

1 helpful to you. But I think, as I said before, you in
2 my mind personify one of the best in the DOE program
3 coming up through the Facility Rep program and
4 assuming the responsibilities that you've taken on
5 down at Pantex. And I'd say this is one of the
6 toughest jobs that DOE has, and you have that job for
7 DOE. So I want to thank you for the effort and what
8 you've been doing today.

9 MR. GLENN: Thank you, sir. We certainly
10 appreciate your insights. And I guarantee you, we are
11 thinking very hard and long about these changes.

12 CHAIRMAN CONWAY: All right. Now we'll
13 turn to Mr. Michael Mallory, who is the General
14 Manager at BWXT Pantex. And also, Mike, we will put
15 in the record a résumé of your background and
16 experience.

17 MR. MALLORY: Okay.

18 Thank you for the opportunity to speak
19 today regarding the Contractor Assurance System at
20 BWXT Pantex. I am Mike Mallory, the President and
21 General Manager of BWXT Pantex, which is the M&O
22 contractor of the Pantex Plant for the Department of
23 Energy's National Nuclear Security Administration.

24 BWXT Pantex is responsible for five core
25 missions at Pantex: (1) We evaluate, retrofit, and

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 repair weapons in support of both life extension
2 programs and certification of weapon safety and
3 reliability;

4 (2) We dismantle weapons that are surplus
5 to the strategic stockpile and;

6 (3) Sanitize the components from those
7 dismantled weapons;

8 (4) We continue to develop, test, and
9 fabricate high explosive components.

10 (5) And we're responsible for providing
11 interim storage and surveillance of plutonium pits.

12 In the time I have today, I want to
13 discuss BWXT Pantex's approach to contractor
14 assurance. I'm very positive about the contractor
15 assurance initiative as it applies to BWXT Pantex, and
16 I believe it will allow us to improve at a faster pace
17 as a company and as an M&O contractor.

18 BWXT Pantex assumed the operation of the
19 Pantex facility in 2001. Prior to that time, as we
20 developed our proposal, we expended significant effort
21 deciding how the Pantex Plant should be operated to
22 improve safety and quality. From those discussions,
23 we developed a philosophy of quality and self-
24 assessment that mirrors, in many ways, the NNSA's
25 current approach to contractor assurance.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 We began by creating a quality
2 organization at Pantex. For several years prior to
3 our arrival, quality functions had been disbursed
4 through several organizations. By implementing a
5 strong quality organization and placing an experienced
6 manager at the helm, we were quickly able to re-
7 establish a focus on product quality utilizing
8 objective data and measurement.

9 For example, BWXT Pantex instituted
10 holdpoint inspections to verify objectively the
11 quality of manufactured products and the associated
12 data that goes along with those products. We
13 instituted a new root cause analysis program in FY01,
14 and further strengthened it this year. Our quality
15 efforts have resulted in 86 percent reduction in
16 procedural adherence occurrences from FY01 to FY03.

17 Another proposal initiative involved the
18 creation of nuclear safety officers in the
19 manufacturing division to enhance ongoing assessments
20 of nuclear facilities and operations. These
21 individuals were drawn from our most experienced
22 facility managers at Pantex.

23 We also implemented several initiatives to
24 improve self-assessments. We developed an Executive
25 Issues Review Board where senior managers meet monthly

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 to discuss and evaluate performance issues and
2 significant performance data trends. We implemented
3 a Business Health Indicator process that measures
4 performance in a variety of areas and links it to
5 successful achievement of improvement initiatives. We
6 strengthened the self-assessment process by increasing
7 the quality and quantity of management self-
8 assessments and independent assessments. We've also
9 improved the critique process and the issues
10 management function. From the first day of our
11 contract, our approach has been to proactively look
12 for issues and resolve them before they become
13 problems.

14 Now that I've talked a little about the
15 past, I'd like to turn to our current activities.

16 We see contractor assurance as a facility-
17 wide initiative that is our primary tool for
18 demonstrating to ourselves that the Plant operations
19 are safe, secure, efficient, and of the highest
20 quality. Contractor assurance activities cut across
21 every business function in the company.

22 From an overall standpoint, contractor
23 assurance activities occur in three major steps. The
24 first step is collection of data, in which we gather
25 assurance information through divisional assessments,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 metrics, independent audits and assessments, and
2 management reports.

3 The second step is evaluation and
4 improvement, which utilizes a centrally-focused issues
5 management system to analyze performance data gathered
6 by the assessments. Improvement action are taken
7 accordingly and analyzed for effectiveness.

8 And the third step is communication, which
9 ensures that assurance information is provided to BWXT
10 Pantex senior management, the Pantex Site Office, and
11 most importantly, the people doing the work.

12 Quality and Performance Assurance Division
13 is responsible for the day-to-day management of the
14 BWXT Pantex Contractor Assurance System. The division
15 manager reports directly to me in all matters
16 concerning contractor assurance and quality.
17 Functional elements within the division include issues
18 management, lessons learned, occurrence reporting,
19 Price-Anderson accountability program, independent
20 assessment, readiness assessment, and compliance
21 assurance and product acceptance. Additional
22 information is provided through the independent
23 internal audit function, which also reports directly
24 to me.

