB A REVISION TO LER  
21 90-006?

22 A: Yes. Based upon comments and review by my supervisor and  
23 manager of two drafts, a third revision was prepared and  
24 this one was submitted to the PRB on May 8, 1990. It

1           stated:

2           After the 3-20-90 event, the control systems of  
3           both engines were subjected to a comprehensive test  
4           program which culminated in control logic tests on  
5           3-30-90 for DG1A and 3-27-90 for DG1B. Subsequent  
6           to this test program, DG1A and DG1B have been  
7           started 11 times each (through 4-19-90) and no  
8           failures or problems have occurred during any of  
9           these starts. These included an undervoltage start  
10          test without air roll which was conducted on 4-6-90  
11          and DG1A started and loaded properly.

12          Q:    WHEN DID THE PRB APPROVE THIS DRAFT REVISION TO THE LER?

13          A:    On May 8, 1990, the PRB approved, with comment, the draft  
14          revision. Mr. George Frederick asked for clarification  
15          concerning the meaning of the "comprehensive test  
16          program". Mr. Allen Mosbaugh provided a rewrite of the  
17          revision to address Mr. Frederick's comment. A copy of  
18          his wording, with "ALM rewrite" annotated at the top, is  
19          attached hereto as Exhibit B. This fourth draft revision  
20          was given to George Bockhold. Mr. Bockhold returned this  
21          draft with a comment. The comment stated: "Include both  
22          the successful starts as of 4/19 and 5/14." This was  
23          written on a "Post-It" sticker and sent to me through Tom  
24          Greene on or about May 14, 1990. The fifth draft  
25          revision only partly incorporated his comment and stated,  
26          in part, that "DG1A had been successfully started 15  
27          times and DG1B had been successfully started 14 times as  
28          of 5-14-90, with no start failures." I sent this draft  
29          revision to Jack Stringfellow in the corporate office.

1 Q: MR. MOSBAUGH HAS TESTIFIED THAT YOU TOLD HIM THAT THE LER  
2 REVISION WAS "PUT ON A SHELF" IN THE CORPORATE OFFICE.  
3 (ALLEN MOSBAUGH RETYPED PREFILED TESTIMONY AT 38). WAS  
4 THERE A DELAY IN THIS LER REVISION'S APPROVAL BY THE  
5 CORPORATE OFFICE?

6 A: Yes. It was unusual for any NRC-related report to go up  
7 to corporate and not be looked at for several weeks. As  
8 part of keeping track of work in progress, I called the  
9 corporate office to learn the status of the revision. I  
10 was told that the revision had been "put on a shelf" but  
11 that it was at that time back in the review process. The  
12 fifth draft revision, with a cover letter, was sent from  
13 the corporate office to the site for Mr. Bockhold's  
14 approval on June 11th. Mr. Bockhold approved this  
15 revision with a comment to update the diesel generator  
16 start numbers through June 11th. This was done, and the  
17 red-lined revision was sent back to the corporate office.

18 Q: HAD THE CORPORATE OFFICE SUGGESTED SUBSTANTIVE REVISIONS  
19 DURING THIS DELAY?

20 A: No. The fifth draft revision was simply put into  
21 corporate form and the cover letter developed.

22 Q: WHAT DID THE DRAFT COVER LETTER OF JUNE 11, 1990 SAY?

23 A: It simply stated that the revision was necessary to  
24 correct the information related to the number of



1 successful Diesel Generator starts subsequent to the  
2 comprehensive test program as discussed in the original  
3 report and Georgia Power's April 9, 1990 letter (ELV-  
4 01516).

5 Q: WHAT DID THE DRAFT LER REVISION STATE AFTER UPDATING  
6 THROUGH JUNE 11, 1990?

7 A: The pertinent language stated:

8 From 3-20-90 to 6-11-90, there were 14 valid tests  
9 of DG1A with no valid failures. During this same  
10 period, there were 11 valid tests of DG1B with one  
11 valid failure, which occurred following  
12 installation of new jacket water temperature  
13 switches. A report of this failure will be  
14 submitted as Technical Specifications Special  
15 Report #1-90-04.

