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NUCLEAR REGULATORY COMMISSION**

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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BRIEFING ON STATUS OF PEACH BOTTOM

PUBLIC MEETING

Nuclear Regulatory Commission
One White Flint North
Rockville, Maryland

Wednesday, October 5, 1988

The Commission met in open session, pursuant to notice, at 10:00 a.m., the Honorable LANDO W. ZECH, Chairman of the Commission, presiding.

COMMISSIONERS PRESENT:

LANDO W. ZECH, Chairman of the Commission

KENNETH M. CARR, Member of the Commission

KENNETH C. ROGERS, Member of the Commission

STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:

S. CHILK

W. PARLER

J. PAQUETTE

D. SMITH

C. MCNEILL, JR.

J. COTTON

J. TAYLOR

W. KANE

B. RUSSELL

T. MURLEY

B. BOGER

P R O C E E D I N G S

(10:00 a.m.)

CHAIRMAN ZECH: Good morning, ladies and gentlemen.

Peach Bottom Atomic Power Station has been shut down by NRC Order since March, 1987. The Order resulted from investigation results indicating pervasive inattentiveness of licensed operators on watch in the control room and the failure of Philadelphia Electric Company management to correct this inattentive behavior.

The purpose of today's meeting is for Philadelphia Electric Company and the NRC Staff to brief the Commission concerning the status of the Peach Bottom Atomic Power Plant and the actions being taken to determine the state of readiness for re-start of operation at Peach Bottom.

Today's meeting is for information only. There is no vote scheduled today. The Commission will meet again at a later date in order to consider a re-start decision for Peach Bottom.

I understand the copies of the slides are available as you enter the room.

Do any of my fellow Commissioners have any opening comments they would like to make?

(No response.)

CHAIRMAN ZECH: If not, Mr. Paquette, you may begin.

MR. PAQUETTE: Mr. Chairman and Commissioners, good

1 morning. I am Joseph Paquette, Chairman and CEO of
2 Philadelphia Electric. My associates and I appreciate this
3 opportunity to give the Commission a status report on our
4 efforts to restore the Peach Bottom Atomic Power Station to
5 operational readiness and to ultimate operational excellence.

6 With me at the table today, Mr. Corbin McNeill, our
7 Executive Vice President for Nuclear Operations; Mr.
8 Dickinson Smith, our site Vice President at Peach Bottom; and
9 Mr. John Cotton, Superintendent of Operations at the plant,
10 who is substituting for Mr. John Franz, the Plant Manager,
11 who incidentally is on his honeymoon.

12 Additional members of our corporate and plant
13 organization are also in attendance today and are available
14 to answer questions.

15 Our presentation today will focus on three areas.
16 Mr. McNeill will report on our nuclear organization and on
17 the results of our self-assessment of readiness for re-start.
18 Mr. Smith will discuss the status of the plant and its
19 operating personnel and their readiness. I will start off
20 by reviewing the significant changes made in our corporate
21 organization to strengthen the management support, oversight
22 and quality of our nuclear operations.

23 Immediately following the shutdown, the company
24 embarked on major programs to institute changes of equipment,
25 people, programs and attitudes at the plant. Although not

1 initially recognized, a cultural change at corporate
2 headquarters was also required.

3 Let me reassure the Commission today that your
4 message on this extremely important factor has been received,
5 is now fully understood, and is being implemented. The new
6 management of this company understands the seriousness of the
7 Peach Bottom situation and we are implementing the steps
8 necessary to support the cultural changes required to foster
9 effective self-assessment, accountability by line management,
10 and positive attitudes towards regulation.

11 In addition, we have sent a clear message to our
12 organization that we personally are committed to these
13 changes.

14 (Slide.)

15 MR. PAQUETTE: To begin, I would like to describe
16 the significant changes made in our corporate organization
17 which provide for strengthened line management and improved
18 communication and accountability for the nuclear organization
19 by corporate management.

20 The key change was establishing a separate
21 organization with full responsibility for nuclear operations
22 under the leadership of Mr. McNeill in the new position of
23 Executive Vice President reporting directly to me. The top
24 officials at Peach Bottom and Limerick have been promoted to
25 Corporate Vice Presidents, thus providing them with direct

1 access to the CEO on a regular basis and strengthening the
2 relationship between corporate and plant management.

3 We have also reduced layers of management,
4 streamlined the organization and, thereby, increased
5 management control and involvement in timely problem
6 identification and resolution.

7 In the area of quality assurance and safety review,
8 we have consolidated and strengthened our nuclear quality and
9 safety review organizations and significantly reduced their
10 role and reporting level within the company.

11 As CEO, I realize I have ultimate responsibility
12 for performance of our nuclear plants and have made a
13 determined effort to keep fully informed about our nuclear
14 operations and to visit our plants frequently. For example,
15 since I re-joined PE in March of this year, I have visited
16 Peach Bottom on nine occasions and Limerick on four others.
17 These visits have included a number of discussions with the
18 operators on shift and I intend to continue them when the
19 plant is back in operation.

20 I have also instituted a new practice of having Mr.
21 McNeill present a monthly oral report on nuclear operations
22 to all of our corporate officers to improve their understanding
23 of this important aspect of our company. We have also
24 recently recruited a new Vice President for Human Resource
25 Activities. This individual is a career professional who

1 clearly understands the role of human resources in supporting
2 line management in carrying out its responsibilities.

3 We have also considerably strengthened the Board
4 of Directors' oversight of our nuclear operations. A new
5 Nuclear Committee of the Board of Directors is now in place
6 with a specific charter to provide oversight and management
7 assessment of our nuclear operations. The committee consists
8 of five outside members of the Board with the assistance of
9 two advisers with extensive technical experience in nuclear
10 power. The committee has direct access to Mr. McNeill and
11 the entire nuclear organization including our quality
12 assurance organization and our Nuclear Review Board.

13 So far this year, the committee has met 24 times
14 including four times at Peach Bottom and twice at Limerick.
15 In addition, the entire Board receives a written and oral
16 report from Mr. McNeill monthly on the status of our entire
17 nuclear program.

18 In the final analysis, the key to success in any
19 organization is the caliber of its people and the level of
20 their dedication, integrity and professionalism. We have
21 increased the number of operating personnel and enhanced their
22 selection, training and qualification. I firmly believe that
23 our nuclear personnel under the overall direction of Mr.
24 McNeill, and with the able assistance of such people as Mr.
25 Smith and the other members of corporate and plant management

1 and supervision, are capable of providing the leadership,
2 expertise, integrity and accountability required to restore
3 Peach Bottom to operational excellence. I believe that the
4 success of our Limerick station demonstrates our potential.

5 Today Peach Bottom is not ready to re-start but I
6 am happy to report that we are well on our way to the
7 successful achievement of that objective. Work is continuing
8 to complete the remaining preparation for re-start items
9 identified in our recent self-assessment. When that is
10 completed and when we have determined we are ready, we will
11 ask the Commission for approval to re-start under a very
12 deliberate and controlled test and power ascension program.

13 Philadelphia Electric has devoted significant
14 resources to the correction of the deficiencies uncovered at
15 the plant and in the management organization and practices
16 which existed. Every action taken has been designed to
17 restore the plant to operational readiness to assure
18 continued protection of the public safety and to restore
19 public confidence in our ability to operate the plant in
20 accordance with the highest standards.

21 We recognize that the many improvements we have
22 made do not permit us to be satisfied and that we must
23 continue the cycle of improvement, assessment and improvement
24 again. Philadelphia Electric is committed to that course.

25 If there are any questions at this time, I will be

1 very happy to attempt to answer them.

2 CHAIRMAN ZECH: You may proceed. Thank you.

3 MR. PAQUETTE: Otherwise, I will now ask Mr.
4 McNeill to discuss our nuclear organization.

5 CHAIRMAN ZECH: Mr. McNeill.

6 MR. MCNEILL: Thank you, Joe. Good morning. I am
7 Corbin McNeill, the Executive Vice President, Nuclear, of
8 Philadelphia Electric. I joined the company in March of this
9 year after having been Chief Nuclear Officer of Public Service
10 Electric and Gas Company for three years. Prior to that, I
11 had served for three years as Plant Manager of the James A.
12 Fitzpatrick Nuclear Power Plant of the New York Power
13 Authority and earlier had served a 20-year career in the
14 Navy's nuclear submarine program.

15 When I joined Philadelphia Electric, it was with
16 the understanding that the company was committed to quality
17 and to excellence. I would like to assure you that Mr.
18 Paquette and the Board of Directors by their active
19 participation and resource commitment have more than met the
20 test.

21 Mr. Paquette has described several of the corporate
22 level changes which have been initiated to effect a new
23 culture. I would like to highlight several of the specific
24 changes relative to the nuclear organization which improve
25 our organizational effectiveness and ensure good management

1 control of both Peach Bottom and Limerick.

2 (Slide.)

3 MR. MCNEILL: We have concentrated our efforts for
4 achieving improved effectiveness in the four areas shown here.
5 I shall discuss each. The nuclear group has been established
6 as a separate organization with responsibility and
7 accountability for all functional areas related to nuclear.
8 I report directly to the Chairman and Chief Executive Officer.

9 (Slide.)

10 MR. MCNEILL: As shown on this slide, I have six
11 direct line reports representing operations at our two
12 stations -- Peach Bottom and Limerick -- completion of
13 construction of Limerick Unit 2 which will be ready for fuel
14 load by the middle of next year; a nuclear engineering
15 organization dedicated to our two plants; a nuclear services
16 organization; and a quality assurance organization which
17 includes independent safety and engineering groups and a
18 performance assessment group.

19 The independent safety engineering group at each
20 site performs the traditional technical specification
21 defined role of independent significant event review,
22 operations monitoring, and safety evaluation review.

23 The performance monitoring group is our internal
24 INPO type organization which monitors functional effectiveness
25 against the various INPO evaluation criteria and guidelines,

1 as compared to compliance-related inspections.

2 As a dedicated organization, we are able to focus
3 on nuclear issues without dilution by other production matters.
4 This structure has resulted in reducing the average number
5 of management layers from seven to five. Additionally, all
6 of the working forces at the station work for the site
7 organization, rather than being matrixed elsewhere in the
8 company as they previously were. Thus, on-site responsibility
9 and accountability truly rests with the site Vice President.

10 Reducing the layers of management and eliminating
11 the matrix structural organization has significantly enhanced
12 open two-way communication, particularly in problem
13 identification, analysis and resolution.

14 Mr. Paquette has described the fact that a major
15 cultural change is underway in Philadelphia Electric. That
16 change is most evident within the nuclear group. We have
17 attempted to set the attitude of the people in the work
18 environment by defining a vision and set of values which
19 define our management commitments and focus our employees'
20 priorities.

21 (Slide.)

22 MR. MCNEILL: As you see here, we have a lofty
23 vision of being world class, and we define our values set
24 focusing on safety, quality, our people and their teamwork.
25 This value set is a key element of the new culture we are

embracing in the nuclear group. Experience tells me that a lofty vision and high standards are effective only if there are controls for measuring performance against these high standards.

(Slide.)

MR. MCNEILL: We have improved management control by establishing definitive goals in all functional areas, by developing performance monitoring reports which show our progress, and, even more importantly, reports which highlight areas where increased management attention is required.

We further enhance the process by requiring 100 percent performance appraisals and by ensuring that both plant and corporate managers visit the plants frequently.

Another element of control is oversight.

(Slide.)

MR. MCNEILL: As Mr. Paquette has indicated, we have significantly improved our management oversight of nuclear operations, starting with the Board of Directors and their standing Nuclear Committee. Likewise, we have revitalized our Nuclear Review Board and have restructured and strengthened our quality assurance organization.

(Slide.)

MR. MCNEILL: However, the most important thing we have accomplished in this area is to make a strong commitment, organizational commitment, to effective oversight and to

1 create an environment which is conducive to self-critical
2 analysis. Without these, any oversight can be only marginally
3 effective.

4 (Slide.)

5 MR. MCNEILL: Our Nuclear Review Board Chairman
6 and the General Manager of Quality Assurance report directly
7 to me. The General Manager of Quality Assurance is also held
8 responsible for ensuring that the quality is built into our
9 processes from the beginning and not just inspected in at the
10 end. This places a responsibility for involvement of Quality
11 Assurance up front in program development in all of our
12 activities.

13 Our Nuclear Review Board has been reconstituted to
14 have a full-time chairman and has employed three outside
15 consultants.

16 (Slide.)

17 MR. MCNEILL: It reports directly to me and has
18 been given particular responsibilities for reviewing plant
19 operations, engineering and radiological safety. I have found
20 the Board's reports particularly useful in highlighting
21 issues such as diesel generator fuel tank erosion and
22 emergency cooling tower testing which have been unresolved
23 for several years.

24 In preparation for re-start, they have also
25 provided good insight as to the effectiveness of our internal

1 communications and the organizational response to the many
2 improvements that we have underway.

3 (Slide.)

4 MR. MCNEILL: The quality assurance organization
5 has been restructured by consolidating four separate
6 organizations, each of which was operating under a different
7 program, into one organization. We have brought five new
8 people into the top seven positions in this organization,
9 two of whom were from outside of Philadelphia, thus infusing
10 new ideas and viewpoints into the organization.