25 Operation of the BWXT Pantex Contractor

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 Assurance System consists of several major components.
2 We have a clear, documented description of activities.
3 Managers understand the description of their
4 responsibilities, and a clear plan of key activities
5 has been developed. The Quality and Performance
6 Assurance Division validates each functional manager's
7 annual assessment plan to assure the highest risk
8 processes are included. Functional organizations
9 provide assurance information in the form of
10 assessment reports and metrics. Assessment completion
11 is compared to established plans to ensure
12 accountability. Assessment reports are reviewed for
13 breadth, depth, and consistency, and feedback is
14 provided to the functional organizations.

15 Quality and Performance Assurance Division
16 also provides feedback to our functional managers
17 through lessons learned, the Executive Issues Review
18 Board, and direct communication. Assessment and event
19 information is collected and evaluated for trending;
20 this includes internal, independent, and external
21 assessment data. Assurance information is provided to
22 the Pantex Site Office in a variety of ways, including
23 reports, charts, presentations, and letter.

24 Finally, we annually revise the contractor
25 assurance plan and coordinate any changes with the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 Site Office.

2 One more major component that deserves
3 mention is the risk management model. BWXT Pantex
4 operations are categorized within business functions,
5 such as manufacturing, finance, environment, safety,
6 and health. Each of the managers responsible for
7 these business functions has determined the highest
8 priority risk-based performance areas for their
9 organizations. Each BWXT Pantex senior manager has
10 obtained the agreement of his or her Site Office
11 counterpart regarding the selection of the most
12 important risk-based performance areas that are to be
13 evaluated during the year.

14 BWXT Pantex considered risk in association
15 with two fundamental dimensions: The consequences of
16 a failure and the probability of a failure,
17 considering the controls already in place and the
18 historic performance in the area. Performance areas
19 that cross functional lines, such as occupational
20 injuries, radiation exposure, absenteeism, or
21 occurrence reports are evaluated by a lead
22 organization. For example, our employee concerns
23 organizations leads the evaluation of Plant
24 absenteeism.

25 Our assessment activities are conducted

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 independently and by the management of our functional
2 organizations. Independent assessments and audits are
3 performed by organizations separate from the process
4 being examined, and management assessments are
5 conducted by the organization responsible for the
6 process.

7 The Independent Audit Group performs
8 audits primarily driven by the DOE Office of Inspector
9 General's Audit Manual. This guidance is incorporated
10 into our own Plant Standard, which we call Standard
11 0270, titled "Internal Audits." The Independent
12 Assessment Group performs assessments drive by 10 CFR
13 830.122 Subpart A [Quality Assurance], 10 CFR 835.102
14 [Radiation Protection], DOE Order 414.1 [Quality
15 Assurance], and QC-1 [DOE Nuclear Weapons QA
16 Requirements].

17 In addition, other groups such as product
18 quality, explosive safety, nuclear explosive safety,
19 and security conduct independent assessments of
20 activities in their areas of expertise. The
21 independent assessment program is covered by Plant
22 Standard 0107, titled "Independent Assessments and
23 Management Assessments."

24 The management assessment program, also
25 driven primarily by 10 CFR 830.122 Subpart A and DOE

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

1 Order 413.1 [Management Control Program], is
2 incorporated into Plant Standard 0107.

3 Each of 22 functional area managers are
4 responsible for developing an annual assessment plan
5 to evaluate his or her own processes through regular
6 assessments. These assessments provide the managers
7 with valuable information with respect to the
8 processes for which they are responsible. The
9 information provided by management assessments is a
10 key element of the Contractor Assurance System
11 process.

12 The subjects and frequency of all these
13 assessments are determined through a risk model that
14 takes into account a number of factors. For example,
15 we look at external drivers such as 10 CFR 835.102
16 that require all areas of the radiological controls
17 program to be assessed every 36 months. We also
18 consider occurrence reports and the time that has
19 passed since the last assessment in a particular area.
20 A broad spectrum of functional areas is assessed,
21 including nuclear safety, explosive safety, industrial
22 safety, radiological controls, environmental
23 compliance, quality and security. All of the
24 independent audits and assessments are requirements-
25 driven and evaluate performance against established

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

1 criteria.

2 Over 100 independent audits and
3 assessments are performed every year. Copies of all
4 internal audit and independent assessment reports,
5 along with the results from the management self-
6 assessment, are provided to Issues Management for
7 tracking, trending, and Price-Anderson Act screening.
8 The independent audit and assessment reports are
9 provided to the Pantex Site Office as another key
10 element of our assurance information.

11 Audit and assessment teams and leaders are
12 trained and qualified and perform assessments using
13 criteria review and approach documents [CRADs] that
14 ensure assessment scope and purpose are met. The
15 results of independent audits and assessments have
16 been shared with the Site Office for more than six
17 years.

18 BWXT Pantex is strengthening the existing
19 management self-assessment process. Personnel
20 performing management self-assessment will receive
21 training from the Independent Assessment Group on the
22 proper method of planning and performing assessments.
23 This action to be completed by December 31, 2003.
24 Additionally, representatives of the Independent
25 Assessment Department will conduct an evaluation of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 completed management self-assessments. This will
2 include an evaluation of the effectiveness and
3 documentation of the assessment as compared to the
4 scope and the area. The action is ongoing and is a
5 key component of the BWXT Pantex Contractor Assurance
6 System.

