

1           A specific project manual was required for each  
2 project or site that described project's unique  
3 requirements in the engineering area.

4           In developing these procedures we looked, as I  
5 said, at architect engineers' systems and in looking at  
6 those we developed what we thought we wanted in an  
7 engineering control package.

8           (Slide.)

9           We took our old procedural system and looked at  
10 the hard requirements to see if we had looked at those in  
11 the new procedures and we did a matrix against the  
12 requirements of appendix B.

13           We feel pretty confident and proud of the system  
14 that we developed.

15           Shortly after June to address these -- I guess  
16 I'd like to address the two time period separately, the  
17 design control -- we asked Gilbert Commonwealth to perform  
18 an evaluation of the design control that's in place  
19 currently. They completed a review of the system and they  
20 concluded that the system for design control is adequate  
21 with three exceptions and they suggest three enhancements.

22           (Slide.)

23           The first exception stated up there deals with  
24 plant configuration. I think TVA had recognized a need,  
25 and Gilbert Commonwealth confirmed that we needed to

1 improve the feedback of as-conducted data to the official  
2 configuration drawings of the plan. We have initiated a  
3 program incorporating what we call a design change  
4 supplement to improve this process. Basically what this is,  
5 it allows us to have one official as-constructed record and  
6 the design supplement will control unimplemented designs  
7 from the period they are designed until they are  
8 implemented and as constructed.

9 Commonwealth, in the next area, identified a  
10 need to more formally identify the design basis at the  
11 beginning of the change. As a result we have added  
12 additional requirement documentation in addition to the  
13 design basis to our procedural system in the form of a  
14 detailed checklist. That's completed in the early parts of  
15 a task.

16 MR. THOMPSON: In identifying these exceptions,  
17 what was the significance of when they did that? That is,  
18 if you look back on what they did, with the exception of  
19 this -- what was the significance of this exception? Did  
20 it result in design controls that you don't have confidence  
21 in? Or how would you characterize that?

22 MR. CANTRELL: I'm going to try to characterize  
23 them after I cover this last one.

24 The USQDs were not formally required to be  
25 updated after the time of implementation, we agreed with

1 all the exceptions and we have changed our procedures and  
2 required the USQDs to be formally kept current with the  
3 status.

4 To comment on each of these exceptions in order:  
5 In the first area of plant configuration -- well, in the  
6 area of plant configuration we feel that we have a system  
7 of management controls that controls the process from the  
8 period of design through the implementation phase and  
9 closing back out, where we found that the period was  
10 getting -- was too long, in that load and the control was  
11 not what we felt like it should be nor what they felt it  
12 should be. I think there are some exposures in that that  
13 we need to go in and look and evaluate the work that has  
14 been done up to that. I'll cover that in just a minute.

15 The acceptance criteria we feel like that we had  
16 design basis and we addressed those. This comment was that  
17 they felt like, that we should document those more  
18 rigorously so we could close them at the start of the day.

19 The USQD, in that area, the engineers who made  
20 the changes were knowledgeable and basically used the data  
21 and assumptions and statements of USQD as they developed  
22 the designs and they were cognizant to conform to the terms  
23 of the USQD. Our shortcoming is we did not keep USQD as a  
24 living document as that went through. Similarly, field  
25 tests were approved by the original designer of the system,

1 so it is -- the design was implemented in the field and  
2 redesigns or modifications were needed to respond to field  
3 change requests. The original designer who also was a  
4 party to the USQD process, was charged with not violating  
5 the provisions of the USQD.

6 The design drawings and specifications for an  
7 engineering change notice in our system are translated into  
8 detailed work plans by the constructor or implementor.  
9 These plans, in their sequence, are reviewed by the plant  
10 operations review committee.

11 There was also a process of Sequoyah that  
12 reviewed unimplemented work plans prior to restart. So we  
13 feel that the areas are sound, the criticisms are valid,  
14 and that we need to bring the program to -- to address  
15 those in our program. But we also conclude that we have to  
16 do some additional checking.

17 As part of our operational readiness review we  
18 will be reviewing and are reviewing the current  
19 configuration of the plant for suitability for operation,  
20 including the confirmation that an unreviewed safety  
21 question does not exist.

22 So, I didn't know whether that talked around  
23 what you were asking or not.

24 MR. THOMPSON: Yes. I think it did.

25 MR. CANTRELL: Let me try to address it a little

1 more succinctly then. We think we had controls. We think  
2 the controls were effective. We think that they have  
3 raised an issue that causes us to question the sharpness of  
4 that plan and, therefore, we feel an obligation to take the  
5 configuration at this point in time in light of these  
6 exceptions and to do, along with the operational readiness  
7 review, a reverification that we are not in an unreviewed  
8 safety question condition.

9 MR. THOMPSON: And all safety systems or all  
10 systems that were subject to design modification during  
11 this period? Is that what you are going to do? I'm trying  
12 to understand.

13 MR. CANTRELL: What we've got is a group of  
14 unimplemented designs and/or as-constructed data. We'll  
15 look at the as-constructed data and those portions of the  
16 designs that are unimplemented and see what bearing they  
17 have on the USQD determinations that have been made.

18 MR. DENTON: How big an effort would this  
19 result in?

20 MR. CANTRELL: It's going to be a pretty big  
21 effort. There's a lot of ECNs out there. There's not as  
22 many safety related ECNs as you might think. Most of the  
23 critical safety systems have had a minimum review to them,  
24 from the time of plant operation and original OL to plan.  
25 But it's a process that we are trying to get our arms

1 around and we could schedule that.

2 MR. DENTON: So this is something you see  
3 that's necessary prior to restart?

4 MR. CANTRELL: It's something that we feel we  
5 need to do in order to specify the plant was ready for  
6 restart.

7 MR. THOMPSON: Well, we were working with the  
8 region on this as part of their review and we were asking  
9 to try to get a better focus on the other hand it so we  
10 know what you are going to do so we know whether to monitor  
11 and inspect and monitor this.

12 What I would like to see is some better  
13 definition of what you plan to do and what your schedule is  
14 on this. Roger, I guess --

15 MR. WALKER: I'm in concurrence with him. What  
16 we need to know is what is the sample you are looking at  
17 and how do we relate that to whether the comprehensiveness  
18 of the plant and the DCNs that are out there. And then we  
19 need to know when you are going to be at a point that we  
20 can take a look at it in a physical sense.

21 MR. CANTRELL: I would like to get into the  
22 enhancements. They consider the enhancements, we have  
23 brought in, an attempt to upgrade the equipment on our  
24 system. We have modifications that are on the way to do  
25 that.

1 MR. DENTON: The first is to have the site talk  
2 to the engineering office. We have all heard that  
3 recommended.

4 MR. CANTRELL: Yes. It worked.

5 MR. THOMPSON: Is that in your area of  
6 responsibility to enhance those communications? I think  
7 really that's something we may kind of consider fundamental,  
8 quite frankly. And it's an area that needs to get down to  
9 the interrelationships of both offices; separated by  
10 distances and so reluctance to communicate is just -- not  
11 tolerable.

12 MR. CANTRELL: We have been communicating in  
13 that area. We have been working in that area. We have a  
14 system that ties the technical sites back to the home  
15 office so that they will communicate. They are being  
16 brought together to communicate and they have an obligation  
17 on technical issues to do generic reviews and so forth.

18 I think what I see is a need to make that work  
19 smoother and faster. I think we get the communication done  
20 with things like: We changed our corrective action reports  
21 to make it more timely, as far as doing generic reviews and  
22 things like that. I think really what this amounts to is  
23 recognizing that an issue at a site may not be generically  
24 applicable to anything else but the experience learned at  
25 that site needs to be relayed back so we can get a cross

1       pollenation. I think if it's a clear safety issue we have  
2       it pretty well covered but we need to keep at it and keep  
3       the lines open.

4               MR. DENTON: It seems engineering did not take  
5       a broad enough review of the engineering charter.  
6       Engineering was the thing out there and if it didn't work  
7       right, it was the field's problem.

8               MR. CANTRELL: I think the criticism is fair. I  
9       have seen it in both our organizations and other areas  
10      where you have interfaces, organizational interfaces, there  
11      is a tendency without an upper management guidance to make  
12      sure that communication is not only received but understood  
13      and implemented.

14              MR. DENTON: But with your resources if you  
15      ever start operating again I would hope you would do root  
16      cause analyses and keep them from returning. That seems to  
17      be the secret in running a safe and reliable plant is a  
18      detailed engineering look at what failures you have had.

19              MR. CANTRELL: I agree. Yes?

20              MR. WALKER: The sample that you are doing, will  
21      it confirm the adequacy of the design and the adequacy of  
22      the implementation of the design to the ECF process?

23              MR. CANTRELL: You are one slide ahead of me.

24              MR. WALKER: Okay.

25              MR. CANTRELL: But I don't have a slide.

1 (Laughter.)

2 I covered the period in the report that we had  
3 covering the system that's in place now. From '75 to '85  
4 there was another system in place, the 200 procedural  
5 system. We have asked Gilbert Commonwealth to perform a  
6 review of the work performed under that control process.