11 Additionally, we have added approximately 120 years
12 of outside experience into other various levels of the
13 organization. The quality assurance organization provides
14 independent reports to the Nuclear Review Board, the Nuclear
15 Committee of the Board of Directors and, at the site level,
16 to the site Vice President.

17 The effectiveness of this organization and its
18 respect within the nuclear group is demonstrated by the
19 decreasing trend in outstanding findings and the decreasing
20 trend in the average age of their findings.

21 In addition to these changes, we have also
22 demonstrated our commitment to safety and high standards by
23 instituting a strong drug policy which includes testing of
24 all personnel with unescorted access by November 1st of this
25 year and random screening during the following year. We have

1 terminated the employment of seven individuals who have been
2 identified as drug dealers either on or off our nuclear
3 facilities.

4 The changes within Philadelphia Electric's nuclear
5 group are significant and have produced positive results. We
6 now have the ability to effectively respond to NRC findings
7 and INPO evaluation results but, even more importantly, we
8 have the ability to identify and respond to issues and
9 weaknesses before they are identified by outside agencies.
10 Since excellence is an undefinable goal, we are not satisfied
11 with our current level of performance and we never will be.
12 However, when we have completed the open items which Mr.
13 Smith will discuss we will be ready for re-start and I am
14 confident that the weaknesses identified by the post shutdown
15 analysis have been satisfactorily corrected.

16 This concludes this part of my presentation. I am
17 free for questions.

18 CHAIRMAN ZECH: Thank you. Proceed.

19 MR. PAQUETTE: All right. Mr. Smith will detail
20 specifics concerning the Peach Bottom station.

21 MR. SMITH: Good morning, Mr. Chairman, Commissioners.
22 I am Dickinson Smith. After completing a naval career, I
23 joined Philadelphia Electric in May of 1987, shortly after
24 the shutdown. I came onboard as the Plant Manager and, as
25 Joe has mentioned, with the reorganization of last fall,

1 became the station Vice President.

2 It is my pleasure this morning to talk to you about
3 the overall readiness at the Peach Bottom Atomic Power
4 Station --

5 (Slide.)

6 MR. SMITH: -- in these three areas -- people, plant
7 and programs. I hope to be able to demonstrate to you some
8 of the results of our efforts in this past year.

9 In the area of people, with the reorganization of
10 last fall, the station came under one leadership and I brought
11 in a number of new managers to help run the station. We
12 looked at what was available at Peach Bottom, what was
13 available in other parts of Philadelphia Electric, and what
14 we needed to bring in from outside Philadelphia Electric.

15 Of my managers and supervisors, which are the top
16 two layers, and myself -- of us, 14 people -- seven were
17 brought in from outside Philadelphia Electric. Of those
18 seven, I am the only one without outside nuclear industry
19 experience. The other six people have an average of ten and
20 one-half years of experience in other parts of the industry.

21 (Slide.)

22 MR. SMITH: The other seven individuals leading
23 the station who were with Philadelphia Electric at the time
24 of the shutdown, of those seven only three were at Peach
25 Bottom at the time of the shutdown. The other four were

1 brought in as proven performers from other areas of
2 Philadelphia Electric Company.

3 In addition to bringing in top leadership from
4 outside Philadelphia Electric and from other parts of the
5 nuclear industry, we have hired 19 other professionals at
6 various experience levels to provide outside experience.
7 The average experience of those individuals is seven and one-
8 half years in other parts of the industry. We feel that the
9 infusion of these new managers from outside Philadelphia
10 Electric and from other parts of the industry -- other parts
11 of Philadelphia Electric -- has enhanced the leadership at
12 Peach Bottom. We have embarked upon numerous management
13 training programs and believe that we have enhanced the skills
14 of the managers there.

15 We have opened up lines of communication at the
16 station, partially by bringing everyone under the same
17 organization and under the same management. We have developed
18 an attitude of teamwork and have set out clearly the
19 accountabilities of each of the people. The site meetings
20 that are held under Mr. McNeill's leadership on a monthly
21 basis are critical appraisals of where we stand at the site
22 and where we are going.

23 We have developed a number of newsletters to keep
24 our people informed and I personally run a "Tell it to the
25 Vice President" program where people can bring any subject

1 they want to my attention anonymously. I have received about
2 2,000 questions from the employees at the station.

3 I would like to dwell a little bit on operator
4 readiness.

5 (Slide.)

6 MR. SMITH: I will talk to operator readiness in
7 three areas -- staffing, training and working hour
8 restrictions. Currently at the station we are on six shifts.
9 We intend to be on six shifts for the re-start and for the
10 future. Each of those shifts is led by a Shift Manager.
11 This person is a qualified Senior Reactor Operator who was
12 a Staff Engineer at Peach Bottom at the time of the shutdown.

13 In addition to having an SRO license, he has
14 received extensive management training and was evaluated and
15 selected for this position. In addition to the Shift Manager,
16 on each shift there are two other Senior Reactor Operators
17 who fill the post of Shift Supervisors. Additionally, each
18 shift has three Reactor Operators which are required by
19 technical specifications. Therefore, we are presently manned
20 with one Senior Reactor Operator on each shift more than
21 required by technical specifications.

22 Our goal at Peach Bottom is to also add an
23 additional Reactor Operator to each shift. We will not
24 achieve that goal until late 1989 or early 1990 but the
25 training programs that lead to that are already in place.

1 Having these additional operators will give us the flexibility
2 we seek to control overtime, to provide more off-shift breaks
3 for the operators so that they can leave shift duty for a
4 period of weeks or months, and it will also provide off-shift
5 career opportunities for operators so that once on shift work
6 they can see a future for them getting off shift work as they
7 come up through the levels.

8 We also, with these additional operators, will be
9 able to embark on college programs for our Reactor Operators
10 that we have already scoped out but we are not presently able
11 to use until we have sufficient operators to make them
12 available for these programs.

13 (Slide.)

14 MR. SMITH: As I say, it will probably be early
15 1990 before we achieve these levels.

16 CHAIRMAN ZECH: Are you talking about people to
17 operate both units?

18 MR. SMITH: Yes, sir. Both units, yes, sir.

19 CHAIRMAN ZECH: And, your plans are to have that
20 number of RO's and SRO's that you mentioned in the control
21 room on both units.

22 MR. SMITH: Yes, sir. We have a single control
23 room and on each shift operating the two units would be those
24 numbers -- three SRO's, one of whom is the Shift Manager, and
25 three Reactor Operators.

1 CHAIRMAN ZECH: Well, tell me again, then on total
2 number in the control room, if both reactors were operating
3 at full power, how many RO's and SRO's would you have?

4 MR. SMITH: Three SRO's and three Reactor Operators.
5 One of the SRO's would be the Shift Manager.

6 CHAIRMAN ZECH: Three SRO's and one of them would
7 be the Shift Manager.

8 MR. SMITH: Yes, sir.

9 CHAIRMAN ZECH: And three RO's.

10 MR. SMITH: Yes, one on unit two, one on unit three,
11 and one we call the Chief Operator -- the required number by
12 technical specifications.

13 CHAIRMAN ZECH: Okay. Thank you. And six shifts.

14 MR. SMITH: Six shifts.

15 CHAIRMAN ZECH: All right.

16 MR. SMITH: In the area of operator training, we
17 have done extensive training since the shutdown in the
18 simulator.

19 (Slide.)

20 MR. SMITH: We began in the simulator at the
21 Limerick Generating Station late last year and early this
22 year and then shifted to simulator training in a Peach Bottom
23 specific simulator which was under contract and is being
24 finished at the Singer plant in Columbia, Maryland. That is
25 not yet totally completed and is not in place at Peach Bottom

1 but we are able to do training on the factory floor. We
2 are presently in the fourth cycle of simulator training, the
3 third cycle in our own Peach Bottom specific simulator. That
4 last cycle of training began this week and will continue for
5 the next several weeks as we go through each of the shifts
6 to ensure that the people are in fact ready for the re-start.

7 In addition to simulator training, we have done
8 required professional training in the classroom and all of
9 our operators at Peach Bottom have gone through either
10 initial certification or recertification boards between the
11 time of shutdown and the present.

12 In addition to the professional licensed type of
13 training, we have also done personal effectiveness training.
14 This was training to enhance the operator's ability to deal
15 with other individuals, to deal with difficult situations, to
16 improve his communication skills. This training was
17 conducted for all licensed Reactor Operators and Senior
18 Reactor Operators who are presently on the shifts and will be
19 done for those that come on the shifts in the future. It
20 was also conducted for all of the Shift Managers and for the
21 operations leadership.

22 After we had conducted this personal effectiveness
23 training, we formed the six shifts into shift teams and began
24 team training. One of the cycles in the simulator that I
25 mentioned was devoted to this team-building, communications,

1 and working together. In addition to that, in each simulator
2 cycle we are evaluating their teamwork ability and emphasizing
3 a teamwork evaluation one day of the cycle.

4 The training that I have described is the training
5 of the present operators. Additionally, we have five
6 licensed Reactor Operators who are in the final stages of
7 training before going into the control room. They passed the
8 NRC examination this July and are doing some last minute
9 training, including personal effectiveness training, this
10 fall and will come on watch before we re-start to gain the
11 experience in watching the plant go up to power. They will
12 of course only have restricted licenses to cold operations
13 and will have to gain experience in the operating plant after
14 we get back to power.

15 Beyond that, we have put 16 non-licensed operators
16 into a pre-licensing course which will take approximately two
17 months. On the completion of that course, we have another
18 16 non-licensed operators who will go into a pre-licensing
19 course for, again, a period of two months. Those who meet
20 our standards will take the NRC theory examination schedule
21 for next February and, passing that, we will put about 16
22 into the complete licensing course leading to licenses in
23 late 1989 or early 1990. It is from this group that we will
24 achieve the necessary numbers to have the flexibility that we
25 are seeking.

1 Looking further downstream to the future, we have
2 hired 35 new helpers into the operations section. Of these
3 35, 32 are former Navy enlisted men that have a minimum of
4 six years experience in the Navy nuclear power program. The
5 other three have at least two years of college experience
6 before being hired as helpers.

7 In addition to the training shown on this slide,
8 we have put the next generation of shift managers into
9 training. We have seven carefully selected staff engineers
10 in SRO training at the present time and we will be developing
11 from among that group our next set of Shift Managers. We
12 also have plans to begin a Senior Reactor Operator license
13 class for some present Reactor Operators beginning early in
14 1989. That again, by late 1989/early 1990, will give us
15 flexibility of Senior Reactor Operators.

16 (Slide.)

17 MR. SMITH: Finally, in the area of operator working
18 hour restrictions, we have recently submitted to the NRC a
19 proposed technical specification amendment which affects the
20 operator overtime hours, as well as overtime hours of all
21 people involved on safety-related equipment. This technical
22 specification amendment is based on the proposed policy
23 statement by the NRC and, as far as I know, we are the first
24 utility to embrace the principles of that policy statement.

25 The proposed amendment has short and long-term

1 restrictions, hours allowed to work in one day as well as
2 hours allowed to work over the course of a year with various
3 intermediate points.

4 We are developing the administrative controls and
5 they will be in place prior to re-start.

6 (Slide.)

7 MR. SMITH: Shifting from people to plant, I will
8 talk briefly about the plant readiness in the areas of
9 corrective and preventive maintenance, modifications, and
10 how we are doing in cleaning up the plant. First off, the
11 work orders. Would you put up the work order slide, please.

12 (Slide.)

13 MR. SMITH: In the area of work orders, we have
14 since the refueling outage which began shortly before the
15 shutdown order, we have completed over 14,000 separate work
16 items at the station. We are presently working on just
17 slightly over 1,000 work orders. These consist of preventive
18 maintenance items, approximately 250 preventive maintenance
19 items, slightly over 200 items relating to modifications that
20 we intend to complete prior to re-start, leaving about 600
21 corrective maintenance items that we anticipate accomplishing
22 prior to re-start.

23 Now, I'm not saying by that, Mr. Chairman, that
24 each and every one of these will be done but we anticipate
25 getting this down to a very small number and to be able to

1 justify why those are not necessary for re-start when we get
2 to that point.

3 (Slide.)

4 MR. SMITH: The other preventive maintenance -- we
5 had a backlog of overdue preventive maintenance at the station
6 that went back unfortunately for a number of years. The
7 standpipes on this graph show a great increase from last
8 December to early this year as we really got our hands around
9 the magnitude of the problem and reviewed all of the
10 requirements of the vendors manuals and other documentation
11 to determine what preventive maintenance was actually
12 required.

13 Our workoff rate has been very marked. The 262
14 items shown are those items which are either presently due
15 or overdue or will come due before the 30th of November of
16 this year. We would anticipate by re-start that there will
17 be no overdue preventive maintenance items on unit two and
18 common equipment. Let me add, there will be some that are
19 due but no overdue items.

20 (Slide.)

21 MR. SMITH: In the area of modifications, we are
22 tracking down to zero on the modifications. There are 28
23 mods that are now totally finished but each and every one of
24 these is in stages of installation and by the end of November
25 these should be totally closed out.

(Slide.)

MR. SMITH: We think we have made great progress in decontamination and cleaning up of the station. When we met with you last September, Mr. Russell made the comment that we were one of the most contaminated plants in the region. I'm not sure if he said one of them or the most contaminated plant in the region. But we were not proud of our surface area contamination and we think we have made great progress in that area.