7 A more formal risk model is being
8 developed to ensure that the right functional areas
9 and correct topics are being assessed. This risk
10 model will be based upon probability and consequence
11 so that BWXT Pantex can ensure those areas with the
12 greatest risk will be assessed. This risk model is
13 scheduled to be completed by March 31, 2004.

14 Improvements are also being made to the
15 BWXT Pantex critique process. The Plant Standard for
16 critiques has been revised and issued, and the lessons
17 plan for critique director training has been revised
18 and approved. The training of all critique directors
19 will be completed by December 31, 2003.

20 Another key component of the Contractor
21 Assurance System is assuring that the lessons learned
22 from our strengths, as well as weaknesses, are
23 properly fed back to appropriate Plant personnel. As
24 a result, the Plant lessons learned program is
25 reviewed and improved. These changes will be completed

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 by July 2004, and they will include full integration
2 of the lessons learned process with a new corrective
3 action system.

4 A variety of metrics are being used to
5 ensure BWXT Pantex is focusing on the right issues.
6 From a quality standpoint, we monitor metrics on
7 occurrence reports, procedure adherence, the ratio of
8 assessment driven issues to event driven issues,
9 corrective action cycle time, assessment schedule
10 performance, contractor assurance implementation
11 milestones, implementation of Software Quality
12 Assurance plans, product defect rates, and material
13 control. In the area of safety and emergency
14 management, we review metrics on total recordable case
15 rate, the lost time rate, radiation exposure, chemical
16 inventories, and emergency response organization
17 training.

18 Metrics in the other functional areas,
19 including production, personnel, infrastructure,
20 security, finance, and capital and expense projects
21 are also included in the plan.

22 These metrics are discussed monthly by
23 BWXT Pantex management at our Business Health
24 Indicator meeting.

25 Both the Internal Audit Group and the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 Independent Assessment Group have a training and
2 qualification program for their personnel. These
3 groups are fully staffed and qualified. The personnel
4 that conduct tracking and trending, Price-Anderson Act
5 screening, and monitor the quality of critiques and
6 causal analysis performance are trained on their
7 respective disciplines. Since BWXT Pantex took the
8 initiative early on to bolster the Plant's assessment
9 capabilities, these activities are appropriately
10 staffed. However, as the system matures, we will
11 monitor the workload to determine whether additional
12 staffing is required. In addition, the quality of the
13 management self-assessment program is being
14 strengthened by [having] our Independent Assessment
15 Group provide an assessment guide, training, and
16 feedback to the functional area managers and their
17 personnel on the conduct of assessments.

18 Over the past year Pantex has made a
19 concentrated effort to improve all aspects of our
20 issues management program. A detailed evaluation of
21 the program was conducted in October and November of
22 2002, and a root cause analysis was performed to
23 determine the causes of the weaknesses that are
24 identified. A robust corrective action plan was
25 implemented and executed to improve the issues

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 management and corrective action process. The
2 weaknesses, analyses, and corrective action plan have
3 been discussed in detail with the Site Office,
4 Pantex's Defense Board Site Representative, and the
5 Office of Price-Anderson Enforcement, EH-6.

6 The current corrective action process is
7 outlined in Plant Standard 6161, titled "Issues and
8 Management." It requires all identified deficiencies
9 be entered into the Plant's Action Management System
10 by use of a standard form. This form is reviewed by
11 the appropriate division coordinator, approved by the
12 appropriate manager, and transmitted to the
13 Performance Assurance Department for Nuclear Safety
14 Rule screening as required by the Price-Anderson
15 Amendments Act.

16 This process is fully integrated with the
17 assessment process in that all assessments are queried
18 by internal procedure to have the stand form completed
19 on each finding or grouping of similar findings. Root
20 cause analysis is required to be performed within 15
21 days. Subsequent determination of corrective action,
22 based upon the identified causes, is required within
23 seven days following completion of the causal
24 analysis. The actions are then completed, and
25 objective evidence of completion is required prior to

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 an action being closed in the system. The
2 documentation of findings, causal analyses, and
3 objective evidence of corrective actions are scanned
4 into the Plant's Action Management System for a
5 complete electronic record.

6 In October 2001, the root cause analysis
7 process in place at Pantex was determined to be
8 inadequate and in need of improvement. BWXT Pantex
9 asked that representatives of the Kansas City Plant
10 [KCP] conduct a third party evaluation of the root
11 cause process at Pantex. KCP's evaluation identified
12 weaknesses, including inconsistent and improperly
13 performed analyses, failure to use the Plant's causal
14 analysis tools, and a lack of training of personnel
15 performing root cause analyses. As a result, BWXT
16 Pantex benchmarked the KCP process and later
17 implemented it at Pantex. The process is called
18 CA/MP, which stands for Corrective Action/Mistake
19 Proofing. Since November 2001, more than 1700
20 personnel have received training in the CA/MP process.

21 While improvements have been made, we
22 continue to strive for more consistent and effective
23 performance of root causal analyses. I meet monthly
24 with my management team to discuss in detail the
25 occurrence reports and the Price-Anderson

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

1 noncompliances of the previous month at the Executive
2 Issues Review Board. The responsible division manager
3 presents facts surrounding events and the results of
4 the causal analysis. The Executive Issues Review
5 Board and associated discussions have resulted in
6 further improvement in our causal analysis.