7 The scope of that will be to consist of  
8 modifications performed since OL, and Gilbert Commonwealth,  
9 the review of compilation of all modifications since the OL,  
10 sorted by system.

11 Gilbert Commonwealth will select at least two  
12 systems, but whatever they feel is representative, and will  
13 evaluate the Sections' systems for the effect on system  
14 operation, conformance with the original design basis and  
15 interface with other plant systems and structures. They  
16 will also evaluate the system in light of the exceptions  
17 that they found in the present system.

18 Another thing that's going to make it difficult  
19 is we are going to operate from June on with the most  
20 recent system, so the figures come out now are the ones  
21 we'll have to use to fine-tune and find out what programs  
22 exactly we need in full. But we will address that data and  
23 do whatever sampling or reconfirmation it takes to retain  
24 confidence to at least lay out the plan we are starting out  
25 with.

1 MR. DENTON: Can you help me with how serious  
2 an issue this is? Is this liable to be a critical path  
3 item? Bigger than EQ issues? I don't have a feel for what  
4 underlies this.

5 MR. CANTRELL: I guess, Harold, my opinion is  
6 that we have had a design control process, that it has been  
7 effective; that we have identified over the years some  
8 holes, organizational holes as well as procedural holes in  
9 it and I think that in the atmosphere we are in now and our  
10 ability to do things to get our act together and perform  
11 well, we want to be sure that the plant we start back up is  
12 well defined and well understood by us.

13 MR. DENTON: Can I interpret from that you will  
14 reestablish design configuration, configuration control  
15 will be reestablished here for the systems you felt you had  
16 doubts about?

17 MR. CANTRELL: We feel we have configuration  
18 control. Configuration control is too broad a word for me  
19 to allow you to just state that way. We feel we have  
20 configuration control. We feel that we need to do a  
21 reconfirmation and a base line of our own self because we  
22 are beginning to put it under more stringent control as we  
23 move off.

24 MR. DENTON: I guess to follow what Roger and  
25 everybody said, seemingly you need to do this sorting by

1 system so we get a feel for what kind of systems you are  
2 talking about out there and how important they are to  
3 safety and what kind of things are necessary.

4 MR. TAYLOR: Let me ask you a hypothetical. If  
5 we came in and looked at a safety system that you modified,  
6 changed the safety valves or solenoids, et cetera, if we  
7 found you had the original design documents sufficiently  
8 documented that in instituting the change you would have  
9 gone back to the original design, done the calculations,  
10 recording those and approving the change? You know, this  
11 is the process, the original design, timing, you want to  
12 bypass -- would you go back and find that you had consulted  
13 the original pipe sizer at that point? Or have you?

14 MR. CANTRELL: I'm not sure you would have found  
15 documentation if it would have been an area that didn't  
16 require recalculation if that was a calculation that was  
17 checked. What you would find was the basis, but what was  
18 done --

19 MR. TAYLOR: Why you didn't have to go back to  
20 the calculation?

21 MR. CANTRELL: What you'd find is more positive  
22 statement rather than a deductive statement. This is what  
23 we did on this job, major issues that we raised.

24 MR. TAYLOR: Okay. Seen other people get in  
25 trouble here. I realize I'm asking a hypothetical question.

1 MR. CANTRELL: Our process basically took a  
2 change, put a scope on it and it said what we would do and  
3 what documents would be addressed by that change. It was  
4 gone through an interdisciplinary review to see that  
5 everybody had their impetus in there, as those documents  
6 were prepared and released the system, the paperwork system  
7 was closed out of design phase to say that we had completed  
8 that change.

9 MR. THOMPSON: As I understand, there is a time  
10 request that you need to leave about 10 minutes from now so  
11 I guess I would like to say we probably have 10 minutes. I  
12 guess one item I would like to do this evening, since it's  
13 a major concern that hasn't been identified or addressed  
14 right now, and also I would like to have the project  
15 manager go over the five or six items that you think you've  
16 kind of made a commitment to today in the meeting as well  
17 as some of the things that we were going to follow up on.

18 MR. DENTON: We should all recognize, and we  
19 document our views on this, some will come out there and  
20 then EQ will come out when you are ready for EQ, feeling  
21 that we have necessarily done the review. All we have done  
22 is getting information needed to do the review. So that's  
23 why we have such a good Staff in the agency, that do the  
24 work. This helps us understand how to allocate the  
25 resources for these areas but it doesn't say we have

1 reviewed them.

2 MR. THOMPSON: Have you made statements to the  
3 effect that NRC has approved any of the submittals to anyone?  
4 Any people or anything like that?

5 MR. PARRIS: No.

6 MR. THOMPSON: The rumors have been that that  
7 had been made.

8 Carl, do you want to -- if he misses any,  
9 please -- we've the transcriber to make sure.

10 MR. STAHL: Let me lead the discussion. The  
11 first Mr. Denton brought up, the consideration of the DPOs,  
12 the matter of difference of professional opinions and a  
13 consideration of putting that within the TVA system,  
14 particularly a mechanism for tacking and its resolution.

15 The second item here which Mr. Taylor brought up  
16 was a consideration of the testing requirements which was  
17 discussed, and how you need noise for approximately MOVs,  
18 which were required here. I think this was related to  
19 startup and the degree of testing, as a -- there's a bullet.

20 MR. ABERCROMBIE: 85.033.

21 MR. STAHL: The third consideration is the  
22 matter brought up here on -- to get the QTC comments on the  
23 employee concerns program. I believe you are considering  
24 this.

25 MR. MASON: Yes.

1 MR. STAHL: The fourth is the submittal of data  
2 on the QA program.

3 MR. THOMPSON: That's what Chuck Mason was  
4 talking about.

5 MR. MASON: We'll give you a submittal saying we  
6 are going to retract our timetable on that thing.

7 MR. THOMPSON: Clearly where we understand the  
8 reporting authority is with respect to the QA program.

9 MR. STAHL: The next item is the assurance that  
10 the wrongdoing investigations reports be made available to  
11 the NRC.

12 The last item as far as commitments or  
13 considerations here was the discussion we just had, I've  
14 translated to some extent here, an understanding or a  
15 better understanding of what's going on in design control  
16 process and a more -- better understanding, at least from  
17 my point of view, of the impact this may have on the  
18 Sequoyah schedule. I have heard nothing addressed at this  
19 point on schedules. I think this is a matter that we want  
20 to hear more about.

21 The other of course I'll look at what NRC will  
22 likely be doing is, one, with respect to the EQ testing,  
23 the rockbestos cables, probably do some monitoring as to  
24 the vendor that's doing the testing and the adequacy of  
25 that program.

1           The the second item here, NRC, schedule a  
2 meeting, I guess, to review your safety criteria that's  
3 going to be used in your employee concerns program. I  
4 guess an understanding -- and maybe an acceptance of the  
5 kind of criteria that was being utilized.

6           That's it for the items that I was able to pick  
7 up. There are other commitments, understandings -- if  
8 there are I'd be glad to know.

9           MR. ABERCROMBIE: The rockbestos, that's a  
10 materials testing and not a full blown cables test program.

11           MR. STAHL: Principally on the radiation -- yes,  
12 I understand it now.

13           MR. THOMPSON: We'll probably document it, in a  
14 letter, our concerns a little better articulated on the  
15 design control program. I think that will help focus your  
16 attention and our concerns.

17           MR. STAHL: Are there any other comments that I  
18 may have missed in terms of commitments? Things that you  
19 are considering

20           MR. DENTON: That seems to capture the major  
21 ones. Hugh, do you want to suggest any major ones for you  
22 or us?

23           MR. PARRIS: No. Chuck?

24           MR. MASON: No.

25           MR. COTTLE: The position description of senior

1 nuclear advisor --

2 MR. STAHL: Yes.

3 MR. THOMPSON: I thought we asked for that  
4 before. I'm sure we had. When we were in Chattanooga  
5 we asked that be defined in the minutes, the IDs minutes of  
6 that meeting but again, we'll ask for it again.

7 MR. MASON: You are asking for more now. We put  
8 a definition. Harold is asking for a job description.

9 MR. PARRIS: I interpret that as being something  
10 different but, you, apparently, didn't. So let's be sure  
11 we understand it.

12 MR. TAYLOR: We want to clearly now what  
13 responsibilities, duties, et cetera --

14 MR. DENT: What his duties are, whether  
15 part-time, full time --

16 MR. THOMPSON: Have you all decided that yet?  
17 At one time I didn't know whether he was going to be full  
18 time or part-time, located in Knoxville or Chattanooga

19 MR. DENTON: If there are no more issues, if anyone  
20 wants to have a last say, especially anyone who is not a  
21 party, any person of the public that would like to comment?

22 Henry, I'll give you a chance if you would like  
23 to say anything.

24 MR. MYERS: The submittal with the employer  
25 response program, it discussed, I think, some of the

1 concerns raised about Sequoyah and how they had been  
2 resolved one section, I believe, in that report. Has QTC,  
3 or whoever brought those to your attention, been asked as  
4 to whether they agree with the write-up in that document?  
5 I think it talks about anchor bolts and a couple of other  
6 things in that document. I can point it out to you. It  
7 talks about welding, instrument slope -- has QTC been asked  
8 to comment on that? In that write-up?