Approximately 33 percent of the available surface area was contaminated when we got heavily into this program. We are below the industry average for boiling water reactors and we anticipate achieving our goal of ten percent somewhere near the end of the year. The difficulty of course is that as you get closer and closer you are cleaning up spots that are harder and harder to clean up. But we have made a significant amount of progress in this area.

(Slide.)

MR. SMITH: We also embarked two years ago on a cleaning and painting program that we called the detailed plant cleaning program where we paint the floors and the walls and all of the equipment. We are over 80 percent completed with that program and will continue on until its done but then it will be time to come back and start over in some of the areas. So, this will be an ongoing program to keep the

1 plant in the condition it should be. Now, this painting
2 progress is units two and three and the emphasis has been on
3 unit two. So, unit two is higher than the 80 percent and
4 unit three is slightly behind.

5 (Slide.)

6 MR. SMITH: Shifting then to the area of programs,
7 there are many, many programs that we looked at and tried to
8 improve our performance in since the shutdown. I have listed
9 only a few of them here. Just a word or two about several of
10 them.

11 In the emergency preparedness area, we have made a
12 number of changes. We brought the site emergency preparedness
13 under my control. Because of the numbers of new managers, we
14 have had to do a lot of retraining of people in various
15 positions. We upgraded our procedures and improved the
16 workoff rate on items that had been backlogged for correction.

17 The culmination of this effort was in the emergency
18 preparedness drill of last week which was a successful drill
19 and was announced by the NRC in the exit interview as our
20 having demonstrated performance which was adequate to protect
21 the health and safety of the public. So, we feel that program
22 is in good shape.

23 In the area of procedures, we reviewed all the
24 classes of procedures at the station to determine which ones
25 individually or as a class should be revised prior to the

1 re-start and which ones should be revised in the longer term
2 or which ones were fully adequate as they were. That effort
3 has been completed. Those procedures we need for the re-start
4 are either completed and in place or are very nearly completed
5 and will be easily in place shortly.

6 We have also set up a good document control system
7 such that procedures changes can be initiated easily by the
8 people in the field and actions taken on them in a prompt
9 manner. The changes, when recognized, are put into the
10 procedures and those are delivered to the operators so that
11 they have them available, and also they have the necessary
12 drawings to do the operation of the plant.

13 The operating experience assessment program was one
14 in which we were criticized by the Institute of Nuclear
15 Power Operations and we recognize that we did not have a good
16 strong program at the station. It was primarily being run
17 out of the corporate offices and we didn't have ownership of
18 it out at the stations. We have turned that around. We are
19 running a good program now but it is so new that we really
20 can't evaluate how good it is. It has only recently been put
21 into place with the controls that presently exist. That was
22 the comment of the Institute when they were in recently, that
23 it looked okay but we want to see it for a while.

24 The commitment tracking program is a similar
25 program. We had a commitment tracking system previously but

1 the people at the station did not feel ownership of the
2 commitments and it was not an easily retrievable system. We
3 have made major changes to that system. The new commitments
4 that have gone into the present program are recognized by us
5 at the station as our responsibility and we are working on
6 those commitments. We are still working on the backlog to
7 bring that up-to-date.

8 In the configuration management area, we have
9 embarked on a two-pronged approach -- one the short-term and
10 one the long-term. We feel that in the short-term, we are
11 very close to demonstrating that we do know the configuration
12 of the plant and we do understand what is out there. The
13 drawings are in place and the procedures are correct.

14 As a long-term program over the course of the next
15 two or three years, we will be doing a major effort to
16 reconstitute the design basis and do other things necessary
17 to get a top-of-the-industry configuration management program.

18 The other three areas on this slide I want to talk
19 about separately. Security is an area where we are not yet
20 ready for re-start. We are not yet at the stage we expect to
21 be or want to be. We have had a history at Peach Bottom of
22 poor SALP ratings in security, numerous violations in this
23 area, and poor morale among the guard force. We were making
24 some improvements but slow improvements and this spring
25 recognized with a detailed self-assessment by our own NQA

1 organization that we just were not making the progress that
2 we should. We brought in a new manager at the station and
3 we brought in a new contractor to run the security for us.

4 Presently, we have much improved our management
5 involvement and by that I mean our Philadelphia Electric
6 Company management involvement. Again, with the reorganization,
7 security came under my control, rather than being controlled
8 from the corporate offices. We changed the leader of the
9 security force at the station. We brought onboard shift
10 security assistants so that 24 hours a day there is a
11 Philadelphia Electric person in charge at the station. We
12 have much closer working relationships with the new contractor
13 than we had with the former contractor. The transition to
14 the new contractor occurred at the end of August. This
15 contractor runs our security organization at Limerick which
16 has been rated SALP-1 and is SALP-1 at some other plants
17 around the company. They were selected primarily based on
18 performance.

19 We have improved the status of our equipment and
20 systems at the station ranging from flashlight batteries to
21 the perimeter intrusion detection system. So, we have good
22 solid systems at the present time.

23 We have upgraded the training not only for the
24 guard force but also for the general population and general
25 employee training to enhance the understanding of the role

1 of the guards and the inter-relationships that are necessary
2 for this to work. We feel that we are on the way. There are
3 a few of these enhancements that are still being put into
4 place this month. We feel that we will have a solid
5 organization by the end of October.

6 In the area of radwaste, I highlight this area
7 because we had allowed a lot of radwaste to collect at the
8 station. We made a decision last summer to start shipping
9 radwaste within our barrel allotments and move it out of the
10 power block into our low level radwaste storage facility or
11 preferably to get it off the station. At that time we set as
12 a goal for dry active waste at the station, no more than ten
13 percent of the capacity of the low level waste storage
14 facility. As you can see, we are way below that goal and we
15 have at the station now about four percent of the capacity
16 of the low level radwaste facility.

17 COMMISSIONER CARR: What does that "DAW" mean
18 there?

19 MR. SMITH: Dry active waste.

20 COMMISSIONER CARR: All right.

21 MR. SMITH: Liquid wastes have shown a similar
22 decline, Commissioner. We had approximately 700 barrels of
23 liquid radioactive waste, some of which was high level
24 radwaste and some of which we didn't know the contents. We
25 didn't know what the isotopes were, et cetera. It makes it

1 very difficult to ship it and very costly to ship it. That
2 number of barrels is down to about 150 now which is about the
3 number that we would have on hand all the time as inflow and
4 outflow. We have also taken the liquid waste way down.

5 (Slide.)

6 MR. SMITH: In the area of radiation protection,
7 this is another area that we were not up to industry standards
8 at the time of the shutdown. Since the shutdown, we think we
9 have made marked steps in reducing station radiation exposure.
10 We have instituted 100 percent dose accountability. That is,
11 if you go into the power block, you have to record your entry
12 into the power block, and we keep track of the dose that you
13 received in the power block. That did not occur previously.

14 The reportable uptakes have significantly decreased
15 as shown on this next chart.

16 (Slide.)

17 MR. SMITH: Positive whole body counts which are a
18 measure of the uptakes have decreased from 14 in 1986 to
19 three in 1987 and so far this year we have had no positive
20 whole body counts. I am told the industry average is about
21 two whole body counts.

22 Finally, I want to talk about the pipe replacement
23 that was conducted on unit three at Peach Bottom.

24 (Slide.)

25 MR. SMITH: I have shown on this chart a number of

1 similar pipe replacements that have been conducted throughout
2 the country. They are not in chronological order. They are
3 in decreasing order of personnel exposure. You can see on
4 the left, the highest exposure recorded for similar activity
5 was at Peach Bottom unit two in 1984. The lowest is the
6 Peach Bottom unit three which was just completed. The level
7 of effort at Peach Bottom unit three was greater than the
8 level of effort shown on any of these other standpipes, and
9 the exposure was of course the least ever achieved in the
10 industry to this date. This has been cited by the Institute
11 and by your own inspectors as a very positive achievement.

12 (Slide.)

13 MR. SMITH: In summation, Mr. Chairman and
14 Commissioners, in the area of people, programs and plants,
15 we are not yet ready to start up Peach Bottom but we are
16 coming close. People -- we need to finish the cycle of
17 simulator training that we are going through now to assure
18 ourselves that our Reactor Operators are fully ready to run
19 an operating plant.

20 In the area of programs, we need to improve the
21 performance of our security area and have that pass our own
22 self-evaluation before we are satisfied with security. And,
23 we have developed a master open items list in all other
24 program areas such as open non-conformance reports, NQA
25 deficiencies, et cetera, that we are tracking down to zero

1 before re-start.

2 In the area of the plant, we think the plant is
3 ready for re-start with the exception of that approximately
4 1,000 work orders that we will continue to work on in the
5 area of modifications, preventive maintenance and corrective
6 maintenance. We will of course be operable in the tech spec
7 definitions of all systems prior to re-start.

8 That concludes my comments subject to your
9 questions. If not, we will go back to Mr. McNeill.

10 CHAIRMAN ZECH: Thank you very much.

11 MR. MCNEILL: The determination of our readiness
12 for re-start, as subject to completion of the items that Mr.
13 Smith has noted, was made upon the recommendation of a
14 Re-start Review Panel consisting of senior Philadelphia
15 Electric personnel not associated with Peach Bottom and
16 several consultants of national stature as shown on this
17 slide.

18 (Slide.)

19 MR. MCNEILL: The assessment process was conducted
20 during three sessions of two days each with most functional
21 managers appearing at all three sessions. These sessions
22 combined with in-plant observations by the re-start panel
23 members resulted in a recommendation for re-start. The panel
24 reviewed the 19 functional areas shown in this slide.

25 (Slide.)

1 MR. MCNEILL: These areas were selected based not
2 only upon their relation to safety but also because in some
3 we had identified problems during the shutdown period. In
4 each functional area, the responsible manager was required
5 to identify the set of issues which the function had addressed
6 during the shutdown and to verify that list that the list was
7 complete. This verification was accomplished by reviewing
8 each of the items noted in the slide.

9 In each area, the manager was required to decide the
10 various corrective action programs that had been undertaken
11 either as a result of the formal re-start program or otherwise
12 and then to describe the results of the action plans and how
13 they had been verified.

14 Mr. Smith has shown you some of the information
15 that demonstrates the types and magnitudes of improvement
16 which were demonstrated. The re-start panel members by their
17 own observations verified many of the results. The
18 sufficiency of the results were substantiated by observation
19 as in the case of plant cleanliness or by comparison with
20 industry values in the example of radwaste accumulation.
21 Analytical techniques were used to confirm several
22 configuration management deficiencies that had been found.

23 Finally, the panel required that each member
24 demonstrate the permanency of the improvements. Since the
25 many changes that were made would not lend themselves to one

1 common method of ensuring permanence, broad latitude was
2 accepted.

3 (Slide.)

4 MR. MCNEILL: Some of the types of issues that were
5 accepted are shown here -- proceduralization, continued
6 management support. They were also required to highlight
7 areas of continuing improvement where they had long-term
8 programs such as the one that was described by Mr. Smith for
9 configuration management where we are going to have a design
10 basis documentation revision program.

11 I am also pleased to report that on September 30th
12 we completed the last of the 138 action items described in
13 our formal re-start plan.

14 (Slide.)

15 MR. MCNEILL: During the last several months we
16 have dealt closely with the State of Maryland and the
17 Commonwealth of Pennsylvania to resolve comments which they
18 had submitted at the invitation of the NRC with respect to
19 our re-start plan. We reached agreement with the State of
20 Maryland and are continuing negotiations with the
21 commonwealth.

22 In addition, representatives of both states have
23 exercised full access to the Peach Bottom facility and have
24 kept themselves informed of our progress and have participated
25 with your inspectors in some observations in the plant.

1 Our self-assessment will be confirmed by an INPO evaluation
2 which is currently in progress, and we expect an NRC
3 assessment to follow. We anticipate that we will be ready
4 for the NRC assessment mid-November.

5 I believe that Mr. Paquette has some closing
6 comments and remarks.

7 MR. PAQUETTE: I would just like to summarize,
8 Commissioners, by saying that I personally am very proud of
9 the accomplishments of the team at Philadelphia Electric and
10 we are proud of what has been accomplished at the plant. I
11 would like to extend an invitation to all of you and your
12 staffs to pay another visit to the plant, if your schedule
13 will permit it, before we come back and ask for re-start
14 permission.

15 We also at this time would be very happy to answer
16 any questions that you have.

17 CHAIRMAN ZECH: All right. Thank you very much.
18 Any questions from my fellow Commissioners. Commissioner
19 Carr.

20 COMMISSIONER CARR: No.

21 CHAIRMAN ZECH: Commissioner Rogers.

22 COMMISSIONER ROGERS: No.

23 CHAIRMAN ZECH: You say your anticipated re-start
24 at this time is when?

25 MR. MCNEILL: In the normal progression of events,

1 we would look forward to actual re-start mid to late December,
2 if we follow in the normal progression of events from a team
3 inspection by the region in mid November.

4 CHAIRMAN ZECH: Late December.

5 MR. MCNEILL: Yes.

6 CHAIRMAN ZECH: All right. Let me just make a
7 couple comments then before we ask the Staff to come forward.
8 In my review of all of the actions that led to the shutdown,
9 specifically the operators and then ultimately the management
10 situation that we were concerned about, I came up with a
11 couple statements that I want to give to you here just to
12 make sure that you understand at least my feelings on the
13 importance of operating all of our power plants safely.