7 To improve our ability to track and trend
8 corrective action data, BWXT Pantex has purchased a
9 new action tracking and performance trending system
10 that will substantially improve the efficiency and
11 effectiveness of our action tracking and
12 documentation, but more importantly will substantially
13 improve our ability to perform trend analysis and
14 create performance indicators.

15 The Office of Price-Anderson Enforcement
16 recommended this particular system, which is already
17 in use at Hanford. My Performance Assurance Department
18 benchmarked a number of systems and concluded that
19 this was the best fit for our processes. My senior
20 staff and I have observed a demonstration of the
21 system, and we are committed to have it online and
22 operational by July 31, 2004.

23 As a contractor, I see the Contractor
24 Assurance System initiative as an improvement in
25 communication between the contractor and the NNSA.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 The process begins with the development of an annual
2 plan, when the Site Office and BWXT Pantex meet to
3 outline the approach for the coming year.
4 Communication continues as the two parties reach
5 agreement on activities to be assessed during the year
6 and the level of risk these activities pose for the
7 site. In addition, agreement is reached in each
8 functional area on the frequency and form of assurance
9 information that is to be provided by the Site Office.
10 In every step of the Contractor Assurance process,
11 from review of audit results to discussions about data
12 trends, BWXT Pantex managers and their Site Office
13 counterparts will communicate regularly.

14 I personally believe that self-assessment
15 promotes better performance and is the reason our
16 original proposal emphasized this concept. Contractor
17 Assurance will drive BWXT Pantex to proactively plan
18 assessments, measure corrective action effectiveness,
19 and communicate the results internally and externally.
20 One area where this is clearly illustrated is in our
21 Business Health Indicator program. Performance is
22 assessed at the operating level using business-wide
23 metrics. As these metrics are rolled up, we see how
24 they affect our strategic improvement initiatives.
25 Employees throughout the organization can see how

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 their personal performance impacts the entire Plant's
2 performance.

3 An additional benefit of BWXT Pantex's
4 Contractor Assurance approach is a strong Issues
5 Management focus. The Issues Management system leads
6 directly to improving day-to-day operations. It is a
7 multifaceted set of tools and processes that implement
8 the feedback and improvement function. The Issues
9 Management system formally integrates all phases of
10 problem or deficiency resolution including
11 identification, evaluation, reporting, lessons
12 learned, tracking, performance data trending, and
13 closure. BWXT Pantex's formal Issues Management
14 Business Policy encourages personnel at all levels of
15 the company to report issues to the Issues Management
16 process to be analyzed and corrected. A robust
17 critique process quickly and accurately determines the
18 facts, the timeline, and immediate actions to be taken
19 for the respective event. Weekly status reports are
20 provided to all senior managers, and issues are closed
21 upon receipt of objective evidence that the specified
22 actions have been completed.

23 One more significant benefit to BWXT
24 Pantex is the fact that Contractor Assurance System
25 lends itself to validation of data. Through

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

1 independent assessments, audits, review of metric
2 data, and trending information, our Quality and
3 Performance Assurance Division can validate the
4 accuracy and adequacy of the information received from
5 the functional organizations. Evaluation of event-
6 driven information against assessment results and
7 metric data provides an indicator of where detection
8 and prevention weaknesses may exist. Performance is
9 also validated through external assessments performed
10 by DOE or NNSA. We will also seek peer reviews of
11 selected processes by companies performing similar
12 activities at other DOE nuclear weapon complex sites.

13 In conclusion, I want to convey to the
14 Board that BWXT Pantex understands that safety,
15 quality, and security comprise the foundation upon
16 which this nation's nuclear deterrent has been
17 developed and maintained. Without a dependable
18 stockpile, our national security is at risk. It is in
19 this context that BWXT Pantex is implementing
20 Contractor Assurance. Contractor Assurance System
21 mirrors our corporate values of accountability,
22 responsibility, and continuous improvement.

23 Thank you for the opportunity to testify
24 today. I welcome any questions that you might have.

25 CHAIRMAN CONWAY: Thank you.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 Dr. Eggenberger?

2 VICE CHAIRMAN EGGENBERGER: Yes. I hate to
3 go away from the roof cracking issue, so we'll stay
4 with it here a little bit.

5 Do you know if the roof cracking issue was
6 ever entered into the action management system?

7 MR. MALLORY: I don't believe it was, sir,
8 for this reason -- and I can only talk from 2001 on.
9 And I know there were issues before that.

10 In 19 -- I'm going to say '99 -- nuclear
11 explosive operations were not conducted any longer
12 after that. As a matter of fact, the main thing we do
13 is the pit repackaging there.

14 Since I have been at the Site, there has
15 not been a concern that the roofs in 12-64 were --
16 that they were inadequate for doing the storage of
17 tooling and the pit repackaging. When that issue
18 basically got on my screen was in our planned sequence
19 of upgrading the facilities to do the SLEP [Service
20 Life Extension] programs. And it was clear then,
21 though, that the roof was not going to support further
22 nuclear explosives activities, and we need that
23 capacity. And it was the process of the construction
24 activities and what we were going to do with that
25 roof, and how it was going to be addressed, and how it

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 was going to be evaluated, that's how that issue came
2 on my screen.