9 MR. ABERCROMBIE: That's basically a description  
10 of ongoing evaluation and investigation.

11 MR. COTTLE: Not to my knowledge unless it was  
12 done through the --

13 MR. MYERS: Reading that I thought it was meant  
14 that these were not issues anymore.

15 MR. PARRIS: That's certainly not the intent.  
16 Quite the contrary.

17 MR. MASON: There are three categories that came  
18 up at Watts Bar that we are looking at at Sequoyah.  
19 Welding programs.

20 MR. DENTON: My understanding is the information  
21 you are sending me in response to my letter to you is that  
22 if QTC writes a letter disagreeing with the NSRS resolution  
23 of an item, you send me that, too.

24 MR. YOUNGBLOOD: Or anybody in management. Or  
25 anywhere.

1 MR. DENTON: So you are setting up a complete  
2 record of the resolution of the concerns, written  
3 documentation. So that's available for us to sample and  
4 audit.

5 MR. MYERS: For example, there was Mr. Key's  
6 comment on the NSRS review of QTC. I gathered that that  
7 was not sent to the NRC. Mr. Key wrote a letter to  
8 Mr. Willis, in like November 7th, saying he disagreed with  
9 the NSRS review of the -- Mr. Claude Key, used to work at  
10 NSRS.

11 MR. COTTLE: He wrote a memorandum to Bill  
12 Willis disagreeing with NSRS response to the QTC report  
13 which he had never seen and freely admitted that.

14 MR. MYERS: He said there were incorrect  
15 statements in it. I don't know how he could have decided  
16 that there were incorrect statements, maybe he hadn't seen  
17 it -- did he want to withdraw the letter?

18 MR. COTTLE: He had not seen the report.

19 MR. MYERS: What was the basis of his writing  
20 the letter?

21 MR. COTTLE: He had seen the NSRS report and was  
22 referring -- rightly or wrongly --

23 MR. DENTON: The question is has it been sent to  
24 NRC?

25 MR. MYERS: Since it's quite public, NRC was

1 asking me for this two days ago; it was one of B.D. Liaw's  
2 deputies. B.D. Liaw allegedly is in charge of welding,  
3 B.D. Liaw is allegedly in charge of looking at the carbo  
4 sink problem. Since everybody made sure that he got the  
5 report that said that QTC was wrong in its assessment of  
6 carbo sink that someone would be sure that B.D. Liaw got  
7 Mr. Key's letter that disagreed; no

8 MR. DENTON: I think our intent, Hugh, was  
9 anything relating to the resolution of those allegations  
10 within TTVA comes to our attention because unless it comes  
11 in the front door there's no assurance it gets to the right  
12 parties.

13 MR. PARRIS: And you are the front door plus  
14 that normal distribution list.

15 MR. THOMPSON: There's three front doors, region  
16 10 -- 2, Jim Taylor, and --

17 MR. COTTLE: It was my fault I guess because I  
18 sent it to the region, inappropriately. I should have  
19 given him one.

20 MR. WALKER: What surprised me is I heard about  
21 it from headquarters.

22 MR. MYERS: You had to ask for the letter?  
23 That's an important point here. I believe that letter was  
24 the subject of a major article in the Knoxville Journal.  
25 So it was something that people -- seemed to be of interest

1 and I would have thought that it would have been sent  
2 directly to you and Roger you would not have had to ask for  
3 it.

4 MR. DENTON: I take it there's no disagreement,  
5 your standing orders to your Staff are send us all things  
6 written by anybody in TVA or your contractors that pertain  
7 to these allegations.

8 MR. PARRIS: No disagreement. Whatever crops up,  
9 comes up, boils up; whatever.

10 MR. DENTON: That's the only way to make sure  
11 it's recognized and considered. Any other items, then?

12 If not I think this has been a productive  
13 meeting and we'll be meeting again on specific topics.

14 (Whereupon, at 5:30 p.m., the meeting was  
15 concluded.)

16

17

18

19

20

21

22

23

24

25

CERTIFICATE OF OFFICIAL REPORTER

This is to certify that the attached proceedings before the UNITED STATES NUCLEAR REGULATORY COMMISSION in the matter of:

NAME OF PROCEEDING: MEETING BETWEEN NUCLEAR REGULATORY COMMISSION AND TENNESSEE VALLEY AUTHORITY

TVA50.54F PRESENTATION

DOCKET NO.:

PLACE: BETHESDA, MARYLAND

DATE: THURSDAY, DECEMBER 12, 1985

were held as herein appears, and that this is the original transcript thereof for the file of the United States Nuclear Regulatory Commission.

(sig) 

(TYPED)

JOEL BREITNER

Official Reporter

ACE-FEDERAL REPORTERS, INC.  
Reporter's Affiliation

Nuclear Regulatory Commission  
Tennessee Valley Authority

Meeting - December 12, 1985

P118 Phillips Building  
1-3:30 p.m. EST  
Bethesda, Maryland

AGENDA

1:00 - 1:10	Introduction	H. G. Farris Manager of Power and Engineering (Nuclear)
1:10 - 1:30	TVA Nuclear Performance Plan - Volume 1	C. C. Mason Deputy Manager, P&E Nuclear
1:30 - 1:50	TVA Employee Concern Program	R. P. Denise Assistant to the Deputy Manager, P&E Nuclear
1:50 - 2:00	Sequoyah Employee Concern Program	H. L. Abercrombie Sequoyah Site Director
2:00 - 2:45	Sequoyah Nuclear Performance Plan Volume 2	Mr. Abercrombie
	Environmental Qualification of Equipment Program, SNF	Mr. Abercrombie
	Operational Readiness, SNF	Mr. Abercrombie
	Design Control Survey at Sequoyah	R. W. Cantrell Manager of Engineering
2:45 - 3:30	General Discussion	TVA/NRC
3:30	Adjournment	

H. G. PARRIS PRESENTATION  
NRC STAFF BRIEFING  
BETHESDA, MARYLAND  
DECEMBER 12, 1985

I'm Hugh Parris, Manager of Power and Engineering (Nuclear) for TVA. I am glad to have this opportunity to get back together again to discuss the progress being made at TVA.

My last opportunity to speak before this group was on September 6 when I discussed with you the status of our nuclear program, its problems, and the road we intended to take toward resolution of those issues.

Since that time we have prepared and shared with you a document entitled NUCLEAR PERFORMANCE PLAN. Volume 1 contained our Corporate Plan while Volume 2 addressed Sequoyah Nuclear Plant matters. These two volumes were submitted on November 1. Then, on November 20, we delivered to you a

document describing our new long-term Employee Concerns Program. All three of these documents detail the many individual actions that we are taking to permit TVA to achieve its goals.

We are here today to discuss with you the progress being made.

The agenda for today includes a short statement of our fundamental changes, a review of detailed progress on a number of items for Volume 1 of the Performance Plan, and a review of the Employee Concerns Program.

During the second hour, we would like to focus on Volume 2 of the plan and provide you with additional details as to the current status of the Operational Readiness Review, Environmental Qualification, Design Control and other projects at Sequoyah.

Substantial progress has been and is being made at TVA, both from a technical as well as a management point of view. We have made some fundamental changes in how we conduct our business. These changes are beginning to result in improvements and accomplishments in several areas.

1. One of the key and fundamental changes has been the increased level of involvement of the TVA Board in the nuclear power program. The Board is currently involved on a daily basis with the corporate level activities of the nuclear program.

While the TVA Board has always been involved with the nuclear program, this involvement has become more intense and at greater depth than ever before. This personal, daily involvement on the part of individual Board members is a very positive force in reshaping our program.

Additional details as to Board involvement will be supplied later in the presentation.

2. A second fundamental change has been the creation of the position of Senior Nuclear Advisor. This Advisor will maintain an overview of TVA's nuclear program activities and performance in order to provide independent assessments and advise the TVA Board on nuclear program matters.

Initially, the Advisor will review our entire nuclear program and provide the results of that review and recommendations to the TVA Board.

As I am sure you are aware from the trade press, we are actively seeking candidates for this position. You have undoubtedly seen specific names mentioned but we are still involved with the selection process and intend to have the

selection made by the end of this month.

3. Another senior-level position being created which will report directly to the TVA Board is that of Inspector General. The Inspector General will be independent from all existing TVA offices.

The Inspector General will also concentrate on TVA's efforts to prevent and detect waste, fraud and abuse, and will have provisions for receiving and dealing with employee concerns.

4. Another fundamental change we have made is the restructuring of the Employee Concerns Program to improve its long-term effectiveness within TVA's nuclear organization.

Our restructured program is designed to reduce employee

concern through positive and effective management involvement directly with people on the front-end.

It will also provide for efficient and timely resolution of concerns once they are voiced.

The Employee Concerns Program will be discussed in greater detail later in the presentation.

5. Another fundamental change we've made is one I described in general at the September 6 meeting here with you. This change brings under a single manager with a single focus the construction, engineering, operation and support organizations.

This organizational concept has been a topic of discussion for some time. Regional management, and probably some of you here in Bethesda, have been strong advocates of this

concept for TVA.