16 This was the language approved by Mr. Bockhold on June  
17 11, 1990.

18 Q: WHY WAS THERE A CHANGE TO "VALID TESTS" AND "VALID  
19 FAILURES" FROM THE ORIGINAL, APRIL 19 LER WHICH DISCUSSED  
20 STARTS WITHOUT PROBLEMS OR FAILURES?

21 A: As I viewed it, the number of starts without problems or  
22 failures as of May 14 or June 11 was meaningless. So the  
23 revised draft LER revision of June 11, 1990 adopted our  
24 standard practice for reporting diesel generator  
25 failures, which was to count "valid" tests and failures,  
26 pursuant to Reg. Guide 1.108. (At that time we did not  
27 report some problem starts that we now call nonvalid



1 failures.) The June 11 revision (i.e. fifth draft  
2 revision) reflected current, updated information although  
3 it changed the criteria for counting starts. I thought  
4 this change in criteria was appropriate.

5 Q: WAS A SIXTH DRAFT REVISION PREPARED AND APPROVED?

6 A: Yes. Between June 12th and June 21st a sixth draft  
7 revision was prepared and approved by the PRB. This  
8 sixth draft contained no "start count" numbers, but  
9 incorporated information obtained from Wyle Laboratories,  
10 which had performed testing on the Calcon temperature  
11 sensors.

12 Q: WAS THERE A SEVENTH DRAFT REVISION?

13 A: Yes, the corporate office, specifically Harry Majors,  
14 sent a seventh draft revision, and a draft cover letter  
15 to the site. The PRB reviewed this draft LER revision  
16 and added comments. The "start count" language in this  
17 seventh draft, which had been PRB-approved with comments,  
18 stated:

19 As of 6-7-90, DG1B had received 11 valid tests  
20 with one failure, and DG1A had received 16  
21 valid tests with no failures.

22 There were a number of cover letter drafts sent to the  
23 site from the corporate office on June 28 and June 29,  
24 1990. The site does not generally review cover letters,  
25 which are developed by the corporate office. I provided

1           these cover letter drafts to Mr. Aufdenkampe.

2           Q:   WHAT WAS YOUR INVOLVEMENT IN REVIEWING THE LER REVISION  
3           COVER LETTER, DATED JUNE 29, 1990?

4           A:   Based upon my review of a transcript of a conversation  
5           recorded by Mr. Mosbaugh, I participated in discussions  
6           concerning the cover letter. Mr. Mosbaugh refers to some  
7           of my participation in his retyped prefiled testimony (at  
8           57). We were using the LER revision as a vehicle to  
9           clarify the April 9 letter as well as to correct the  
10          original LER. My understanding was that correcting the  
11          original LER was required by NUREG 1022.

12          Q:   MR. MOSBAUGH MAINTAINS THAT THE LER COVER LETTER WAS  
13          WILLFULLY FALSE (ALLEN MOSBAUGH RETYPED PREFILED  
14          TESTIMONY AT 55). DID YOU THINK THAT THE JUNE 29, 1990  
15          LER COVER LETTER CLARIFIED THE INFORMATION RELATING TO  
16          THE NUMBER OF SUCCESSFUL DIESEL STARTS IN THE APRIL 9  
17          LETTER?

18          A:   Yes. The April 9th letter is specifically referenced in  
19          the cover letter, and Page 6 of the LER revision, third  
20          paragraph, updates diesel generator start information to  
21          the current time. Although the April 9th letter did not  
22          use Regulatory Guide terminology such as "valid test", it  
23          was our practice to report valid failures; we are  
24          expected to maintain our surveillance frequency based

1           upon the number of valid tests and number of valid  
2           failures. Tests and failures that were not "valid" have  
3           no bearing on that surveillance frequency. So, to me,  
4           the LER revision used defined phrases from a regulatory  
5           compliance perspective, and provided more useful  
6           information. In addition, the cover letter and the April  
7           9th letter begin their "counts" after March 20, 1990.

8           lamberjm\licamend.pro\reb-test.dg\webb.r2