3 VICE CHAIRMAN EGGENBERGER: Yes. But the
4 reason that I asked that is you are now doing
5 something about it.

6 MR. MALLORY: Yes, sir.

7 VICE CHAIRMAN EGGENBERGER: So it has to
8 be put in the system somewhere, and then before you do
9 anything about anything, you say what you do is you
10 have a risk model, then that determines the
11 probability and the consequence of whatever it is of
12 not doing anything. So I'm just taking an item and its
13 sample. We could also use the fire loop leaks.

14 MR. MALLORY: Yes.

15 VICE CHAIRMAN EGGENBERGER: You can use
16 anything. And so I'm just attempting to test what you
17 say that you're doing and how you're doing it. You
18 see what I'm --

19 MR. MALLORY: I do see what you mean.

20 Right now from a nuclear safety standpoint
21 with the work that's being done in 12-64, I've never
22 heard anyone that had an issue that would cause it to
23 be entered into an action tracking system. It
24 certainly shows up from the standpoint of our future
25 and how we're going to utilize that facility.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 VICE CHAIRMAN EGGENBERGER: You said it
2 requires all identified deficiencies to be entered
3 into the Plant's action management system. And that's
4 a deficiency, a design deficiency because it wasn't
5 designed right. And my point with him was that was
6 not recognized by you collectively on a timely basis,
7 because nothing was done for five years.

8 So, I guess maybe another example would be
9 a better test where it actually worked.

10 MR. MALLORY: Yes. I don't know really
11 what happened in 19 --

12 VICE CHAIRMAN EGGENBERGER: Okay.

13 MR. MALLORY: I can talk about the fire
14 loop issue.

15 The belief was that for approximately four
16 years that the fire suppression systems in the bays
17 themselves were adequate. And as you're aware, when
18 one of the 12-44 cells was being upgraded, we elected
19 to test that system. And the system found that there
20 were rocks there that effected some of the sprinkler
21 heads. And as you are also aware, it then absolutely
22 became an issue, and BWXT Pantex, we took it upon
23 ourselves that, as you're aware, we've tested every
24 bay and every cell so that we now know that water will
25 come out of every sprinkler head. And that was

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 immediately entered into our Issues Management
2 activity, and that's why we took those actions.

3 CHAIRMAN CONWAY: Dr. Mansfield?

4 DR. MANSFIELD: Yes, Mr. Mallory. I
5 congratulate you on the achievement of the 86 percent
6 reduction, I believe it was in the procedural
7 adherence occurrences. As you know, we focus heavily
8 on that.

9 MR. MALLORY: Yes.

10 DR. MANSFIELD: It is the one thing that
11 can't be designed into a plant, and we rely
12 continually and totally on your ability to train
13 people to do that correctly.

14 Let me talk about a recent one. There was
15 a recent violation where a multi-step process was
16 permitted to be done in any order, at least in more
17 than one order. A shift change took place before the
18 multi-step process was completed. When it was
19 resumed, one or more steps were omitted because the
20 second shift didn't recognize the order in which the
21 things were done the first time. When that happened,
22 did you put that into the Issue Management System with
23 a requirement to propose to validate changes of
24 procedures or instructions?

25 MR. MALLORY: I believe you could be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 talking about two issues with the W56 [a nuclear
2 weapon designation]. I'm not quite sure which one,
3 but those are both ORPs [Occurrence Reporting
4 Processing System] reportable.

5 DR. MANSFIELD: Yes, they were both -- we
6 read every ORPs report as you know?

7 MR. MALLORY: Right. I know you do.

8 DR. MANSFIELD: Did an issue get created
9 to be tracked to fix that, that was the first thing?

10 MR. MALLORY: Yes.

11 DR. MANSFIELD: I don't know if it was
12 within your 15 days window or not? And I believe that
13 was sufficiently longer. When was that? That was two
14 weeks ago?

15 MR. MALLORY: Within that time period.

16 DR. MANSFIELD: Something like that. So
17 it may not be finished yet.

18 Did the procedure get changed or at least
19 is there a draft of such a change? Is the next step
20 that you would approve it and would Mr. Glenn have --
21 would it show up on his thing also, would he have to
22 approve the change in procedures?

23 MR. MALLORY: Typically, no. I'll get
24 more specific. I'll talk generically. I don't know
25 what Dan will want to do, but typically I wouldn't be

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 involved in the approval of process changes.

2 Now, I'm not sure which W56 issue we're
3 talking about.

4 DR. MANSFIELD: This was the one where I
5 believe there were 12 steps --

6 MR. McCONNELL: They did the setup for
7 three actions, but didn't complete all the actions and
8 got out of phase.

9 MR. MALLORY: Right. Right. And they got
10 out of phase.

11 Let me back up before I talk about that
12 one, and I'll talk about the W56 issue that happened
13 prior to that where a piece of tooling was
14 disassembled.

15 I personally, because I saw that as a
16 safety issue, I got very, very involved in that one.
17 And I've gotten involved with a number of issues that
18 have to do with procedure adherence in the bays
19 themselves.

20 And because I have -- it's been a lot of
21 years ago, but for many years as a process engineer,
22 I designed all my own tooling. I wanted to understand
23 how this could happen. And the issue that Dan and I
24 had, and also discussed it at great length with
25 Pantex's Defense Board Site Rep, was how a group of

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 people could use a piece of tooling that was not
2 assembled properly and then not know that it wasn't.