The establishment of this organizational structure and focus was TVA's way of attacking the root cause of one of our major problem areas -- eliminating the large and cumbersome ways of doing business.

I am reporting to you today it is essentially in place and functioning well.

6. Another basic change that has been made is the development of a Senior Management Team for P&E Nuclear. This team is responsible for the day-to-day corporate level policy decisions necessary to provide direction and leadership in the overall effort.

The Team includes the key managers from the operational, technical and support groups and provides the

communications and interfaces required to keep our long-range goals in focus while we work together on our short-term objectives.

The increased level of Board involvement, the addition of a Senior Nuclear Advisor and an Inspector General, the establishment of a nuclear corporate organization and the establishment of a Senior Management Team are providing us with an up-front, long-range management organization whose focus is on long-term performance and reliability.

These fundamental changes are designed to achieve the performance improvements needed at the corporate level. Now that they are being implemented, we are proceeding with the implementation of the many individual action plans.

Now, to discuss some of the details of the changes I've just mentioned along with other accomplishments to date, I would

like to call on Chuck Mason, our Deputy Manager of P&E Nuclear.

For those of you not familiar with Chuck's background, he joined TVA from the Nuclear Navy program 18 years ago. He rose quickly through the ranks to head first our Watts Bar Nuclear Program as plant manager and later Sequoyah Nuclear Plant as plant manager and later its first site director.

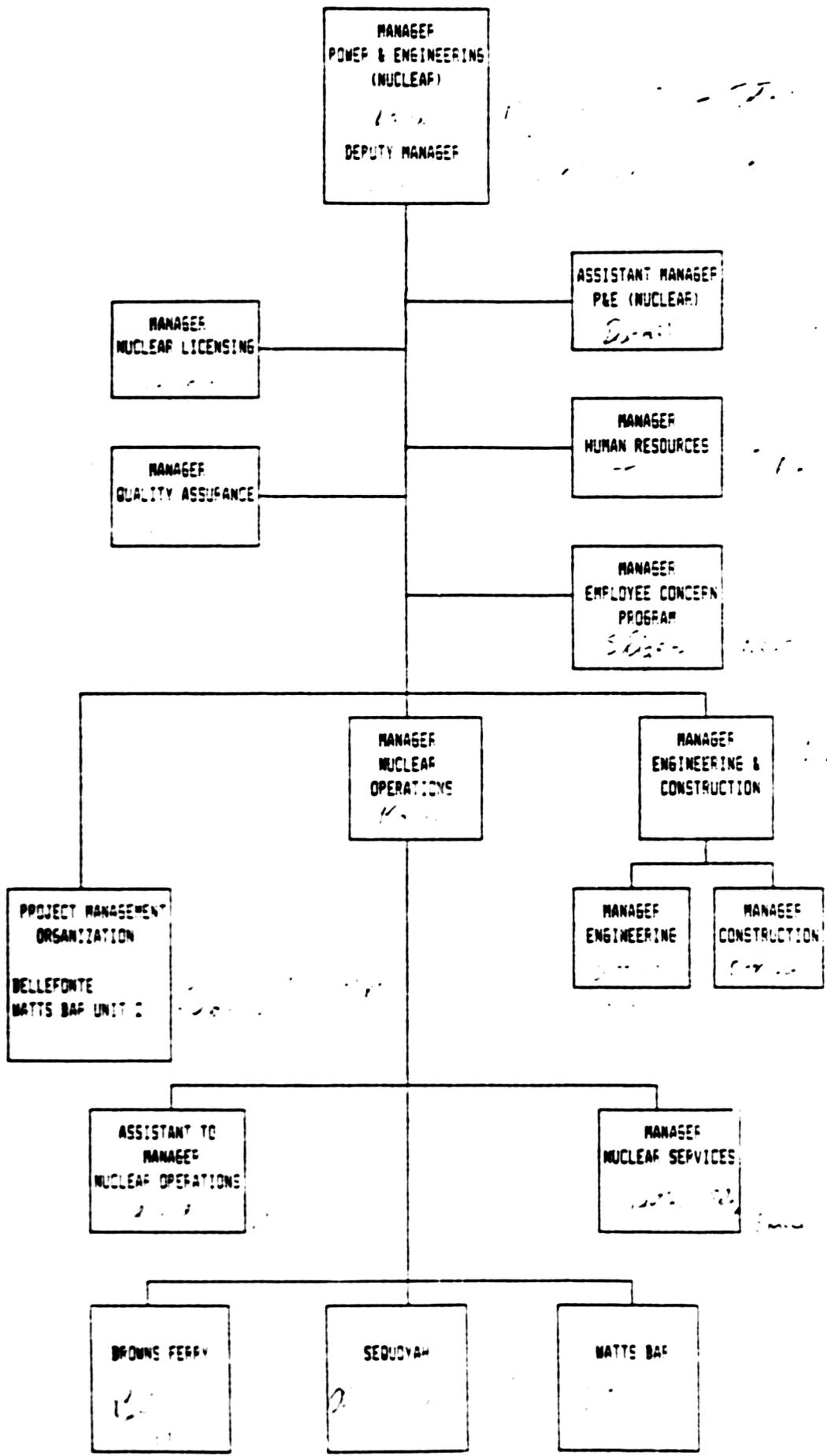
Chuck left TVA in 1984 to become part of the corporate team at Kansas Gas and Electric Company responsible for its Wolf Creek Nuclear Plant. There, he did a fine job of directing the completion of construction, the startup and commercial operation of that facility.

Chuck's record speaks for itself. He builds strong and effective teams wherever he goes. He has done so since his early days as a supervisor at TVA and continued to do so as he

rose through the ranks.

His success at Wolf Creek came as no surprise to anyone who  
has worked with him.

+ + +



EMPLOYEE CONCERNS

RICHARD P DENISE

DECEMBER 12, 1985

## AGENDA

1. INTRODUCTION
2. STATUS OF P&E (NUCLEAR) EMPLOYEE CONCERN PROGRAM IMPLEMENTATION
3. PROCESS FOR REVIEW AND EVALUATION OF EMPLOYEE CONCERNS
4. STATUS OF CONCERNS FROM THE WATTS BAR SPECIAL EMPLOYEE CONCERN PROGRAM
5. STATUS OF REVIEW OF "K-FORMS" FOR GENERIC APPLICABILITY TO SEQUOYAH