14 First of all, concerning the operators themselves,
15 I believe that the Peach Bottom operators should be reminded
16 that they hold a license from the United States government
17 which confers upon them the special trust and confidence that
18 the American people place in them for the safe operation of
19 nuclear power facilities.

20 This obligation, in my view, places the operators
21 in the position where their performance is expected to be
22 above reproach. Now, this applies, as far as I am concerned,
23 not only to the Peach Bottom operators but to all operators
24 in our country.

25 As far as the management is concerned, and I know

1 we don't have to review all that because you have made
2 significant management changes, most impressive changes. You
3 have taken obviously some very significant actions. But as
4 far as the enforcement action was concerned and management is
5 concerned at Peach Bottom, I'll try to summarize very briefly
6 my feeling in that regard in this way.

7 The only reason that I was able to approve the
8 enforcement action that we did take without insisting on the
9 revoking of individual operator license permanently was
10 because of the poor performance of senior utility management
11 at Peach Bottom who, at least in my view, either condoned
12 this inattentive behavior or were unaware of it. Either is
13 acceptable.

14 Management's failure clearly contributed to and
15 exacerbated the situation, in my view. That is behind us now
16 I hope. That is what you are trying to do, I know. But I
17 think those are important lessons for all to be aware of --
18 not just Peach Bottom but all nuclear facilities. We expect
19 the operators to operate the plants above reproach. We
20 expect management to be aware of what's going on, to be
21 concerned about what's going on, to be committed to quality
22 and to excellence, and to demand safe performance.

23 Unless there are other comments from my fellow
24 Commissioners --

25 (No response.)

1 CHAIRMAN ZECH: -- I would like to thank you for
2 your presentation, all of you, Mr. Paquette, you and your
3 colleagues. It is clear from your standpoint you have made
4 significant progress towards making the improvements that are
5 clearly necessary at Peach Bottom.

6 We do know, from what you tell us this morning,
7 that there is more to be done but I believe your focus on
8 people and on people performing in such a way that you should
9 expect a commitment to excellence, that those are the things
10 that certainly should encourage you and us that you are,
11 indeed, making progress at Peach Bottom.

12 I would only submit that you continue to do what
13 you are doing as far as leadership and the people programs
14 are concerned. Changing of culture and changing attitudes is
15 extremely difficult but also very important. That of course
16 leads to, at least in my view, the technical safety changes
17 that are needed to ensure the public health and safety will
18 be protected.

19 We will look forward to your continued progress and
20 to seeing you again before making any re-start decision.
21 Thank you.

22 MR. PAQUETTE: Thank you very much.

23 MR. MCNEILL: Thank you very much.

24 CHAIRMAN ZECH: Thank you. The Staff may come
25 forward, please.

(Pause.)

CHAIRMAN ZECH: Mr. Taylor, you may proceed.

MR. TAYLOR: Good morning. With me at the table today from the Office of Nuclear Reactor Regulation are Tom Murley and Bruce Boger, and on my left from Region 1 is our Regional Administrator Bill Russell and Bill Kane.

I would like to give you an overview of the Staff's work at Peach Bottom. I would like to make one or two points. First, there has been considerable effort placed on the Staff's overview of Peach Bottom since the shutdown and, as we have with some other stations, the Staff has set up a special panel and the panel is represented by Bill Kane and Bruce Boger. These are senior managers who are providing special oversight of the work at Peach Bottom by the Staff and coordination of that work.

I would also like to emphasize that in the past year -- over this year -- we expect to expend somewhere in the order of about 9,000 direct inspection manhours in overview of the Peach Bottom work and recovery. This is somewhere on the order of four times what we might normally expect at a station of this size.

I emphasize this because the Staff since the shutdown has been deeply involved in overseeing the company's work and in reviewing the progress of their recovery and re-start plan.

1 I will now ask Doctor Murley to start with his
2 comments.

3 CHAIRMAN ZECH: Thank you very much. You may
4 proceed.

5 MR. MURLEY: Thank you, Mr. Chairman. We have
6 briefed the Commission on a couple of occasions over the past
7 year and a half on Peach Bottom. The problems that led us to
8 this situation are well known, so there is no need to go
9 through those here today.

10 Philadelphia Electric we believe has now gotten
11 through the first two phases that we see develop as a pattern
12 in these cases. The first phase is a recognition and
13 acknowledgement of their problems. The second phase is
14 analysis of their operations and their problems and making
15 the necessary fundamental changes in their organization.

16 The Staff believes that the management changes
17 that Philadelphia Electric has made have been substantial
18 improvements. In particular, we have worked several years
19 and have several years experience working with Corbin McNeill
20 and with John Frantz, the Plant Manager, who was not here
21 today but who was the former Plant Manager at Limerick. We
22 have confidence that they can bring good operations to Peach
23 Bottom.

24 Philadelphia Electric is now well into the third
25 phase that we see which is implementing the improvements and

1 developing a smooth operating team at the site. We see
2 attitude changes throughout the operations but there is still
3 some important work that needs to be done before they are
4 ready to resume operations.

5 In addition, the NRC Staff is going to have to make
6 a thorough assessment and come to our own conclusions on the
7 readiness to resume operators.

8 Bill Russell will describe those activities.

9 CHAIRMAN ZECH: Thank you very much. You may
10 proceed.

11 MR. RUSSELL: May I have the slide entitled
12 "Restart Criteria" please?

13 (Slide.)

14 MR. RUSSELL: Mr. Chairman, we have tried to
15 summarize here in one slide correspondence and responses
16 that have gone to congressional and the states in regarding
17 the criteria that the Staff will use in judging their
18 readiness for re-start.

19 The first two bullits, the licensee identification
20 of root causes and the licensee corrective actions which
21 address those root causes, are in the main complete. The
22 full root causes of the shutdown were identified in the
23 licensee's re-start plan. They were a lack of leadership
24 and management skills at the plant, of slowness in developing
25 replacement operators which you have just heard about, a

1 station culture for which the operators appear to be in
2 control, rather than management in control of activities,
3 and the failure by the corporation to recognize the problems
4 which existed and to take timely action.

5 Now, those root causes are being addressed in a
6 comprehensive re-start plan which the Staff has under review
7 and subject to receiving some written confirmation of
8 information which has been verbally reported to the Staff,
9 we expect to issue a safety evaluation approving that re-start
10 plan in mid-October.

11 The key elements which have to be demonstrated to
12 the Staff to go beyond the plan -- the actual effectiveness
13 of operation -- relate to conclusions regarding the operator's
14 readiness to operate the plant safely. We will be doing
15 additional evaluations of the simulator training which the
16 company has described and will necessarily reach conclusions
17 on operator performance and ability to effectively operate
18 the plant.

19 Now, we are looking for a stable and effective
20 licensee management and staff, stable in that the programs
21 that they have put in place are effectively being implemented
22 and that they have the ability to assess their own performance
23 and take appropriate corrective action.

24 We are going to be looking for demonstrated
25 improvement in the areas which were rated as unsatisfactory

1 in the last SALP. By unsatisfactory, I mean that the
2 performance was such that we did not rate it as a category
3 three but it was concluded to be in fact lower than that.
4 It was not rated. Now, these are the areas of operations,
5 assurance of quality and training. And, we must assure
6 ourselves that the facility is physically ready for re-start.
7 That is that the equipment is in conformance with the required
8 technical specifications and that the other material
9 deficiencies which the company has described have in fact
10 been corrected and the plant is physically ready.

11 We do expect to complete a systematic assessment of
12 licensee performance and I do anticipate that we will be
13 issuing that report next week. You heard the company describe
14 their concerns in security. That is also a conclusion
15 preliminarily of the SALP Board. That area has degraded and
16 will be so reflected in the SALP report. We do expect that
17 that area will be improved. It does not appear at this point
18 to be on a controlling path. The issues that are necessary
19 are well defined and with the new security contractor and the
20 emphasis that the company is now placing on security, we
21 expect that that can be resolved between now and the time
22 that the plant is estimating the re-start to occur.

23 I must admit the overall schedule described by the
24 company may be somewhat optimistic. We are looking at a team
25 inspection on the order of two to three weeks. If that starts

1 in mid-November, it takes time for us to evaluate those
2 results and to bring in a recommendation to the Commission.
3 Based upon the experience with other facilities, that may be
4 more on the order of six weeks, rather than the few weeks the
5 company described.

6 We will not bring that recommendation until such
7 time as we are assured that the company and the facility is
8 ready to operate.

9 I would like to have Mr. Kane, who is the Chairman
10 of the Re-start Panel, address the major Staff activities
11 that need to be accomplished between now and the time we will
12 be prepared to come back to you with a re-start recommendation.

13 CHAIRMAN ZECH: Fine. You may proceed.

14 MR. KANE: Could I have the next slide, please?

15 (Slide.)

16 MR. KANE: As Bill said, the way that we have
17 managed the review of the re-start of Peach Bottom is through
18 the Re-start Assessment Panel. I would like to just at this
19 point acknowledge the other members of that panel. There is
20 Mr. Boger of course, Mr. Regan of NRR, the Branch Chief, Mr.
21 Wenzinger, Mr. Gallo and Mr. Bellamy, Branch Chiefs in Region
22 1, and Mr. Linville, the Section Chief in my division. Others
23 who are principal contributors to that of course, the senior
24 resident from the site, Tom Johnson, and the Project Manager,
25 Bob Martin. So, it was through this process that we have been

1 able to focus and control the myriad of activities that are
2 involved with a major re-start such as this.

3 What we do as a panel is to provide an overall
4 focus for the control of activities and the assignment of
5 inspection resources to assure that the proper priorities are
6 achieved.

7 I would like to touch on the safety evaluation
8 report at this time. As Bill mentioned, that has been
9 substantially prepared and is in the final editing stage and
10 we are awaiting some additional correspondence from the
11 utility in order to finalize that report, and we would expect
12 to issue that on or about mid-month. The purpose of that
13 report I would point out is to assess the quality and the
14 timing and the scope of the commitments to the individual
15 actions that are in response to the root causes. It does not
16 in any way make a determination as to the adequacy of how
17 those actions are being implemented. That is a very important
18 process that follows. So, if you can understand the
19 distinction between that activity and what that safety
20 evaluation report will represent.

21 The next major activities that have been ongoing
22 and will continue are the inspections and licensing actions.
23 There certainly have been a large number of inspections
24 conducted to date and very important inspections. One of the
25 most important I would remind the Commission is the day to

1 day evaluation by the resident inspectors of the activities
2 at the site. It's the principal input into how we manage
3 the inspection program at that site and direct other
4 resources.

5 CHAIRMAN ZECH: Wasn't there a recent maintenance
6 team inspection?

7 MR. KANE: Yes, sir. I wanted to go into some of
8 these other more important inspections.

9 CHAIRMAN ZECH: Tell us a little bit about that, if
10 you would.

11 MR. KANE: Certainly. We have conducted major
12 inspection of the emergency operating procedures. There has
13 been a comprehensive maintenance inspection. Peach Bottom
14 was one of the pilot plants for that and the results of that
15 were very good. There have been inspections of simulator
16 team training, of the operators as a team. There has been
17 the recent emergency exercise that was conducted prior to and
18 very early in the process, major inspection of the
19 rehabilitation program, the operators, and its effectiveness.

20 Those are some of the inspections. There are many
21 others that have taken place. But those are the kinds of
22 major activities that we have at this point. There are
23 several licensing actions that must be completed prior to
24 re-start. Those are hardware issues related to the minimum
25 source range, count rate, fire protection and degraded

1 voltage, all of which appear to be manageable prior to
2 re-start.

3 CHAIRMAN ZECH: Are you satisfied at this stage
4 concerning the overall material condition of the plant, unit
5 two in particular?

6 MR. KANE: I would say yes but of course we have
7 got a major inspection coming up which I will get to which
8 that will be one of the major components of that inspection.

9 CHAIRMAN ZECH: Then you will make a judgment at
10 that time.

11 MR. KANE: Yes.

12 CHAIRMAN ZECH: All right.

13 MR. KANE: There have been a number of public
14 meetings. I would say that we have I think been very active
15 in seeking out public comment on the adequacy of the re-start
16 plan. There were three public meetings held after the
17 submittal of the first plan -- one in Maryland and two in
18 Pennsylvania. The utility of course had to make a major
19 modification to that plan and, again, there were public
20 meetings held -- two in Pennsylvania and one in the State of
21 Maryland -- to receive public comments on that revised plan.

22 Those public comments have all been assessed and
23 will be evaluated in an appendix to the safety evaluation
24 that we will be issuing shortly. All of the public comments
25 will be addressed in that plan or in that safety evaluation

1 report.

2 I would like to go into state involvement. There
3 has been extensive state involvement by both states. The
4 comments from the State of Pennsylvania and the State of
5 Maryland have been forwarded to the Philadelphia Electric
6 Company. They have responded to the Maryland comments. As
7 was discussed earlier, Philadelphia Electric Company and
8 Pennsylvania are in the process of negotiations.