3 I talked to every one of the people that
4 were involved. I personally utilized the tooling
5 myself with mock HE [high explosive]. I tried
6 personally to make that tooling fail, and I followed
7 the procedure that had been written for that, and I
8 came away with the conclusion that the way it was
9 written, the PTs [Production Technicians] had followed
10 that process exactly. It had a note that allowed them
11 to lift and tilt the tooling in a way that it was
12 conceivable that the first group that used it didn't
13 notice that it was put together improperly. And that
14 the second did.

15 Now, as a result of my involvement, we
16 spent three days practicing to remove a piece of high
17 explosive hemisphere from that tooling so that we
18 could finalize that part of the process.

19 I went down and I stood there and I
20 watched them myself to make sure that they did that
21 properly. And as a result of my involvement we
22 stopped operations. We stopped operations a number of
23 times in 2003 for safety issues. We went through all
24 of the tooling in all the bays themselves, and we're
25 finishing up the bays. We went through everything in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealrgross.com

1 the cells in a couple of days to verify that each
2 piece of tooling was put together properly. We went
3 through the entire tooling warehouse to make sure that
4 every piece of tooling was put together properly.

5 And this piece of tooling had been
6 disassembled about 4½ years ago, and this was the
7 first time it had ever been used.

8 We've also changed our receiving
9 inspection organization to improve the -- quality's
10 not the right word -- but the experience of the people
11 doing that. We've even changed the forms and how they
12 fill out the information and required functional tests
13 of the tooling that requires HE activities.

14 We've also changed our tooling
15 organization so that now they have a peer review
16 before anything leaves that tooling organization so
17 that we do not put the reliance on a receiving
18 inspection organization or on the PTs to assure that
19 tooling is put together properly.

20 One of the things that happened was in the
21 mid-'90s to lower costs, because I talked to all the
22 tooling people that were available, you know, that
23 still work there. There was an effort to reduce
24 costs, and there's nothing wrong with reducing cost.
25 But the cost reduction was in the manufacture of the

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 tooling, and they designed the tooling in a way where
2 -- and this always gets you -- they didn't put any
3 offsets in it. Everything is on a center line. It
4 reduces the amount of setups that the tool and dye
5 makers used. So they did reduce their costs. They
6 weren't looking five years down the road when somebody
7 put it together wrong.

8 So that's my involvement in that one, and
9 it was significant.

10 My involvement with the one that happened
11 a couple of weeks ago where that team got out of
12 phase. The question in my mind is just like it always
13 would, with the approach that we take. With the
14 reader, checker, doer, how is it possible at Pantex
15 for anyone to get out of phase? And they are working
16 their way up to me as far as the management reviews of
17 that particular action. And when I get back home
18 tomorrow, I'm meeting with that team.

19 My policy has been, and I put it in
20 writing a couple of weeks ago, just as I review every
21 safety incident from a personal safety issue, I will
22 review with the management and the people that are
23 involved in procedure adherence issues, I will
24 personally be involved with them, and I will talk to
25 them to find out if they know how to do their job, if

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 they have the wherewithal and the support of their
2 management to do their job, and if they intend to do
3 their job properly and follow procedures.

4 So, my involvement with procedure
5 adherence is deeper than any other time in my career,
6 and rightfully so. I take what we do at Pantex very,
7 very seriously. I expect it to have an incredible
8 amount of scrutiny. And I'm open and I welcome all
9 the feedback that we can get that will help make that
10 site safer and better quality from anyone that gives
11 it.

12 DR. MANSFIELD: Excellent. Excellent.

13 Now my question that I had the view on
14 this was since this procedure is relied on for safe
15 operations, since the procedures in general are -- in
16 effect -- have the same status as safety class
17 hardware, and if it doesn't work right, you can't
18 count on keeping you within your safety basis, since
19 for that reason, procedures need to be cast iron, if
20 you want, unbreakable or if it does break, everybody
21 knows it. Don't you feel that that requires a deeper
22 level of personal review within the Pantex Site Office
23 than procedure changes usually have in the past?

24 MR. GLENN: Yes. And let me describe a
25 little bit the way the Site Office gets involved in

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 this kind of event.

2 The first thing that we look at is, did
3 the contractor self-identify?

4 DR. MANSFIELD: Yes.

5 MR. GLENN: You know, problems occur,
6 errors are made, and we fully expect the contractor to
7 identify that, stop the work, and do the process, to
8 back out, to resolve it. So that's the first thing,
9 and in this case, it was self-identified.

10 The second thing that we look at from the
11 Site Office perspective is on the technical
12 inquisitiveness on the part of the contractor. And
13 that is usually illustrated in a properly run
14 critique. We attend the critique. We see: did the
15 contractor fully define the issue, identify proposed
16 corrective actions, you know. And in the critique you
17 only get so far into those corrective actions. And
18 then that translates to the occurrence reports.

19 My Site Office staff gets involved in both
20 the critiques where I have my duty office always
21 attends the critiques or one of the other federal
22 personnel in the operations. In this case, my
23 operations group would go to hear the issue to find
24 out what impact or quality impact that could have
25 made.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 In the Authorization Basis development
2 part of our steps is when they look at those
3 procedures is to determine if it's a skipped step or
4 a reverse step; what consequences could they have.
5 And so as procedures and processes are being defined,
6 that's being looked at. So we have a level of
7 confidence that kind of mistakes in the big area have
8 been looked at. But now it's our obligation to go
9 back and check the specifics.