**POWER AND ENGINEERING (NUCLEAR) EMPLOYEE  
CONCERN PROGRAM SCHEDULE FOR IMPLEMENTATION**

*Reports to Mgr. P&E (Nuclear)*

**PROGRAM MANAGER SELECTION** (*Eric S. Miller*) DEC 1, 1985 :

**SITE REPRESENTATIVE SELECTIONS** BY JAN 1, 1986

**EMPLOYEE TRAINING / SITE REPRESENTATIVE  
TRAINING** JAN 1 -  
FEB 1, 1986

**PROGRAM IMPLEMENTATION** FEB 1, 1986

**SAFETY RELATED  
EMPLOYEE CONCERN  
REVIEW AND EVALUATION**

**'K-FORMS'**

- GENERIC APPLICABILITY
- STOPWORK
- PRELIMINARY REPORTABILITY
- PRIORITY INVESTIGATION

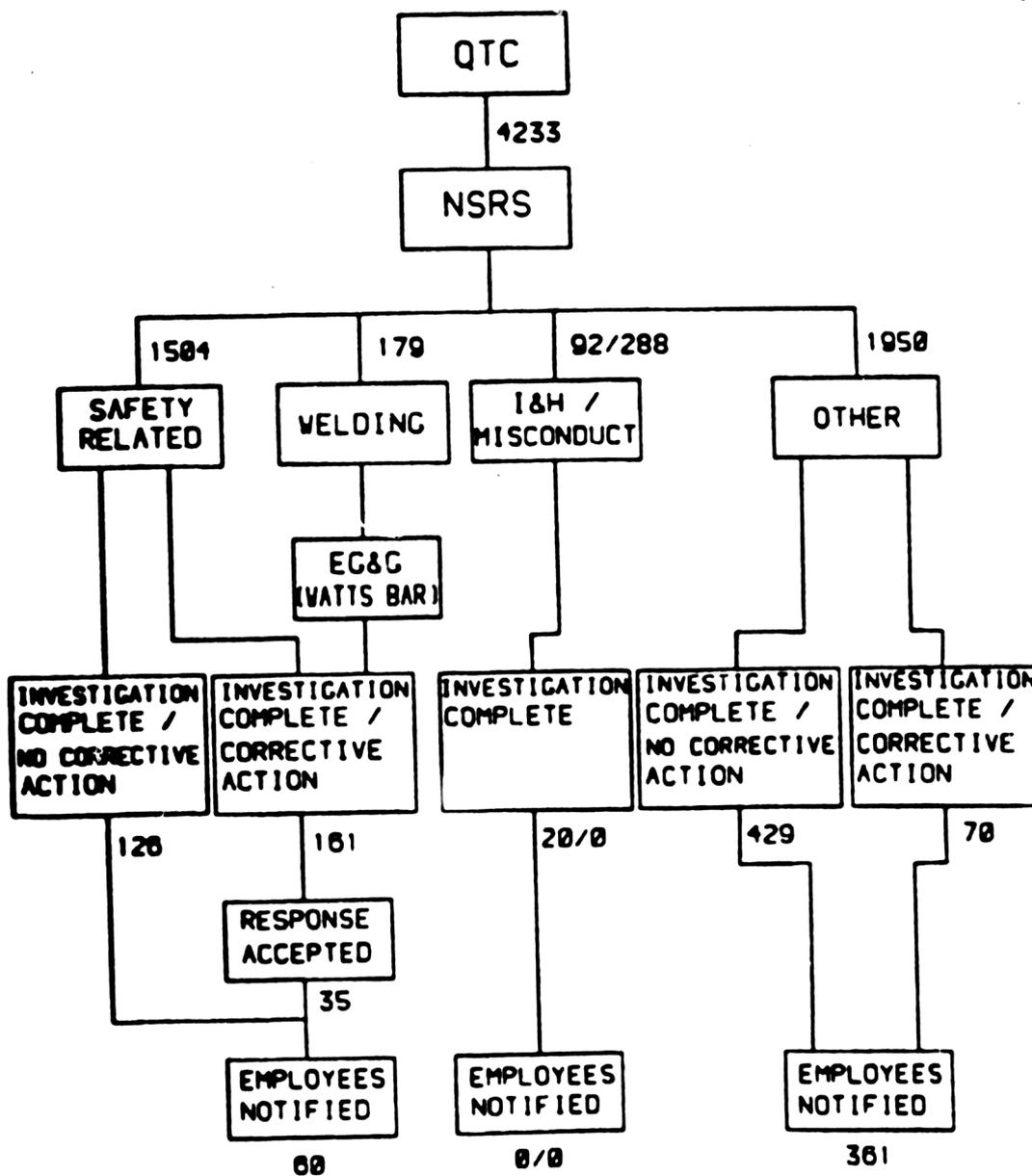
**INVESTIGATION REPORTS**

- INVESTIGATION REPORT ADEQUACY
- GENERIC APPLICABILITY
- STOPWORK
- REPORTABILITY

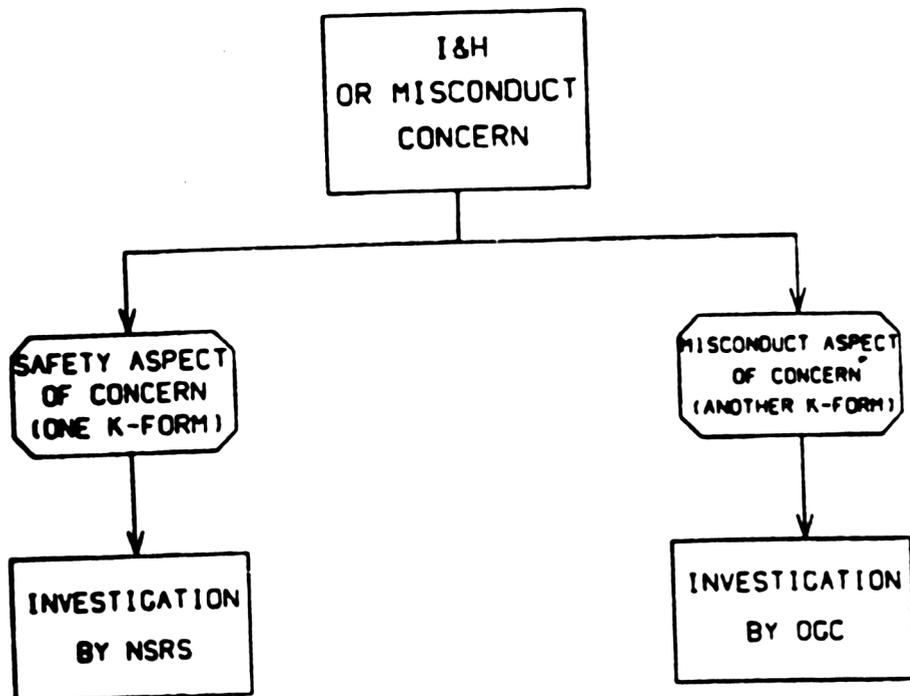
**INVESTIGATION REPORT RESPONSE**

- RESPONSE ADEQUACY
- GENERIC APPLICABILITY
- STOPWORK
- REPORTABILITY

# STATUS OF EMPLOYEE CONCERNS DECEMBER 7, 1985

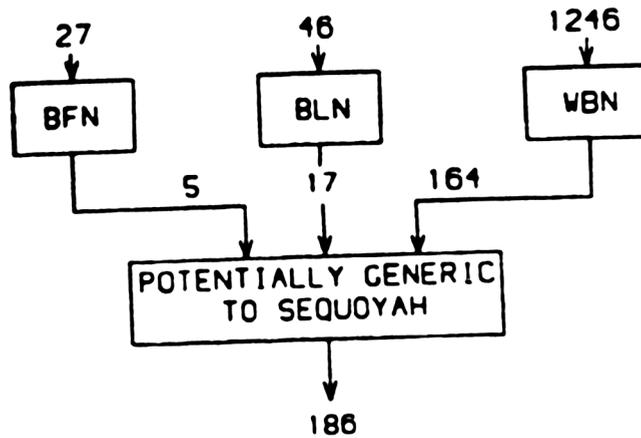


# INVESTIGATION OF INTIMIDATION AND HARASSMENT AND MISCONDUCT CONCERNS



- K-FORMS FOR NUCLEAR SAFETY RELATED CONCERNS ARE IDENTIFIED AND INVESTIGATED INDEPENDENT OF THE MISCONDUCT ISSUE
- NSRS AND OCC UTILIZE QTC TO PERFORM SELECTED SAFETY RELATED, I&H, AND MISCONDUCT INVESTIGATIONS

**SAFETY RELATED "K-FORM"  
GENERIC APPLICABILITY  
REVIEW**



**GENERIC ISSUES**

**NO OF CONCERNS**

ENVIRONMENTAL QUALIFICATION	1
OPERATIONAL READINESS	45
CABLE TRAY & CONDUIT HANGERS	4
PIPE HANGERS & ANCHOR BOLTS	18
CABLES	40
CONFIGURATION CONTROL	13
WELDING	31
MISCELLANEOUS	34

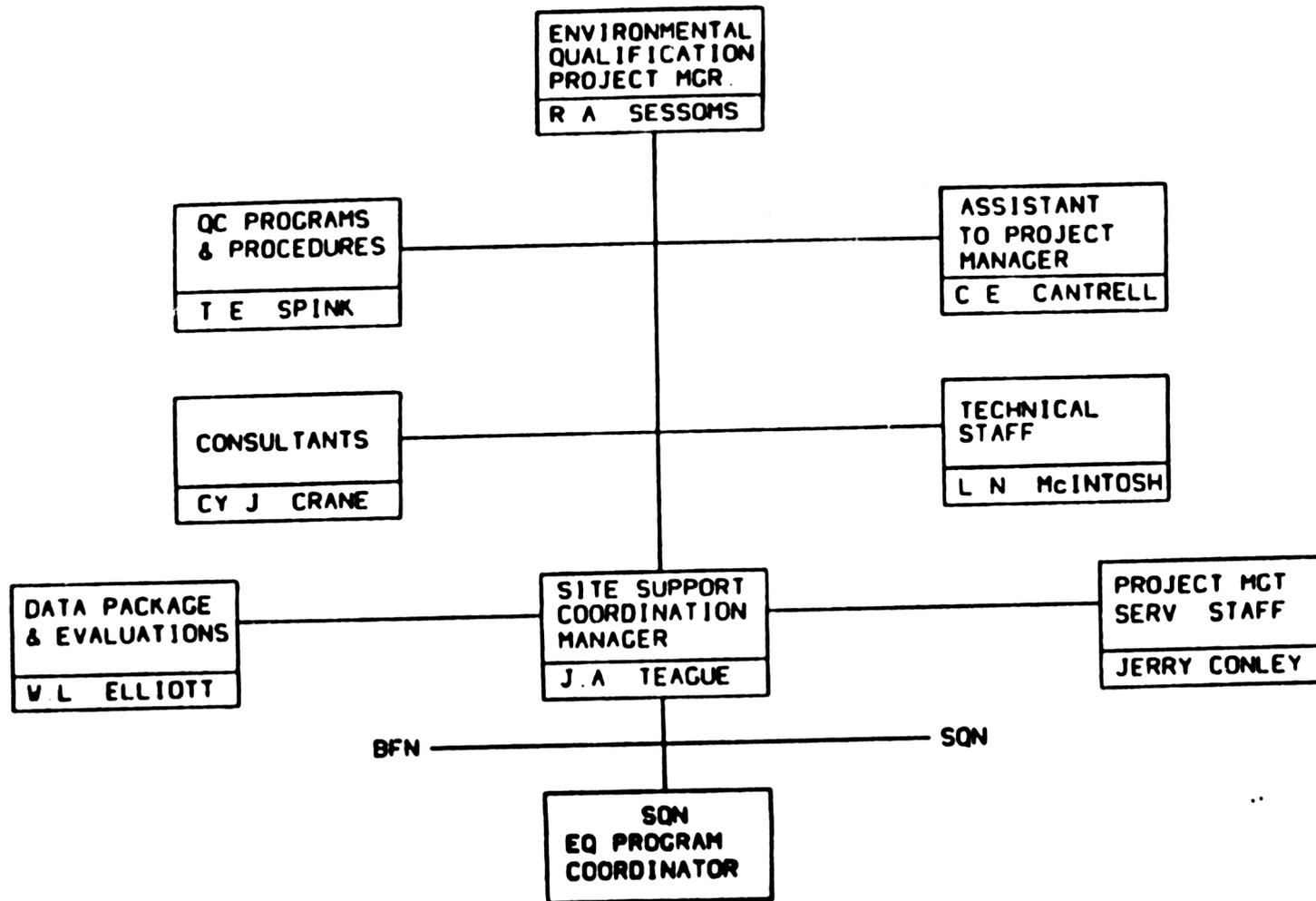
# TVA EMPLOYEE CONCERN EVALUATION FOR SEQUOYAH STARTUP