9 The issues that were raised by the states which are
10 relevant to the re-start are of course addressed in the safety
11 evaluation report. Both states have been very active in
12 attending all of our public meetings that we have held. I
13 think without fail the states have attended each of those
14 meetings. There has been involvement at the entrance and
15 exit meetings for a number of inspections and observation of
16 one of the major inspections which involved the simulator
17 examinations by the State of Pennsylvania.

18 We have also invited the states to several of our
19 Re-start Panel deliberations following meetings with the
20 utilities. So, there has been extensive involvement
21 throughout with the states.

22 The next slide, if I could have it please, will
23 deal with the forthcoming actions and, hopefully, will answer
24 some of the questions that you have raised.

25 (Slide.)

1 MR. KANE: The Philadelphia Electric Company
2 self-assessment which has been described, our review of that
3 self-assessment would be a major factor in our assessment of
4 the ability of the company to identify the problems and
5 assess those problems and make a judgment with respect to
6 their ability to go forward and operate the plant. We will
7 of course, following their deliberation and notification, we
8 will conduct our own self-assessment process or assessment
9 process, which I will get into.

10 That will be in the form of an integrated team
11 inspection which is an inspection that is called integrated
12 because we look at really all of the functional areas. We
13 will look at operations. We will look at maintenance. We
14 will look at radiological controls, security, engineering,
15 and really the inner-relationships of all of these functions.

16 Principal factors that we would look to in these
17 inspections are the horizontal and vertical communications
18 within the organization and the effectiveness. We would look
19 at certainly the teamwork of the organization, the attitudes.
20 We would look at the use of procedures. We would look at the
21 way in which they prioritize work. We would also look at the
22 status of equipment to confirm the overall readiness of the
23 plants to operate.

24 It is of course an inspection in which we will have
25 to be able to forecast from a plant that is shutdown. In

1 looking at the way in which the organization is functioning,
2 we will have to make a judgment from this inspection about
3 what we see and the ability of the company to operate that
4 plant at power.

5 So, in a sense there are certain things that you
6 simply can't observe with a shutdown plant and we have to
7 make some judgments about that.

8 The next major activity that has taken place and
9 will be issued shortly -- again, about mid-month -- will be
10 the SALP report. That again is an assessment of the
11 organization at Peach Bottom during the shutdown period.
12 Necessarily that looks back in time but it is important in
13 terms of understanding again how the organization has
14 progressed from the time it was shutdown, and get an
15 understanding of these areas that were rated unacceptable in
16 the past.

17 I would note just for the record the training area
18 was not evaluated by the previous SALP Board. Operations and
19 assurance of quality areas were rated unacceptable. The area
20 of training was one in which we did not have sufficient
21 information at the time in order to make a determination
22 because we did not understand at the time we issued that
23 SALP report the relationship of training to what took place.
24 But, in any event, there will be an update in all those
25 functional areas. That of course will be followed by a

1 management meeting with the utility.

2 The importance of the SALP report, in terms of
3 looking back in time, is that it establishes a base line from
4 which we have to move forward in time and, with this, it
5 establishes a base line for this integrated team inspection.
6 The integrated team inspection again, as you will recall
7 earlier, I pointed out that we are looking at all these
8 functional areas again. So, the areas of weakness, concern,
9 identified within the SALP will be a principal focus in this
10 integrated team inspection to really update where the
11 organization stands at the time of the inspection.

12 The principal inputs of course to a re-start
13 recommendation to the Commission are the safety evaluation
14 report which again is an assessment of the plan, the SALP
15 which is an assessment of the previous operation of the
16 facility for the last 12 months or so, and then the integrated
17 team inspection which is to really tell us are the safety
18 evaluation commitments in fact being implemented effectively
19 and in fact, in going back and looking and updating the SALP
20 functional areas, are they improving?

21 Those then will be the major inputs to a re-start
22 determination.

23 I would like to also point out in the next bullit,
24 the ACRS briefing, we have of course on the Pilgrim plant,
25 we have interfaced with the ACRS. They have held a

1 subcommittee meeting at the site and a full committee meeting.
2 We would expect to follow the same process on Pilgrim, and
3 we have discussions ongoing with the ACRS to best determine
4 at what point they wish to hold the subcommittee meeting and
5 then follow it by the full committee meeting which I would
6 anticipate based on the schedule would be maybe in the
7 December timeframe.

8 MR. TAYLOR: Bill, correction. You mean follow on
9 Peach Bottom as you did on Pilgrim.

10 MR. KANE: Peach Bottom.

11 MR. TAYLOR: You said on Pilgrim.

12 MR. KANE: Oh, I'm sorry. Yes, we would follow a
13 similar process here at Peach Bottom as we did at Pilgrim.

14 CHAIRMAN ZECH: All right. Thank you.

15 MR. KANE: And, then the Commission briefing to be
16 determined really as a result of all of these activities --
17 the re-start recommendation, the results of the ACRS input.
18 Following all of this, if we come to the Commission with a
19 recommendation that the Commission believes that the plant
20 is acceptable for re-start, we would have an expanded power
21 ascension program monitoring by the region. It would be
22 patterned very close to the one at TMI which I was responsible
23 for in which we would have an opportunity to really observe
24 all aspects of the operating plant. This is important
25 because the plant is operating obviously at this time. We

1 would -- certainly during this period there would be an
2 opportunity for retraining of the operators and a conversion
3 of cold licenses. Our inspection would include -- certainly
4 a major component of it would be around-the-clock observation
5 of shift operations, and there would be NRC hold points within
6 the power ascension program at several levels so that we
7 would have an opportunity to review with the company their
8 assessment of operations up to that point and our assessment
9 of operations and then see what else needed to be done if
10 anything prior to going to the next power level.

11 I would point out that we are still reviewing the
12 power ascension program with the utility and have not
13 approved it as of this time.

14 Those are some of the actions, major actions, that
15 would take place. That completes our presentation.

16 CHAIRMAN ZECH: All right. Thank you very much.

17 MR. TAYLOR: That concludes the Staff's brief, sir.

18 CHAIRMAN ZECH: All right. Thank you very much.

19 Any questions from my fellow Commissioners. Commissioner
20 Carr.

21 COMMISSIONER CARR: No.

22 CHAIRMAN ZECH: Commissioner Rogers.

23 COMMISSIONER ROGERS: No.

24 CHAIRMAN ZECH: Let me point out, first of all, I
25 should have mentioned at the opening of the meeting that

1 Commissioner Roberts is not with us today. He is on overseas
2 travel.

3 Well, let me thank the Staff for this status report.
4 Of course we will meet again later on at an appropriate time
5 prior to re-start. In the meantime, we expect that the Staff
6 would continue to closely monitor the Peach Bottom program
7 and be able to continue a rather extensive monitoring program
8 which Mr. Taylor pointed out has already been in place.
9 There has been a lot of management changes and, although they
10 certainly would appear to be positive and constructive, I
11 think it is important, Mrs. Russell, that you and your people
12 watch the status of the re-start plan and actions very
13 carefully.

14 We will need of course the Staff's recommendation
15 before we make the decision. We will also be interested in
16 hearing what the ACRS has to say in their deliberations. So,
17 we will look forward to hearing from the Staff again and ask
18 that you continue your very aggressive monitoring of the
19 Peach Bottom situation.

20 Are there any other questions from my fellow
21 Commissioners?

22 (No response.)

23 CHAIRMAN ZECH: If not, thank you very much for a
24 very fine briefing from both the Staff and Peach Bottom
25 officials. We stand adjourned.

(Whereupon, at 11:28 a.m., the meeting adjourned.)

CERTIFICATE OF TRANSCRIBER

This is to certify that the attached events
of a meeting of the U.S. Nuclear Regulatory Commission
entitled: BRIEFING ON STATUS OF PEACH BOTTOM

TITLE OF MEETING: Public Meeting
PLACE OF MEETING: Washington, D.C.
DATE OF MEETING: October 5, 1988

were transcribed by me. I further certify that said
transcription is accurate and complete, to the best
of my ability, and that the transcript is a true and
accurate record of the foregoing events.


JOHN TROWBRIDGE, C.V.R.

Ann Riley & Associates, Ltd.

OCTOBER 5, 1988

SCHEDULING NOTES

TITLE: BRIEFING ON STATUS OF PEACH BOTTOM

SCHEDULED: 10:00 A.M., WEDNESDAY, OCTOBER 5, 1988 (OPEN)

DURATION: APPROX 1-1/2 HRS

PARTICIPANTS: LICENSEE (PHILADELPHIA ELECTRIC COMPANY)

- JOSEPH PAQUETTE 5 MINS
CHAIRMAN, PRESIDENT AND CEO
- CORBIN McNEILL, JR. 15 MINS
EXECUTIVE VICE PRESIDENT-NUCLEAR
- DICKINSON SMITH 15 MINS
VICE PRESIDENT-PBAPS
- JOHN B. COTTON
SUPERINTENDENT OPERATIONS

NRC

- JAMES TAYLOR, DEPUTY EXECUTIVE 15 MINS
DIRECTOR FOR OPERATIONS
- WILLIAM F. KANE, DIRECTOR,
DIVISION OF REACTOR PROJECTS,
REGION I

COMMISSION BRIEFING

ON THE STATUS

OF

PEACH BOTTOM

OCTOBER 5, 1988

PRESENTATION OUTLINE

BACKGROUND

RESTART CRITERIA

STAFF RESTART ACTIVITIES

FORTHCOMING ACTIONS

BACKGROUND

- ° SHUTDOWN ORDER MARCH 31, 1987
 - ° LICENSED OPERATOR INATTENTIVENESS
 - ° LICENSED SUPERVISION PARTICIPATED IN AND FAILED TO CORRECT OR REPORT INATTENTIVENESS
 - ° INABILITY OF LICENSEE CORPORATE AND SITE MANAGEMENT TO IDENTIFY AND CORRECT PROBLEMS
 - ° STATION CULTURE DID NOT ADAPT TO CHANGING REQUIREMENTS

RESTART CRITERIA

- ° LICENSEE IDENTIFICATION OF ROOT CAUSES
- ° LICENSEE CORRECTIVE ACTION WHICH ADDRESSES ROOT CAUSES
- ° OPERATORS READY TO OPERATE SAFELY
- ° STABLE AND EFFECTIVE LICENSEE MANAGEMENT AND STAFF
- ° IMPROVEMENT IN UNSATISFACTORY SALP AREAS DEMONSTRATED
- ° FACILITY PHYSICALLY READY FOR RESTART

STAFF RESTART ACTIVITIES

- ° RESTART ASSESSMENT PANEL
- ° SAFETY EVALUATION REPORT TO ASSESS LICENSEE
RESTART PLAN
- ° INSPECTIONS AND LICENSING ACTIONS
- ° PUBLIC MEETINGS
- ° STATE INVOLVEMENT
 - PECO RESPONDED TO MARYLAND COMMENTS
 - PECO AND PENNSYLVANIA CONTINUE
NEGOTIATIONS ON ISSUES IN CONTENTION

FORTHCOMING ACTIONS

- ° PECO SELF ASSESSMENT/POWER ASCENSION PROGRAM REVIEW
- ° INTEGRATED ASSESSMENT TEAM INSPECTION (IATI)
- ° SALP REPORT & MANAGEMENT MEETING
- ° RESTART RECOMMENDATION (SER, SALP, IATI)
- ° ACRS BRIEFING
- ° COMMISSION BRIEFING
- ° EXPANDED POWER ASCENSION PROGRAM MONITORING

J. F. PAQUETTE

**NRC COMMISSION MEETING
OCTOBER 5, 1988
PECO PRESENTATION AGENDA**

**J. F. PAQUETTE
CHAIRMAN AND CEO**

OVERVIEW

**C. A. MC NEILL, Jr.
EXECUTIVE VICE PRESIDENT
NUCLEAR**

**NUCLEAR ORGANIZATION
OVERSIGHT FUNCTIONS**

**D. M. SMITH
VICE PRESIDENT - PBAPS**

SITE READINESS

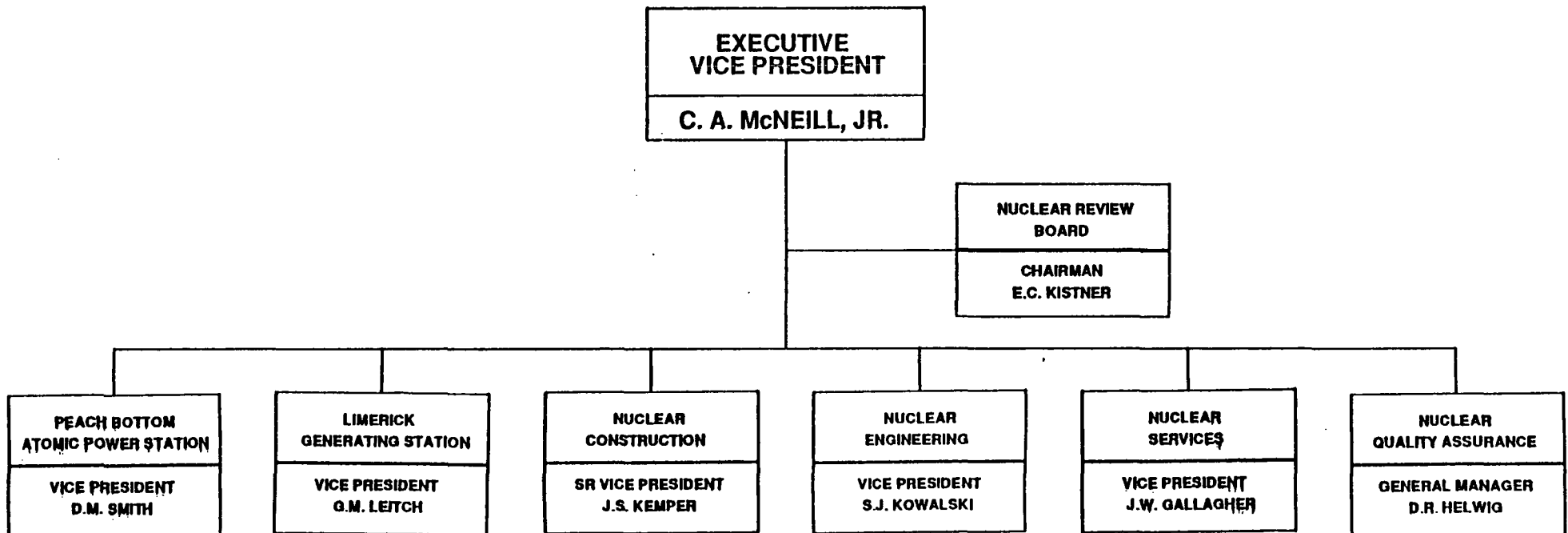
C. A. MC NEILL, Jr.