10 In this case, the actions that were
11 performed didn't result in a safety concern in a way
12 that that weapon activity was performed. If it was, if
13 there was a potential consequence, that's when I sort
14 of jump in with both feet at that point. We have had
15 some cases of that which it comes up through me,
16 through the Facility Rep. They report back to me if
17 there's issues with the critique or from my operations
18 SME as far as what came out of that, what is the
19 issue.

20 And then, generally, every Monday
21 afternoon Mike and I discuss various issues, but a lot
22 of those discussions are the events that we want to
23 focus on to make sure that he and I have a general
24 understanding of what happened in that and what is the
25 path forward. So that I'm kept aware of what my

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 contractor is proposing on that.

2 So, that's pretty much the process.

3 DR. MANSFIELD: Okay. In particular, I
4 understand what you mean. That these particular steps
5 were judged not to be important for safety and could
6 be done in a different order and that other steps that
7 are determined to be important for safety are marked
8 very carefully in the procedures.

9 MR. MALLORY: Yes. And I'd like to add
10 that I'm aware of every critique that occurs at the
11 Site. And if I'm on Site, I go to those. There's two
12 reasons.

13 Number one, I want to hear as soon as
14 possible from the people that were involved their
15 version. And I don't say anything to them. They come
16 to me later, you know, where I ask the questions.

17 Second, the Site needs to see when
18 something goes wrong that their General Manager knows
19 about it and is interested in their being involved.
20 I think that's very, very important, and that's why I
21 do that.

22 DR. MANSFIELD: Okay.

23 MR. MALLORY: And I don't make judgments
24 about whether it's a safety issue or not whether I get
25 involved. If I'm there, we go to the critiques.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

1 DR. MANSFIELD: Okay. It's a question of
2 procedure adherence?

3 MR. MALLORY: Yes, sir.

4 DR. MANSFIELD: The line of logic I'm
5 getting here on, it might be obvious to you, the fact
6 that these steps could be performed in any order and
7 perhaps one omitted did not take you out of your
8 safety basis. Isn't it an indication that other steps
9 in the procedures if performed out of order or omitted
10 wouldn't take you out of the safety basis?

11 So the logical question on my part is: in
12 the review of the procedures initially for approval,
13 were consequences of omitting steps or performing the
14 steps out of order taken fully into account, number
15 one? Number two, did Mr. Glenn as the Pantex Site
16 Officer have assurance that the procedures had been
17 scrubbed so that the steps important to safety weren't
18 scrambled in order or omitted? And number three, is
19 somebody at Headquarters watching you like a hawk on
20 this?

21 I'm not in the Navy, of course, but I see
22 some Navy people out there. If somebody when you're
23 doing an evolution like a dive in a submarine, there's
24 obviously some steps that have to be done in the right
25 order. If they're not done in the right order,

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 obviously the commanding officer's got to find out
2 about it. But for sure somebody further up the chain
3 finds out about it also. The individual operators
4 aren't free to fix every problem without people up the
5 line knowing about it.

6 So my question is: does Headquarters watch
7 this like a hawk? And if so, who is familiar with
8 every time you have to address the issue of a
9 potential safety issue in a procedure that has steps
10 either omitted or --

11 CHAIRMAN CONWAY: You'll have to ask
12 somebody at Headquarters. These guys are out in the
13 field. I guess the point is, do you report up it, and
14 has anybody at Headquarters contacted you on it?

15 MR. GLENN: Let me see if I can answer a
16 couple of those questions.

17 First of all, you know clearly the
18 procedural adherence violation is significant no
19 matter what the specific steps. And that's where we
20 look at the contractor's action to just set the
21 standard that procedural adherence is really
22 necessary. Okay. There's the general, and then the
23 specific of this. And the specifics we look at: does
24 it create any immediate problems that the actions have
25 just occurred? If there is, then we respond right

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS

1323 RHODE ISLAND AVE., N.W.

WASHINGTON, D.C. 20005-3701

(202) 234-4433

www.nealgross.com

1 way. If there isn't, then we allow the process to
2 evolve it.

3 Also, when there's an immediate concern,
4 that's when I would get on either my email or phone
5 and let Dr. Beckner or Dave Beck know of the specific
6 event.

7 Other than that, specific events that
8 effect that are significant are discussed in the
9 weekly NA-12 & 13 conference call.

10 And so it is a judgment on my part whether
11 I feel I need to inform them immediately or not. And
12 I believe, you know, their expectation is at the Site,
13 I understand the procedure in depth. And I had
14 determined there is not an immediate safety
15 implication, then there is no expectation that I would
16 pick up the phone and call them; "I just had this
17 event." Because we do have it reported in the
18 occurrence reports that Headquarters people do take a
19 look at, that their staff takes a look, as those
20 reports, as they are initiated. And then we have
21 discussions at the staff level on the specifics of
22 those if they have any follow-up questions.

23 DR. MANSFIELD: So nobody at Headquarters
24 is really expected to know the details of those
25 procedures?

1 MR. GLENN: Correct.

2 DR. MANSFIELD: Okay. I contrast that
3 with what's in OP-98 [as of December 2003, Navy Staff
4 Code OPNAV N77], the submarine operators? Whatever it
5 is. I don't know what it is now.