- I. RECEIPT OF "K-FORMS"
- II. PRELIMINARY EVALUATION
  - A. PERFORMED BY OFF-SHIFT STAs
  - B. TECHNICAL SPECIFICATION LCO PROBLEM
  - C. POTENTIAL UNREVIEWED SAFETY QUESTION
- III. INDEPENDENT EVALUATION BY NSRS
- IV. JOINT LIST PRIORITIZING EMPLOYEE CONCERNS
- V. LIST OF CORRECTIVE ACTIONS TO BE ACCOMPLISHED  
PRIOR TO STARTUP

**GENERIC EMPLOYEE CONCERN  
EVALUATIONS**

<b>PLANT</b>	<b>NUMBER OF GENERIC "K-FORMS"</b>
WATTS BAR	164
BROWNS FERRY	5
BELLEFONTE	17
====	====
TOTAL	186

<b>CATEGORY</b>	<b>NUMBER OF GENERIC "K-FORMS"</b>
ENVIRONMENTAL QUALIFICATION	1
OPERATIONAL READINESS	45
CABLE TRAY AND CONDUIT HANGERS	4
PIPE HANGERS AND ANCHOR BOLTS	18
CABLES	40
CONFIGURATION CONTROL	13
WELDING	31
MISCELLANEOUS	34
====	====
TOTAL	186



ENVIRONMENTAL QUALIFICATION PROJECT ORGANIZATION

## SAFETY SIGNIFICANT CRITERIA

SAFETY SIGNIFICANT CRITERIA ARE THOSE CRITERIA USED TO ANALYZE A POTENTIAL SAFETY-RELATED CONCERN THAT IF SUBSTANTIATED COULD AFFECT THE ABILITY OF A SAFETY SYSTEM TO PERFORM ITS SAFETY-RELATED FUNCTION REQUIRED FOR THE PREVENTION OR MITIGATION OF ACCIDENTS WHICH COULD RESULT IN POTENTIAL OFFSITE EXPOSURES EXCEEDING THOSE SPECIFIED IN THE TECHNICAL SPECIFICATIONS OR 10 CFR 100

IF THE ANSWER TO ANY OF THE ABOVE QUESTIONS IS "YES", A SAFETY SIGNIFICANT QUESTION OR SAFETY HAZARD MAY BE INVOLVED. A PRIORITIZED INVESTIGATION MUST BE MADE BEFORE A IDENTIFIED PLANT OPERATIONAL MODE MILESTONE ASSOCIATED WITH THE CONCERN IS ACHIEVED. IF THE OPERATIONAL MILESTONE HAS BEEN ACHIEVED, THE PLANT MUST BE IMMEDIATELY INFORMED TO PERFORM AN UNREVIEWED SAFETY QUESTION DETERMINATION

## ENVIRONMENTAL QUALIFICATION PROJECT

- AUGUST 21 - SEQUOYAH SITE DIRECTOR DESIGNATED RESPONSIBLE FOR RESOLUTION OF ENVIRONMENTAL QUALIFICATION CONCERNS
- AUGUST 22 - PROJECT MANAGER AND SKELETON PROJECT ORGANIZATION ESTABLISHED MEETING IN KNOXVILLE WITH ENGINEERING PERSONNEL ESTABLISHED ORGANIZATION RESPONSIBILITIES PROJECT OBJECTIVE ESTABLISHED
- AUGUST 23, 24, 25 - PROJECT MANAGER ESTABLISHED PROJECT IMPLEMENTATION PLAN, IDENTIFIED RESOURCES REQUIRED, AND ESTABLISHED METHODOLOGY FOR ASSEMBLING OF EQ PACKAGE
- AUGUST 26, 27 - PROCEDURES AND CHECKLISTS DEVELOPED FOR EQ PACKAGES TRAINING MODULE PREPARED RESOURCES ASSIGNED TO PROJECT
- AUGUST 28 - TRAINING PROCEDURES AND CHECKLIST

## ENVIRONMENTAL QUALIFICATION PROJECT MANAGER'S OBJECTIVES

1. CONSOLIDATE PERTINENT INFORMATION INTO A QUALIFICATION FILE THAT WILL FULFILL ALL REQUIREMENTS OF 10 CFR 50 49 REGARDING PROOF OF ENVIRONMENTAL QUALIFICATION
2. ENSURE ALL REQUIREMENTS OF 10 CFR 50 49 REGARDING THE EQUIPMENT QUALIFICATION PROGRAM ARE AVAILABLE, ADEQUATE, AND PROPERLY ENTERED INTO A DOCUMENT SYSTEM THAT ADDRESSES ALL REQUIREMENTS OF THE RULE
3. PRIORITY FOR THIS PROJECT IS ON SEQUOYAH GENERIC INFORMATION FOR ALL PLANTS CAN BE ADDRESSED IF IT DOES NOT SIGNIFICANTLY IMPACT THE SEQUOYAH EFFORT
4. WATTS BAR AND BROWNS FERRY ARE TO BE ADDRESSED CONSISTENT WITH THEIR ANTICIPATED STARTUP DATES

**UNIT 2**  
**SCHEDULE FOR COMPLETION**  
**OF 18 CFR 58.49 IMPLEMENTATION**

- JANUARY 21, 1986** - COMPLETE REROUTING OF CABLE INSIDE CONTAINMENT TO RESOLVE CABLE SUBMERGENCE PROBLEMS
- JANUARY 21, 1986** - RESOLVE ROCKBESTOS CABLE TEST REPORTS (11)
- JANUARY 13, 1986** - COMPLETE REPUUL OF CABLE WITH EXPIRED LIFE
- JANUARY 8, 1986** - COMPLETE ISSUANCE OF ALL EQ BINDERS THAT ARE COMPLETE OR COMPLETE WITH FIELD WORK OUTSTANDING
- JANUARY 8, 1986** - RESOLVE OPEN ISSUES THAT COULD IMPACT QUALIFICATION OF EQUIPMENT (28 CABLE BINDERS TOTAL)
- 1 MAIN STEAM VAULT SUBMERGENCE (14)
  - 2 IDENTIFY ANY CABLE FROM THE CABLE LOAD STUDY THAT HAVE REDUCED LIFE (17)
  - 3 COMPLETE TESTING AT WYLIE LABORATORY OF SELECTED CABLE (12)
- JANUARY 8, 1986** - COMPLETE IMPLEMENTATION OF QUALIFIED MAINTENANCE DATA SHEETS
- 1 REPLACE NYLON ROLLERS ON NAMCO LIMIT SWITCHES
  - 2 VERIFY INSTALLATION IN ACCORDANCE WITH QUALIFICATION MAINTENANCE DATA SHEETS
- DECEMBER 30, 1985** - COMPLETE REVIRING OF MOTOR OPERATED VALVES  
MOVATS TESTING CONTINUES TO 1/12/86
- DECEMBER 23, 1985** - ALL PROCEDURES IMPLEMENTED FOR LIFE OF PLANT ENVIRONMENTAL QUALIFICATION PROGRAM
- DECEMBER 23, 1985** - COMPLETE TRAINING OF SELECTED MANAGERS, ENGINEERS, AND CRAFTS FOR LIFE OF PLANT ENVIRONMENTAL QUALIFICATION
- DECEMBER 18, 1985** - BEGIN ISSUANCE OF EQ BINDERS
- DECEMBER 18, 1985** - ISSUE LIST OF EQUIPMENT UNDER 18 CFR 58.49 PROGRAM