**RESTART SELF-ASSESSMENT
SUMMARY**

C. A. Mc NEILL

IMPROVED ORGANIZATIONAL EFFECTIVENESS

- Quality People
- Structure
- Culture
- Effective Oversight



ORGANIZATION CHART
NUCLEAR GROUP

NUCLEAR GROUP ORGANIZATION

- Dedicated Organization
- Reduced Layers
 - Increased Span of Control
- On-Site Corporate Direction at VP Level
- Accountability
- Improved Communications

VISION, MISSION and VALUES

VISION

- World Class

MISSION

- Safe, Economical Reliable Power

VALUES

- | | |
|--------------------------|-------------|
| • Safety | • Teamwork |
| • Quality | • People |
| • Dynamic Business Focus | • Integrity |

MANAGEMENT CONTROL

- Goals
- Performance Monitoring
- Performance Appraisals
- Management By Walking Around

OVERSIGHT

- Nuclear Committee of the Board
- Senior Management
- Nuclear Review Board
- Nuclear Quality Assurance

SENIOR MANAGEMENT

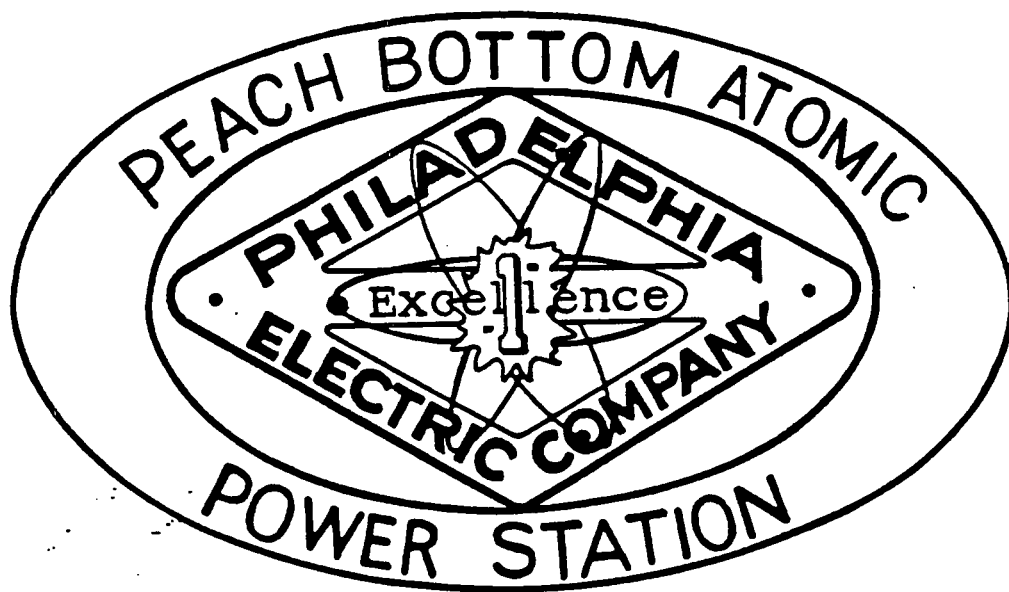
- Corporate Commitment
to Effective Oversight
- Climate That Promotes
Self-Critical Analysis

NUCLEAR REVIEW BOARD OVERSIGHT

- **Advisory Committee Reporting Directly to Executive Vice President, Nuclear**
- **Provides Independent Review and Audit in Areas Including:**
 - **Operations**
 - **Nuclear Engineering**
 - **Radiological Safety**
- **Assess PBAPS Readiness for Restart**

NUCLEAR QUALITY ASSURANCE OVERSIGHT

- Consolidated Four Separate Organizations
- Elevated Reporting Level
 - to Executives
 - to NRB and NCB
 - to Sites
- Added Outside Experience
- Increased Effectiveness



D. M. SMITH

OVERALL SITE READINESS

- People
- Plant
- Programs

PEOPLE

- New Management
- Increased Nuclear Industry Experience
- Enhanced Leadership/Management Skills
- Improved Communications

OPERATOR READINESS

- Staffing
- Training
- Working Hour Restrictions

OPERATOR STAFFING

- **Current**
 - 6 Shifts
 - Additional SRO on Shift
- **Goal**
 - Additional SRO and RO per Shift
 - Additional Operators for Flexibility

OPERATOR TRAINING

- **Simulator and Classroom Training**
- **Personal Effectiveness Training**
- **Team-Building Training**
- **5 Licensed ROs in Training**
- **16 RO Candidates in Training**
- **35 New Operations Helpers**

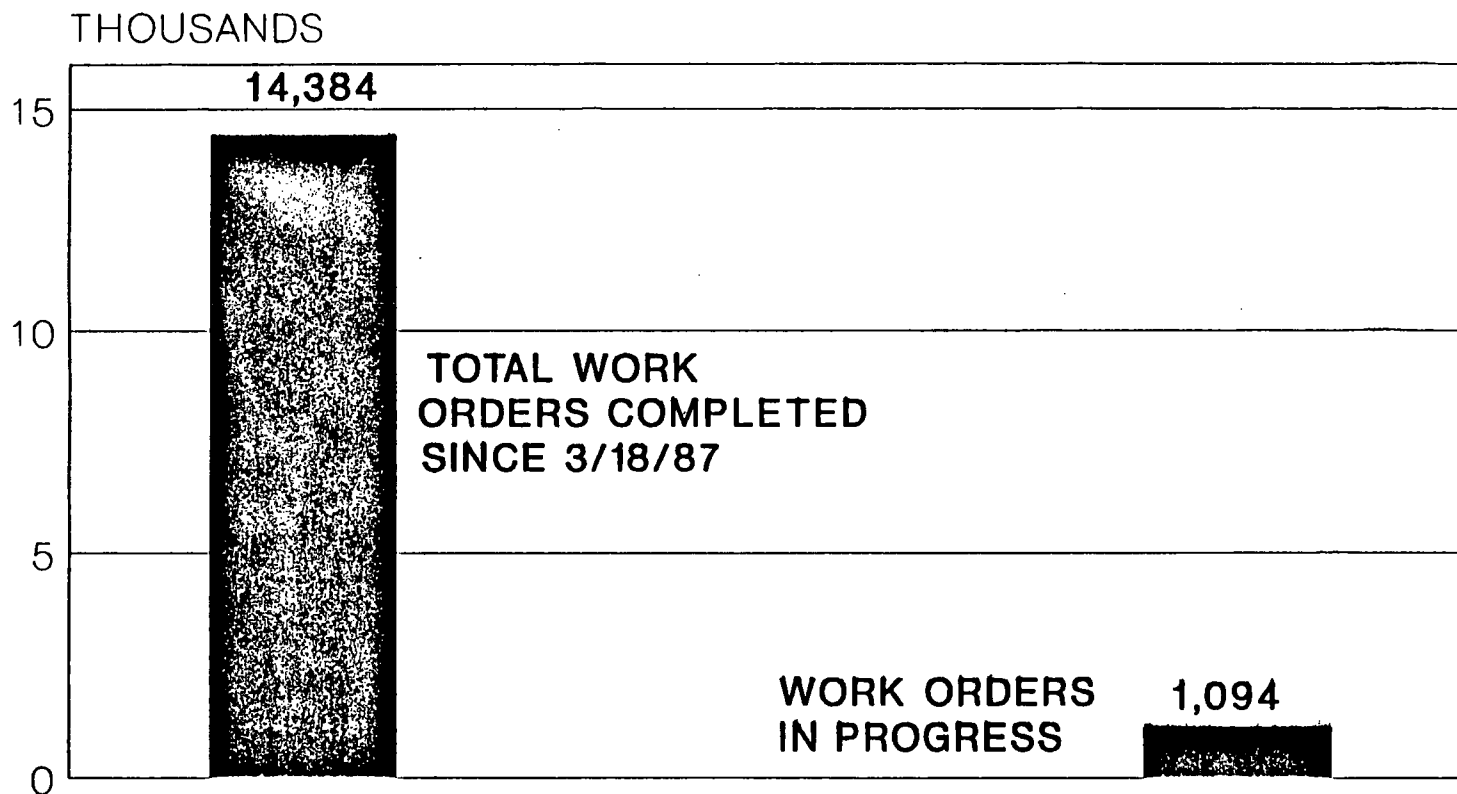
OPERATOR WORKING HOUR RESTRICTIONS

- Tech Spec Amendment Submitted
 - Based on NRC Proposed Policy Statement
 - Short and Long Term Restrictions
- Administrative Controls

PLANT READINESS

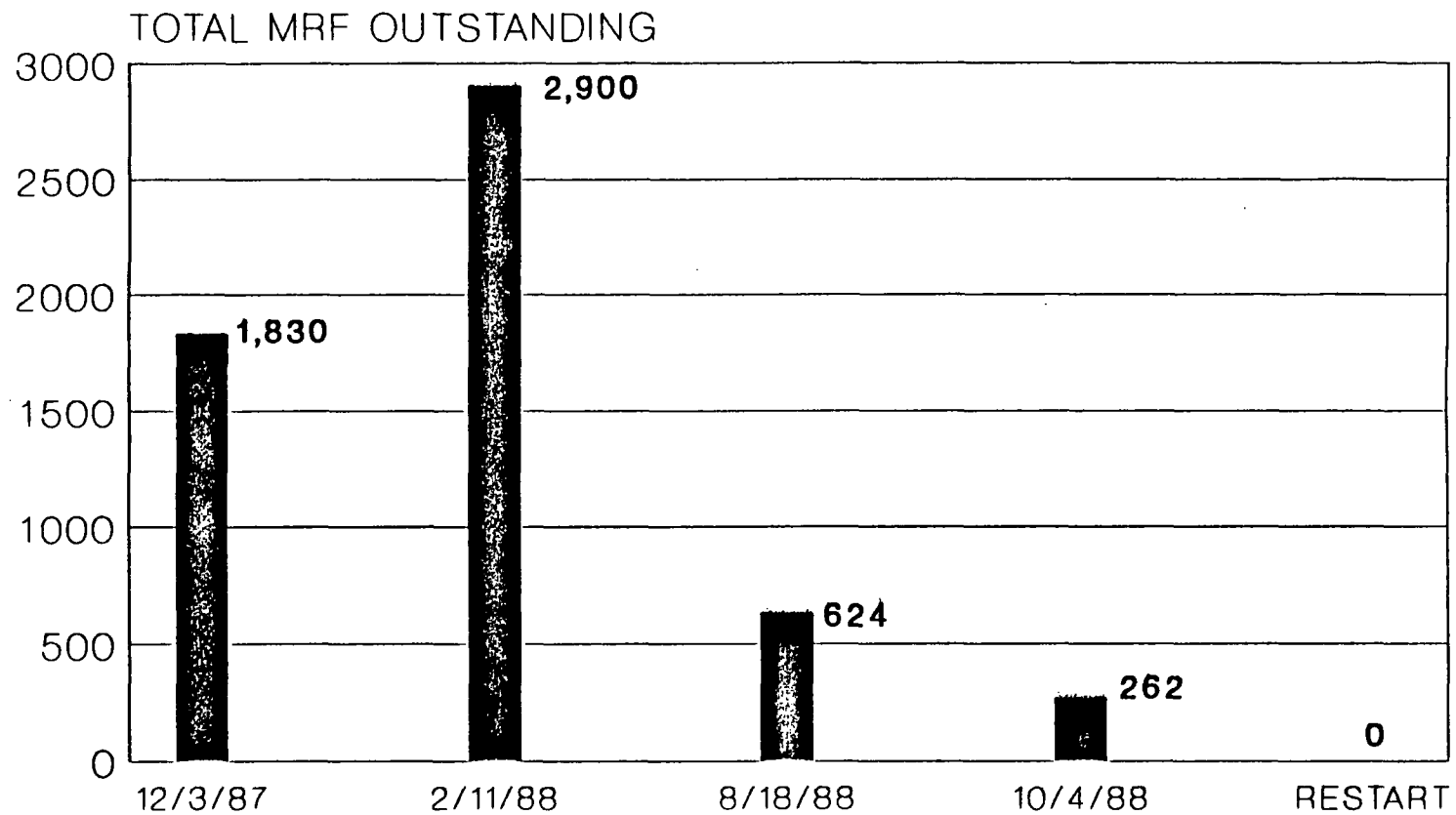
- **Corrective Maintenance**
- **Preventive Maintenance**
- **Modifications**
- **Decontamination and Painting**