6 Okay. Thank you.

7 CHAIRMAN CONWAY: Mr. Matthews?

8 DR. MATTHEWS: Yes. You described a very
9 extensive assessment, contractor assessment program of
10 tracking and trending and criteria and Issues
11 Management, and that's all very good. But it came
12 across a little bit paper heavy from what I heard.

13 So what I want to ask is: do you track how
14 often your managers are on the floor talking to
15 operators about safety issues? Now you described a
16 personal case, which was very impressive, where you
17 went down there. But that was sort of in the reactive
18 mode. And I'm thinking more in the preemptive mode.
19 Do you do that? Do you have a formal management on
20 the floor, safety type of program, and how often do
21 they do those types of things?

22 MR. MALLORY: Yes. "Management By Walking
23 Around?"

24 DR. MATTHEWS: Right.

25 MR. MALLORY: Yes. At least every other

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 week I go for at least two hours out on the floor in
2 an unannounced way where I just drop in in the bays
3 themselves, talk to the people, see how things are
4 going. The people that actually get on system and
5 check my schedule for the day, they kind of know when
6 I might be coming but they don't know where.

7 As far as the people, for example, in
8 manufacturing. They spend almost their whole day,
9 people in management, out on the floor just dealing
10 not necessarily with issues, but just making sure
11 everything is going smoothly.

12 There is no formal requirement to do
13 Management By Walking Around. I have worked places
14 before where there were expectations set, and they
15 became minimum expectations, not maximum. My
16 expectation is that people will be involved in the
17 support of the manufacturing organization, and I've
18 made it very clear that if it was not for the
19 manufacturing organization at Pantex, they would not
20 need any of the rest of us. We're only there to
21 support manufacturing. And I believe that there is a
22 significant amount of attention to our manufacturing
23 organization. And that our engineering organization -
24 - and I am an engineer. I spent five years earning
25 the right to criticize engineers. I have a bias that

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 those engineering organizations will lose the
2 arrogance they're sometimes accused of having. They
3 will acknowledge that they work for the manufacturing
4 organization, and they will respond to any need that's
5 necessary.

6 And I usually have a rule that when
7 someone in engineering wants to talk to me, they can
8 meet me on the manufacturing floor.

9 DR. MATTHEWS: That sounds like you're
10 setting a good example. I like that.

11 The other thing that I want to ask
12 briefly, you stated in your remarks that you had an
13 average of 100 independent assessments and audits in
14 a year. That's like two per week.

15 MR. MALLORY: Yes.

16 DR. MATTHEWS: That sounds like a lot to
17 me.

18 MR. MALLORY: And that is the plan that we
19 have here.

20 DR. MATTHEWS: And the question is how
21 many of those are safety related? Now are they yours
22 or are they truly independent? I guess I've
23 misunderstood the --

24 MR. MALLORY: Yes. I talked in my
25 testimony about two groups. Our Internal Audit

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 Group, and our Independent Assessment Group.

2 The Internal Audit Group is the group that
3 most people usually identify with financial accounting
4 activities. Now the problem with internal audit
5 groups is if you only elect to use that expertise to
6 look at internal financial audits. You know,
7 unallowable costs, those kind of things. So from any
8 Internal Audit Group, most of them are CPAs [certified
9 public accountants], and we've spent a lot of effort
10 in improving and increasing the ability of that group.

11 When we lay out our internal audit plan
12 for the year, I hold five periods of time back just
13 for myself.

14 DR. MATTHEWS: Let me interrupt you,
15 because I just really want to get a quick answer.

16 MR. MALLORY: Okay.

17 DR. MATTHEWS: And that is those 100 per
18 year are performed by BWXT?

19 MR. MALLORY: Yes. Yes.

20 DR. MATTHEWS: Okay. Then I misunderstood
21 your statement. I thought -- I assumed it was outside.

22 MR. MALLORY: No, no. The other group is
23 our Quality Assurance Product Division and they do
24 independent reviews also. And when I say
25 "independent," independent of that functional

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701

1 organization. Manufacturing does its own self-
2 assessments, but there are other groups in BWXT Pantex
3 that are looking at them also.

4 DR. MATTHEWS: Okay. Thank you.

5 CHAIRMAN CONWAY: In view of the time is
6 moving on, I may send you some questions that I have.
7 But in order to save some time, I thank both of you
8 for being here. And we may also have after we read
9 the transcript additional questions.

10 Thank you.

11 MR. GLENN: Thank you.

12 CHAIRMAN CONWAY: Okay. We'll, turn to
13 you, Mr. William J. Brumley, Manager of the Y-12 Site
14 Office.

15 MR. BRUMLEY: Thank you, sir.

16 Mr. Chairman, if you would prefer, I would
17 be happy to just summarize my brief statement and it
18 be submitted for the record?

19 CHAIRMAN CONWAY: Fine. Let's do it that
20 way. It will be in the record as read in whole. Yes.

21 MR. BRUMLEY: Thank you.

22 Thanks for this opportunity to provide
23 testimony on our process for contractor oversight and
24 our role in ensuring the mission assigned to NNSA are
25 effectively accomplished.

NEAL R. GROSS

COURT REPORTERS AND TRANSCRIBERS
1323 RHODE ISLAND AVE., N.W.
WASHINGTON, D.C. 20005-3701