**SEQUOYAH STARTUP READINESS REVIEW**  
**RESPONSE TO ITEM 3- "OPERATIONAL READINESS PLAN"**  
**METHODOLOGY**

1. TWO MID-LEVEL MANAGERS ASSIGNED FULL TIME TO COORDINATE THE REVIEW
2. EACH PLANT SUPERVISOR WAS PROVIDED PACKAGES DETAILING DEVIATIONS CHARGED TO HIS ORGANIZATION DURING SALP PERIOD THESE PACKAGES INCLUDED
  - NRC VIOLATIONS
  - QA AUDIT FINDINGS
  - LERs
  - INPO RECOMMENDATIONS
  - SCRAM REPORTS
  - CORRECTIVE ACTION REPORTS
  - SECURITY DEGRADATIONS
  - HEALTH PHYSICS VIOLATIONS
3. SUPERVISORS EVALUATED THIS INFORMATION TO ANSWER THE FOLLOWING QUESTIONS
  - WAS THE ROOT CAUSE CORRECTLY IDENTIFIED?
  - WAS APPROPRIATE CORRECTIVE ACTION IMPLEMENTED?
  - WAS CORRECTIVE ACTION EFFECTIVE TO PREVENT RECURRENCE?
  - ARE THERE UNFAVORABLE TRENDS NOT PREVIOUSLY IDENTIFIED?
4. THE COORDINATORS MET WITH SUPERVISORS TO DISCUSS THEIR FINDINGS. ACTIONS COMPLETED OR PLANNED TO CORRECT OR IMPROVE PERFORMANCE WERE RECORDED
5. A MATRIX WAS PREPARED TO ASSURE THAT THESE ACTIONS ADDRESSED ALL NRC CONCERNS THIS INFORMATION WAS THEN ORGANIZED INTO THIS STARTUP READINESS REPORT

**SEQUOYAH STARTUP READINESS REPORT**  
**RESPONSE TO ITEM 3 - "OPERATIONAL READINESS PLAN"**

**CONTENTS**

**EXECUTIVE SUMMARY**

- 1.0 SEQUOYAH MANAGEMENT GOALS AND OBJECTIVES**
  - 2.0 STRENGTHENING THE NUCLEAR MANAGEMENT  
STRUCTURE AT SEQUOYAH**
  - 3.0 MANAGEMENT CONTROL / QUALITY ASSURANCE**
  - 4.0 MANAGEMENT INVOLVEMENT TO IMPROVE  
REGULATORY PERFORMANCE AND TO ACHIEVE  
EXCELLENCE IN OPERATIONS**
  - 5.0 EMERGENCY PREPAREDNESS**
  - 6.0 PLANT MAINTENANCE**
- ATTACHMENTS**

**SEQUOYAH STARTUP READINESS REVIEW  
RESPONSE TO ITEM 3 - "OPERATIONAL READINESS REVIEW"**

**DETAILED LISTING OF SUBJECTS ADDRESSED**

**EXECUTIVE SUMMARY**

- 1.0 SEQUOYAH MANAGEMENT GOALS AND OBJECTIVES**
  - ACCOUNTABILITY
  - PROCEDURAL AND MANAGEMENT CONTROLS
  - EMPLOYEE STAFFING, TRAINING, QUALIFICATION
  
- 2.0 STRENGTHENING THE MANAGEMENT STRUCTURE**
  - BACKGROUND
  - IMPLEMENTATION OF SITE DIRECTOR ORGANIZATION
  - OPERATION EXPERIENCE
  - SPECIFIC ORGANIZATIONAL AND MANAGEMENT CHANGES (DESIGN, MODIFICATIONS, OPERATIONS, MAINTENANCE, QA, ENGINEERING)
  
- 3.0 MANAGEMENT CONTROL / QUALITY ASSURANCE**
  - STATEMENT OF GOALS AND OBJECTIVES
  - COMMUNICATION OF MANAGEMENT EXPECTATIONS TO EMPLOYEES
  - PERFORMANCE MONITORING
  - CORRECTIVE ACTION

**4 0 MANAGEMENT INVOLVEMENT TO IMPROVE  
REGULATORY PERFORMANCE AND TO ACHIEVE  
EXCELLENCE IN OPERATIONS**

- PLANT OPERATIONS
- SCRAM REDUCTIONS
- ESF ACTUATIONS
- SHIFT TECHNICAL ADVISORS
- REVIEW OF DAVIS-BESSE OPERATING EXPERIENCE
- SURVEILLANCE TESTING ACTIVITIES
- CHEMISTRY LABORATORY OPERATIONS
- RADIOLOGICAL HEALTH
- PLANT SECURITY
- DESIGN SUPPORT
- MODIFICATION PROGRAM
- POST MODIFICATION TESTING
- TRAINING
- PLANNING AND SCHEDULING
- FIRE PROTECTION
- NUCLEAR OPERATING EXPERIENCE REVIEW
- REPORTING
- IMPROVEMENTS TO FACILITIES
- VIBRATION DIAGNOSTICS

## 5.0 EMERGENCY PREPAREDNESS

- ASSESSMENT OF RADIOLOGICAL EMERGENCY PREPAREDNESS
- SUMMARY OF SEQUOYAH REP PROGRAM ENHANCEMENTS

## 6.0 PLANT MAINTENANCE

- IMPROVEMENTS IN MAINTENANCE ORGANIZATION AND STAFFING
- MAINTENANCE ACCOUNTABILITY AND MANAGEMENT INVOLVEMENT
- MAINTENANCE INSTRUCTION ENHANCEMENT
- ACTIONS TO SYSTEMATICALLY CHANGE PLANT MAINTENANCE EMPHASIS FROM SHORT-TERM PLANNING AND RESPONSE TO PROBLEMS, TO LONG-TERM PLANNING AND PREVENTIVE MAINTENANCE
- MAINTENANCE TRAINING

## ATTACHMENTS

## INDUSTRY REVIEW TEAM

### TEAM CONSISTED OF:

- TVA SENIOR MANAGER
- ANI REPRESENTATIVE
- TWO MANAGERS FROM DUKE POWER, ONE WITH MAINTENANCE EXPERIENCE, AND ONE WITH OPERATIONS EXPERIENCE
- INPO REPRESENTATIVE

### THE TEAM HAD TWO RECOMMENDATIONS TO BE COMPLETED PRIOR TO STARTUP:

1. TRAIN SHIFT TECHNICAL ADVISORS ON THE SAFETY PARAMETER DISPLAY SYSTEM TO ALLOW THEM TO OPERATE THE SYSTEM FOR THE TECHNICAL SUPPORT CENTER PERSONNEL
2. REVIEW OUTSTANDING PRE-OPERATIONAL TEST OPEN ITEMS AND DETERMINE THAT THEIR STATUS DOES NOT CONSTITUTE AN UNREVIEWED SAFETY QUESTION

## SEQUOYAH NUCLEAR PERFORMANCE PLAN COMMITMENTS

COMMITMENT	COMPLETION DATE
1. TVA WILL SUBMIT TO THE NRC A COPY OF THE FINAL DESIGN CONTROL SURVEY BY GILBERT COMMONWEALTH AND OUR COMMENTS (PART V)	11/07/85 COMPLETE
2. AN INSTRUCTION REVIEW SHEET WILL BE IMPLEMENTED ON AN INTERIM BASIS TO OBTAIN INPUT FROM CRAFTSMEN TO ENSURE ADEQUACY OF THE EXISTING MAINTENANCE INSTRUCTION THE REVIEW SHEET WILL BE IMPLEMENTED BY NOVEMBER 15, 1985. (6.4.3)	11/15/85 COMPLETE
3. IN RESPONSE TO NRC INSPECTOR REPORT SB-327, -328/84-38, IMPROVEMENTS TO THE FUNCTIONAL TEST PROGRAM WILL INCLUDE REVISION OF APPLICABLE PLANT PROCEDURES TO ENSURE FUNCTIONAL TESTS ARE REQUIRED FOR TEMPORARY ALTERATIONS WHICH MAY BECOME PERMANENT, BASIC INSTRUCTIONS ARE INCLUDED IN FUNCTIONAL TEST PROCEDURES, AND A METHOD FOR IDENTIFYING AND CORRECTING FUNCTIONAL TEST DEFICIENCIES (4.12)	12/03/85 COMPLETE
4. PROVIDE A SENIOR REACTOR OPERATOR (SRO) TO WORK WITH THE QUALITY ASSURANCE (QA) GROUP AND MAINTENANCE PLANNERS TO PROVIDE OPERATIONS KNOWLEDGE AND EXPERIENCE (2.4.4 AND 2.4.5)	AS AVAILABLE
5. FOR FISCAL YEAR 1986, WHERE POSSIBLE, PLANT GOALS WILL BE SPECIFIED BY MAJOR PLANT ORGANIZATIONAL UNITS. (3.1.2)	— —
6. THE TIERING OF PROCEDURES IS BEING REDUCED WHERE POSSIBLE AS PRACTICAL, PLANT PROCEDURES WILL DIRECTLY IMPLEMENT REGULATORY DOCUMENTS WITHOUT INTERMEDIATE LEVEL MANUALS. (3.2.3)	12/31/85
7. IN RESPONSE TO NRC VIOLATIONS SB-327, -328/85-20-02, AN EMPLOYEE HANDBOOK HAS BEEN PREPARED AND WILL BE DISTRIBUTED. THIS HANDBOOK EXPLAINS EMPLOYEE'S RESPONSIBILITIES WITH REGARD TO RADIOLOGICAL HEALTH (e.g., PROPER WEARING OF DOSIMETRY), SECURITY (e.g., PLANT ENTRY AND BADGING REQUIREMENTS), AND EMERGENCY RESPONSE (e.g., ASSEMBLY LOCATIONS). (3.2.3)	