WORK ORDER PROGRESS UNIT 2 AND COMMON

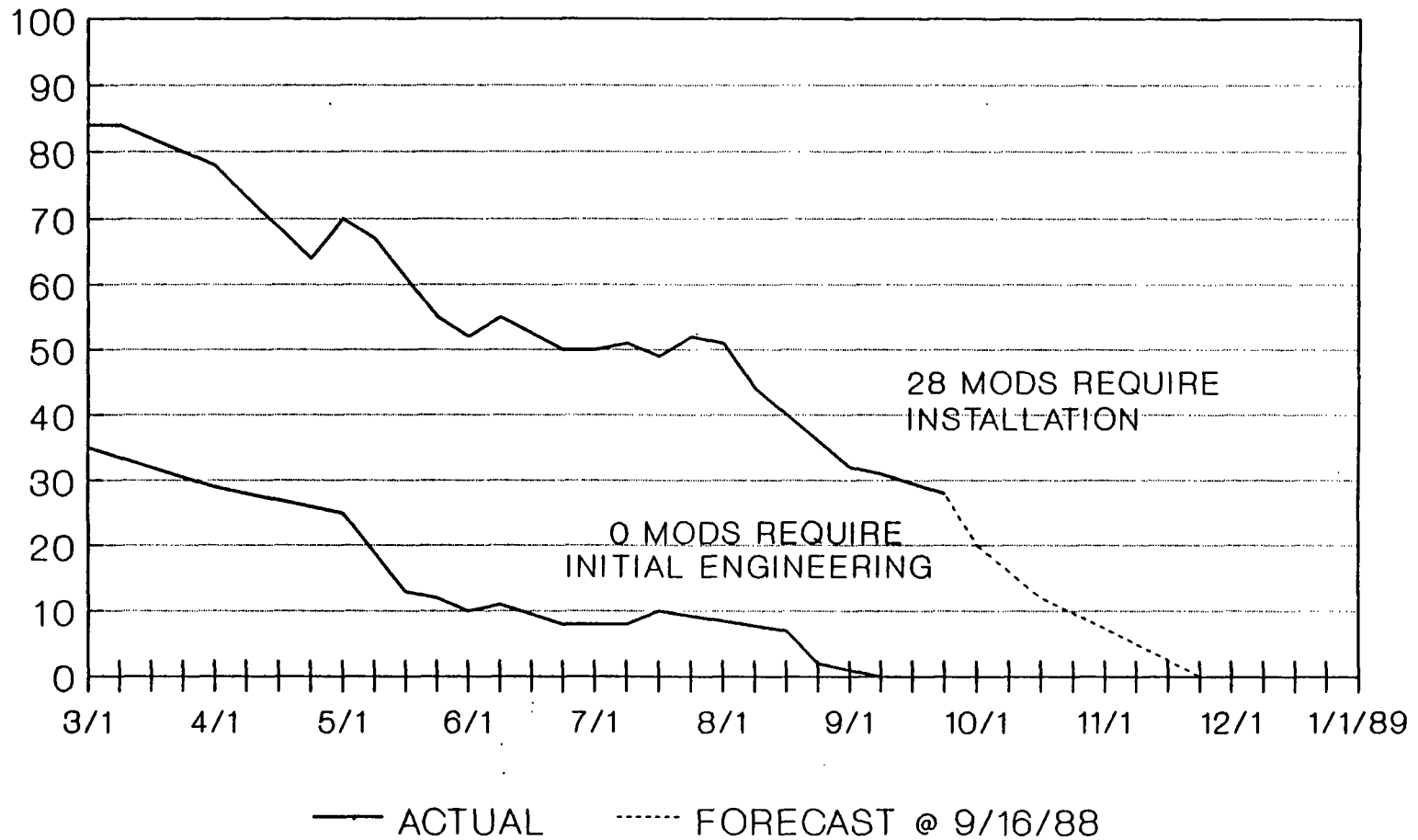


INCLUDES CN, CM, AND PM SECTION 6 WORK ORDERS

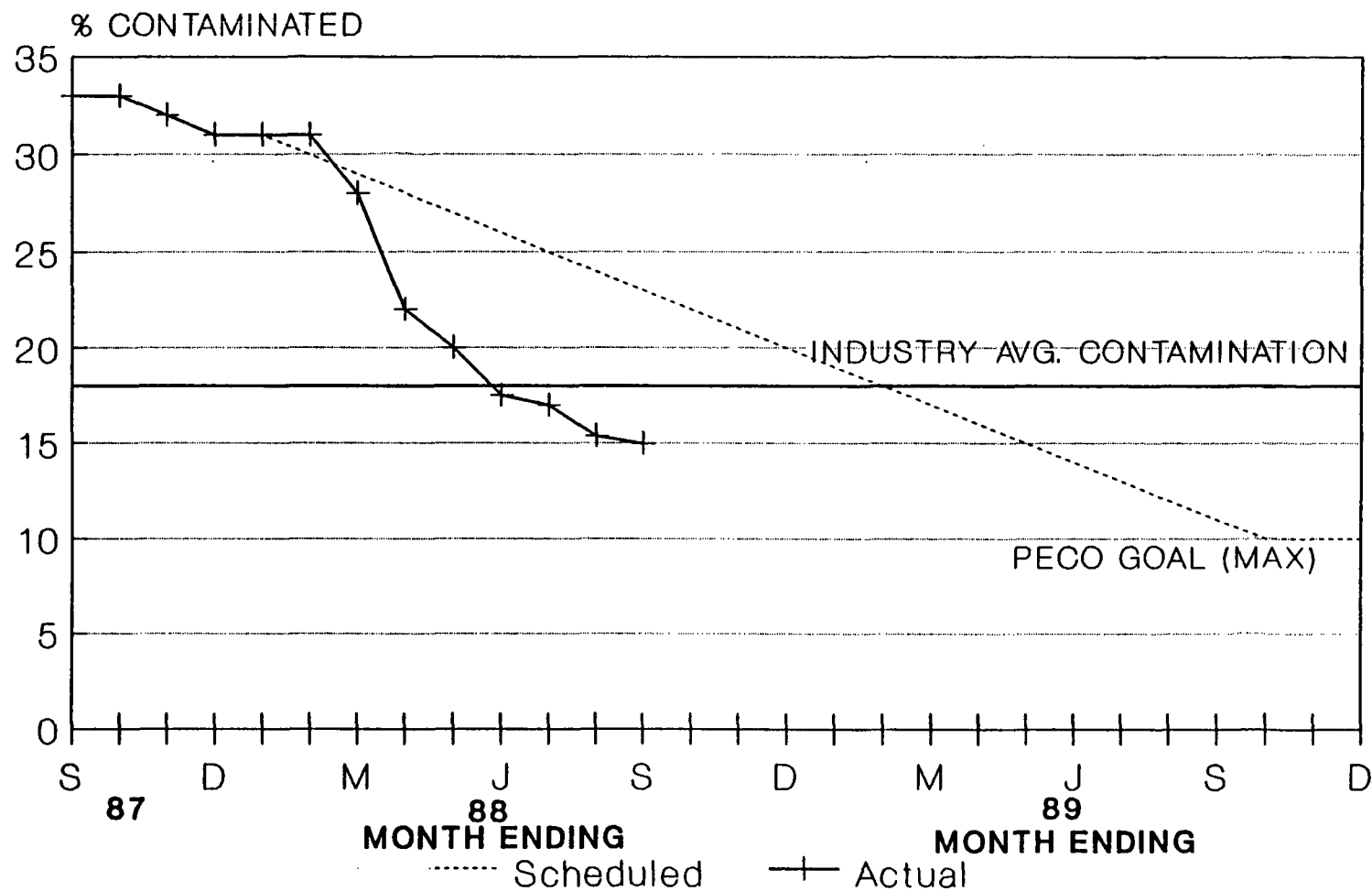
PREVENTIVE MAINTENANCE UNIT 2 AND COMMON



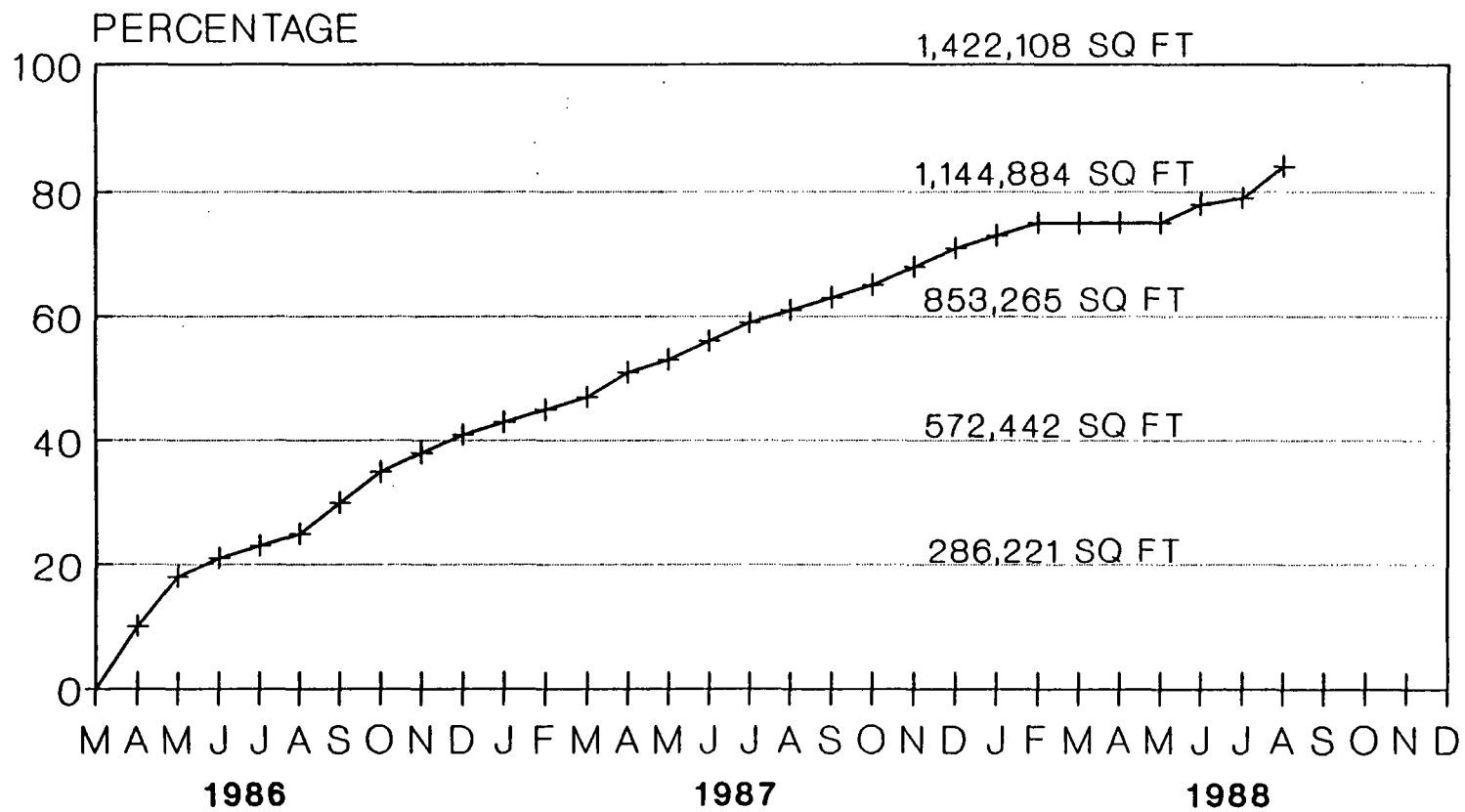
UNIT 2 AND COMMON OPEN RESTART MODIFICATIONS (TOTAL - 167)



