Thank you.

CHAIRMAN CONWAY: Okay. Our first witness this morning is Dan Glenn, Manager of the Pantex Site Office, who is an employee of DOE/NNSA [National Nuclear Security Administration]. And, Dan, I will put in the record your background, which will go into the record prior to your speaking.

Welcome, Dan.

MR. GLENN: Thank you, sir.

Well, good morning, Mr. Chairman and members of the Defense Nuclear Facilities Safety Board, and members of the audience.

Thank you for this opportunity to provide testimony on the Pantex Site Office's current practices for oversight and management of our management and operating contractor activities at the Pantex Plant.

Transition from the long-standing roles and responsibilities to the re-engineered NNSA presents some challenges, but these challenges are needed as we strive to improve the effectiveness, the efficiency, and most importantly the safety of our site operations. I fully support the NNSA reengineering effort and believe that the appropriate level of contractor oversight to ensure adequate

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protection of the health and safety of the public and the workers within the Pantex Plant community will continue after this re-engineering is completed.

Office has primary The Site three responsibilities, all of which help ensure that contractor operations are conducted in a safe and environmentally sound manner. They are: first of all, complying with legal requirements; secondly, administering the M&O [management and operating] contract, and; thirdly, monitoring the contractor performance.

It is imperative that Pantex Plant is in compliance with all statutory requirements. During the budget review process each year, a concerted effort is made to ensure that the sufficient resources are allocated to the work required to comply with the Several of these laws serve as drivers to laws. assure appropriate federal oversight of the contractor work in such areas as environmental compliance and financial procedures.

Through the NNSA re-engineering effort, we have added more formality to the way in which the M&O contracts are administered. All the Site Managers went through an intense contracting officer training program earlier this year and were issued contracting

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officer warrants after completion. As such, I am now the focal point for directing the contractor to perform work at the Pantex Plant.

To assist me in administering the contract, I have appointed contracting officer representatives both within the Pantex Site Office and at Headquarters. There are a total of 12 contracting officer representatives assigned to the contract at the Pantex Plant.

I've also hired two contract specialists, one of whom is a warranted contracting officer and the other is scheduled to receive his warrant in December of this year. They will assist me in administering the day-to-day contract activities.

Implementation of this process has enhanced contractual control and formalized communication and tasking of work to the contractor.

Information is provided to me from a number of sources regarding contractor performance. Facility Representatives play an important role in monitoring contractor work activities, but they are [the] only way in which we monitor overall performance. In addition to Facility Representatives, I also rely on subject matter experts [SME] within the Site Office to monitor contractor activities on a

daily basis in their respective of areas responsibilities. I have subject matter experts in areas such as systems engineering, authorization basis occupational safety, radiological [AB], safety, explosive safety, environmental compliance, safequards and security, projects, legal, and business areas.

In addition to our own oversight, I receive input on contractor performance from various external sources, to include NNSA Headquarters, the DOE Office of Independent Oversight and Performance Assurance [OA], and other federal and state government entities. Agencies such as Environmental Protection Agency [EPA], the Texas Commission on Environmental Quality, and the State of Texas Bureau of Radiation Control, all of which are concerned with various environmental aspects of the Pantex Plant, perform onsite reviews.

The Office of Inspector General [IG] and the General Accounting Office [GAO] also conduct audits of various activities at the Plant and provide reports on contractor performance. It is not anticipated that there will be any changes in the foregoing reviews as a result of the NNSA reengineering effort.

And one tenet of the NNSA re-engineering

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1	effort calls for placing more accountability for
2	operating the Plant in a safe and environmentally
3	sound manner with the contractor. As such, the
4	contractor has been charged with developing and
5	implementing a more robust internal assessment
6	program. To strengthen its assessment program, the
7	contractor has done several things to include:
8	(a) Developing and implementing the
9	Contractor Assurance System [CAS] which places
10	emphasizes both on self-assessments and independent
11	assessments;
12	(b) The establishment of nuclear safety

- The establishment of nuclear safety (b) officers who are responsible for the in-depth knowledge and execution of the Authorization Basis and other safety documents for facilities and processes that involve nuclear, nuclear explosive, and nonnuclear hazardous operations, and;
- (c) Increasing the size and involvement of their Quality Assurance [QA] staff.