## SEQUOYAH NUCLEAR PERFORMANCE PLAN COMMITMENTS

COMMITMENT	COMPLETION DATE
8 IN RESPONSE TO NRC VIOLATION 50-327, -328/84-31-84 PRIOR TO UNIT 1 STARTUP, THE FIRE PROTECTION STRAINERS WILL BE CLEANED AND A MAINTENANCE INSTRUCTION WILL BE IN PLACE WHICH ADDRESSES FUTURE PERIODIC INSPECTION AND CLEANING. (4 15.3)	PRIOR TO UNIT 1 STARTUP
9 PAST VIOLATION RESPONSES, BULLETIN RESPONSES, LICENSEE EVENT REPORTS, AND NUREC-0737 ITEMS WILL BE REVIEWED BACK TO JANUARY 1, 1981 BEFORE RESTART COMMITMENTS IDENTIFIED WHICH ARE FOUND TO BE PAST DUE WILL EITHER BE COMPLETED OR HAVE NEW DATES ESTABLISHED. (4 17.4)	PRIOR TO STARTUP
10 PRIOR TO RESTART OF EITHER UNIT, ALL SAFETY-RELATED EMPLOYEE CONCERNS WILL BE REVIEWED FOR SAFETY SIGNIFICANCE THOSE THAT ARE SIGNIFICANT WILL BE INVESTIGATED, AND THE RESULTS OF THE INVESTIGATION REVIEWED FOR CORRECTIVE ACTION. (4.2.2)	PRIOR TO STARTUP
11 A CHECKLIST FOR REVIEW OF MAINTENANCE INSTRUCTIONS WILL BE DEVELOPED. (8.4.2)	01/86
12 UTILIZING THE ABOVE CHECKLIST, A REVIEW FOR ENHANCEMENT OF EXISTING MAINTENANCE INSTRUCTIONS WILL BE COMPLETED BY JULY 1987. (8.4)	07/01/87
13 GUIDELINES WILL BE DEVELOPED FOR MAINTENANCE PLANNERS TO: <ul style="list-style-type: none"> <li>a. DETERMINE WHEN A POST-MAINTENANCE TEST INSTRUCTION IS NEEDED. GUIDELINES WILL BE PREPARED BY JANUARY 1, 1988.</li> <li>b. DETERMINE WHEN AN MR PACKAGE IS POTENTIALLY INADEQUATE FOR THE PLANNED WORK AND TO DIRECT THE PLANNERS TO AN EXISTING INSTRUCTION OR REQUIRE EVALUATION FOR PREPARATION OF A NEW INSTRUCTION. (8.4.7)</li> </ul>	01/01/88  PRIOR TO STARTUP

# SEQUOYAH NUCLEAR PERFORMANCE PLAN COMMITMENTS

COMPLETION DATE  
12/31/85

## COMMITMENT

- |  |   |
|--|---|
| <p>14 A BASIC COMPUTERIZED TRENDING PROGRAM, UTILIZING NPROS DATA BASE, WILL BE ESTABLISHED USING INPO GUIDELINES (8 5 3)</p>  | <p>PRIOR TO<br/>STARTUP</p>   |
| <p>15 PRIOR TO STARTUP, AVAILABILITY AND OPERABILITY OF SAFETY-RELATED EQUIPMENT WILL BE VERIFIED BY THE FOLLOWING (8 7 2)</p> <ul style="list-style-type: none"> <li>o REVIEW OF OUTSTANDING MAINTENANCE REQUESTS TO ENSURE THAT NO UNWORKED ITEM WILL DEGRADE EQUIPMENT OR IMPEDE OPERATOR ACTION NECESSARY FOR SAFE OPERATION OF THE PLANT</li> <li>b REVIEW OF POTENTIAL REPORTABLE OCCURRENCES INITIATED FOR EQUIPMENT FAILURES WHICH OCCURRED SINCE MARCH 1984 TO DETERMINE ADEQUACY OF CORRECTIVE MAINTENANCE TO PREVENT RECURRENCES</li> <li>c REVIEW OF SURVEILLANCE TESTS AND PREVENTATIVE MAINTENANCE SCHEDULES TO ENSURE PERFORMANCE OF REQUIRED TESTING AND NEEDED MAINTENANCE</li> </ul> | <p>PRIOR TO<br/>STARTUP</p> <p>PRIOR TO<br/>STARTUP</p> <p>PRIOR TO<br/>STARTUP</p> <p>PRIOR TO<br/>STARTUP</p> |
| <p>16 PRIOR TO STARTUP OF UNIT 2, A REVIEW WILL BE MADE TO ENSURE PROPER METHODS WERE USED FOR DETERMINATION OF SEISMIC LOADS FOR CONDUIT, DUCT, AND PIPE SUPPORTS IN THE DIESEL GENERATOR BUILDING</p>  | <p>INSP - COMPLETE<br/>PROCED - 2/1/86</p>  |
| <p>17 TO ADDRESS THE LIMITORQUE VALVE OPERATOR GEAR REVERSAL PROBLEM IDENTIFIED AT BROWNS FERRY VALVES 1 &amp; 2-FCV-74-1 AND 1 &amp; 2-FCV-74-2 WILL BE INSPECTED PRIOR TO STARTUP, AND THE LIMITORQUE MAINTENANCE PROCEDURE WILL BE REVISED PRIOR TO FEBRUARY 1, 1988. (8.1.2)</p>   | <p>(a) SELF-EVAL<br/>8/1/88</p>   |
| <p>18. SON WILL SEEK ACCREDITATION OF THE ELECTRICAL AND MECHAIICAL MAINTENANCE TRAINING PROGRAMS. A SELF-EVALUATION REPORT WILL BE SUBMITTED BY JANUARY 1988, WITH ACCREDITATION EXPECTED BY THE SPRING OF 1988. (4.13.1)</p>   | <p>(b) SPRING, 1988</p>   |

## SEQUOYAH NUCLEAR PERFORMANCE PLAN COMMITMENTS

COMMITMENT	COMPLETION DATE
19. PROVIDE DECREEED ENGINEERING EXPERTISE WITHIN THE OPERATIONS GROUP (2 4 3)	06/30/86
20. SOM WILL COMPLETE ALL APPENDIX R WORK (WITH THE EXCEPTION OF THOSE DEVIATIONS AWAITING APPROVAL BY NRC) BY THE JUNE 30, 1986 DATE AS COMMITTED TO IN THE TVA RESPONSE TO NRC AUGUST 10, 1984 CONFIRMATION OF ACTION LETTER. (4 15 1)	06/30/86
21. NEW MAINTENANCE INSTRUCTIONS FOR 17 CRITICAL STRUCTURES SYSTEMS & COMPONENTS EQUIPMENT ITEMS WILL BE PREPARED BY JULY 1986 (6 4 4)	07/25/86
22. A COMPREHENSIVE SAFETY-RELATED MOTOR-OPERATED VALVE (MOV) PROGRAM FOR VISUAL INSPECTION, LUBRICATION, AND TESTING IS BEING DEVELOPED WITH INSTRUCTIONS EXPECTED TO BE IN PLACE PRIOR TO START OF THE UNIT 2, CYCLE 3 OUTAGE. (6 5 4)	12/86
23. THE QA GROUP WILL IMPLEMENT A FORMALIZED ON-THE-JOB TRAINING PROGRAM FOR QUALITY CONTROL (QC) GROUP INSPECTORS. (2 4 5)	

ENGINEERING DESIGN CONTROL  
1975 - 1985

APPROXIMATELY 200 DETAILED PROCEDURES

TECHNICAL GUIDES AND STANDARDS

MINIMUM OF TIERING

ADEQUATE BUT NOT USER FRIENDLY

USED ONLY FOR QA WORK

ENGINEERING PROGRAM DIRECTIVES  
1985

MANAGEMENT POLICY AND PHILOSOPHY

ORGANIZATION AND RESPONSIBILITIES

DESIGN PROCESS

EIGHTEEN ENGINEERING PROCEDURES

PROJECT MANUAL REQUIRED

GILBERT COMMONWEALTH REVIEW OF  
PRESENT DESIGN CONTROL PROCESS

SEQUOYAH



THREE EXCEPTIONS

THREE ENHANCEMENTS

## **EXCEPTIONS**

SYSTEMATIC SOURCE OF PLANT CONFIG-  
URATION INFORMATION TO DESIGNER

ACCEPTANCE CRITERIA FOR ADEQUATE  
DOCUMENTATION OF DESIGN BASIS

USQD SHOULD BE LIVING DOCUMENT AND  
UPDATED UPON DESIGN COMPLETION,  
PARTIAL IMPLEMENTATION, AND FCR

## **ENHANCEMENTS**

CONTROL OF INTERFACES BETWEEN OE  
CENTRAL STAFF AND OE SITE  
ORGANIZATIONS

INTEGRATION OF OE PERSONNEL INTO  
SITE ORGANIZATION

ENHANCE THE DESIGN VERIFICATION  
PROGRAM WITH SENIOR TECHNICAL  
REVIEWS