UNIT 2 & COMMON DECONTAMINATION PROGRESS



STATION PAINTING PROGRESS UNITS 2 AND 3



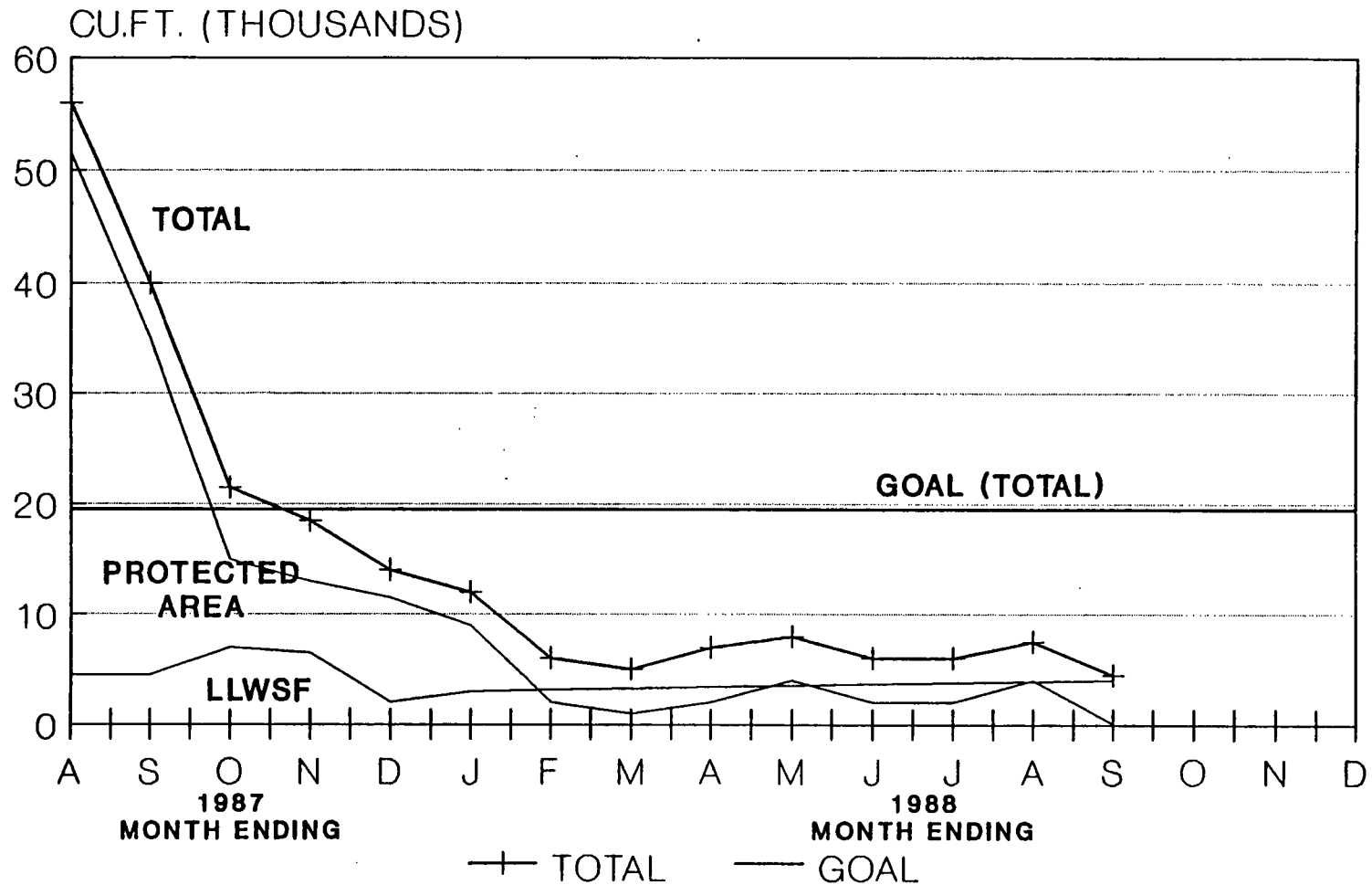
PROGRAMS

- Emergency Preparedness
- Configuration Management
- Procedures and Document Control
- Security
- Operating Experience Assessment Program
- Radwaste
- Commitment Tracking Program
- Radiation Protection

SECURITY

- Background
- Improvements
 - Management Involvement
 - Contractor Transition
 - Equipment/Systems
 - Training

UNITS 2 AND 3 RADWASTE INVENTORY-DAW

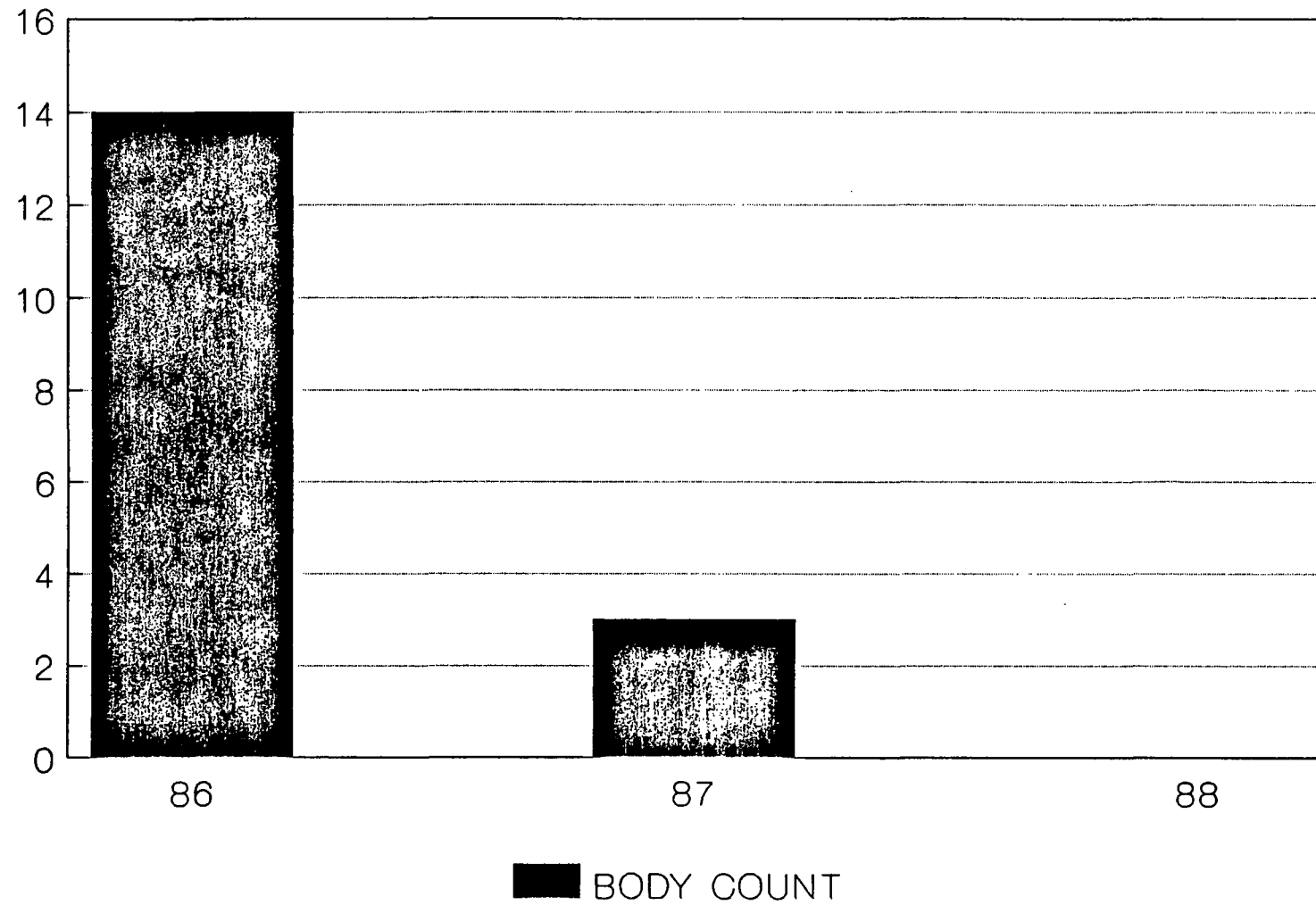


RADIATION PROTECTION

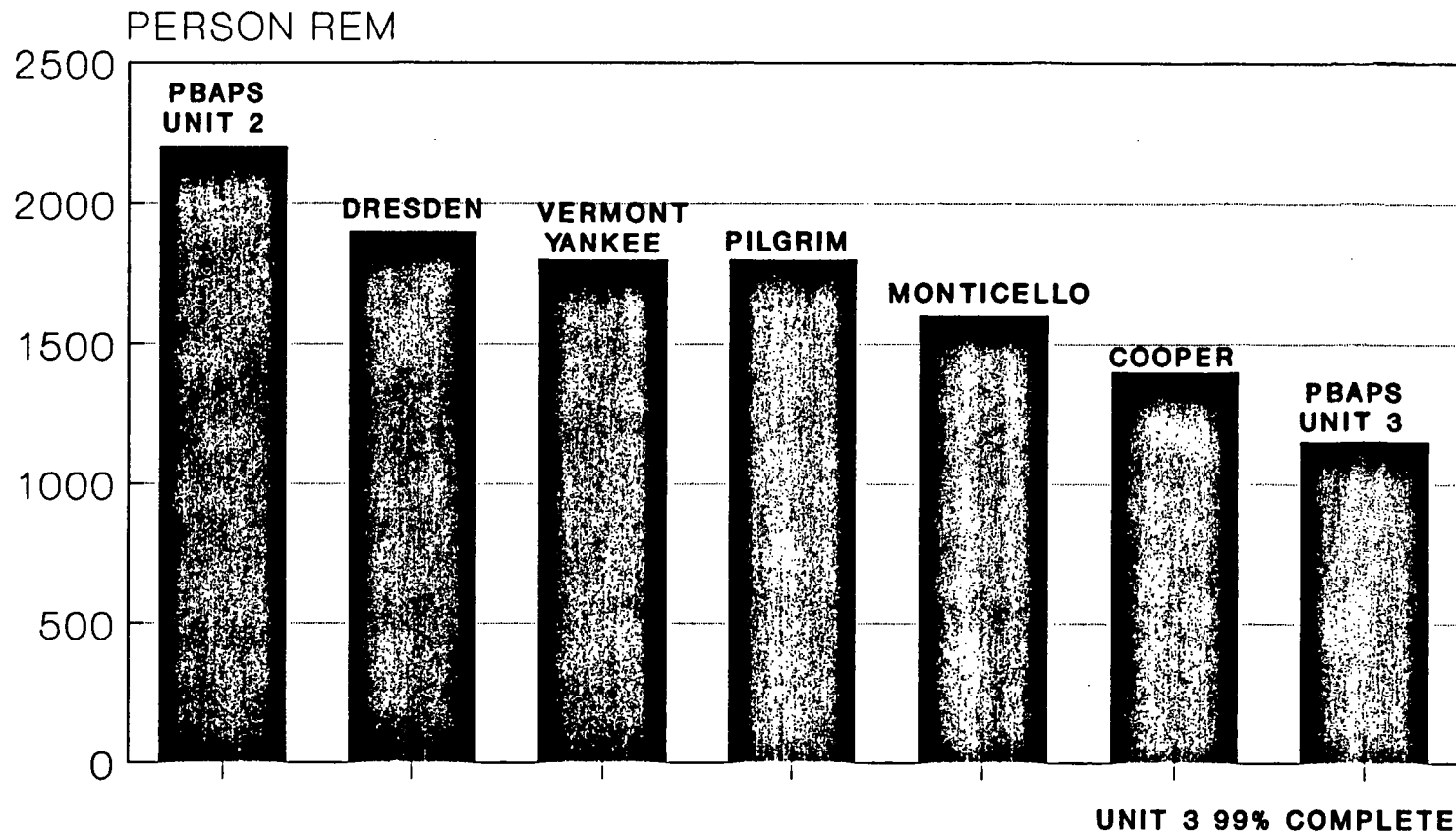
REDUCTION OF STATION RADIATION EXPOSURE

- **100% Dose Accountability Achieved**
- **Reportable Uptakes have Significantly
Decreased from 1986 to 1988**
- **Unit 3 Pipe Replacement Exposure
was an Industry Record Low for
Plant Type**

POSITIVE WHOLE BODY COUNTS



PIPE REPLACEMENT COMPARISON



OVERALL SITE READINESS

- PEOPLE
- PROGRAMS
- PLANT

C. A. Mc NEILL

RESTART REVIEW PANEL MEMBERSHIP

C.A. McNEILL

J.S. KEMPER

G.M. LEITCH

D.R. HELWIG

E.C.KISTNER

E.P. WILKINSON

S. LEVY

L. BURKHARDT

FUNCTIONAL AREAS

- Nuclear Quality Assurance
- Human Resources
- Operations
- Technical Support
- Plant Support
- Maintenance
- Industrial Safety
- Emergency Preparedness
- Security
- Fire Protection
- Training and Qualifications
- Configuration Management
- Document Control
- Design Engineering
- Modifications
- Procurement and Material
- Outage Management
- Power Ascension
- Licensing and Commitment Tracking

IDENTIFICATION OF ISSUES

- Shutdown Order
- NRC Inspections, SALP, etc.
- INPO Evaluations
- Self - Evaluations
- Other External Evaluations

LINE MANAGEMENT ASSESSMENT

RESULTS

- Walkdowns
- Trending
- Statistical Analysis
- Observations
 - MBWA
 - By Outsiders

LINE MANAGEMENT ASSESSMENT

SUFFICIENCY OF RESULTS

- Walkdowns
- Comparisons with:
 - NRC
 - INPO
 - Industry Guidelines
 - Averages
- Observations
- Analysis

LINE MANAGEMENT ASSESSMENT

PERMANENCY OF CHANGE

- Proceduralization
- Budget
- Management Support
- Line and Field Acceptance
- Areas for Continuing Improvement

OVERALL RESTART STATUS

- Self Assessment
- INPO Assessment
- NRC Assessment
- PECO Anticipates Being Ready
for the NRC Assessment by
November 14, 1988