Another tenet of the NNSA re-engineering effort involves enhancing the Pantex Site Office oversight of contractor operations. There is a significant amount of work performed by the federal employees that I rely on as input to assess contractor performance. Some of this work is routinely recognized

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as conforming to the conventional oversight programs, such as the current reporting reviews, duty officer assignments, Facility Representative assessments, ES&H program assessments. However, the day-to-day operations of the Site Office encompass significantly more work, which often is not recognized for the indepth contractor assessments that they are.

As the Site Office Manager, it is my responsibility to review and evaluate much of the contractor's performance via the required approval or disapproval of program documents. For example, as the authority for the Site Safequards Security Plan, the Documented Safety Analysis, the 10-Year Comprehensive Site Plan, the Master Authorization Agreements, Emergency Management Plan, and the delegated authorities associated with the Energy Systems Acquisition Approval Board, my staff performs in-depth reviews and assessments of the information and related actions contained in each documents. All of this work constitutes a significant effort on the part of the federal employees to oversee the contractor's operations. The results of this work, along with additional inputs, serve as input to annual assessment via the Performance formal Evaluation Plan. Many elements in this plan are

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specifically dedicated to effective safety program performance. When evaluating the oversight programs of the Site Offices, I believe it is essential to recognize not only the conventional oversight mechanisms, but also the efforts that are a direct result of fulfilling our day-to-day responsibilities.

To further bolster our oversight program, we are in the process of developing and implementing a Line Oversight Plan, which is intended to enhance and formalize our assessment activities. The newest part of this development is development of an integrated assessment plan.

To date functional assessments have been performed, well-coordinated, but they weren't resulting in either redundancies or lapses. integration with our own staff, BWXT reviews, and the external reviews should not only provide the desired efficiency gains, but also improve the overall quality of our assessment program. We will continue to utilize Facility Representatives and subject matter experts in the Plant as they will provide input through readiness assessments, QΑ surveys, duty officer coverage, safety system evaluations, safety basis review teams, nuclear explosive safety reviews, and business and budget reviews.

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In conjunction with developing the line oversight plan, we are shoring up our self-assessment program. The Pantex Site Office has six organizational elements that will be involved in the self-assessment program. Self-assessments of the safeguards and security function are already well established and functioning, and the business function has recently developed its program.

The other Site Assistant Managers will have self-assessment programs established and implemented by the FY04 [Fiscal Year 2004]. This effort will include updating our local procedures to establish program requirements based on applicable orders or NNSA guidance.

As the various oversight and assessment programs identify findings and issues that require forwarded corrective actions, they are to the contractor or assigned to the appropriate Site Office organization for action. Tracking of these actions is currently accomplished by the cognizant Assistant Area Manager's organization. Both paper and electronic processes are used. BWXT Pantex is in the process of acquiring new issues management software that should This software be installed by December of 2004. system is being purchased to support the new line

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oversight/Contractor Assurance System program at Pantex. We are coordinating with BWXT to have access to that system and will use it in the future to provide one common system for the Plant with appropriate isolation between the federal and the contractor data.

I'd like to spend a few minutes talking about the staffing activities and departments at the Site right now.

To perform our mission, each Site was allocated a personnel ceiling, or what we call full time equivalents [FTE] during the NNSA re-engineering The Sites were charged with developing and implementing a managed staffing plan which outlined the organizational structure and personnel required to do its work. In developing the Pantex Site Office managed staffing plan, Ι took advantage of recommendations made by several workload reduction initiatives to streamline work, as well as some initiatives that were in the process at the Pantex Site Office and within the contractor's organization.

Two initiatives underway were: first of all, building up the Quality Assurance staff by the contractor, and; developing and implementing their contractor assurance system. The Pantex Site Office

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managed staffing plan showed an increase of personnel in the business and project management areas to handle the additional responsibilities being placed in these areas.

Staffing level has remained fairly constant in the areas of safeguards and security, authorization basis and environment safety and health. We are planning slight reductions in the areas of QA and Facility Representatives.

Our intent was not to back away from the current level of oversight until we could verify our contractor had implemented and we had validated the essential elements of the Contractor Assurance System. However, in actuality, we have experienced some unplanned reductions in the Site Office due to transfers and retirements prior to validating the full Contractor Assurance System. We are managing to those impacts via prioritization of our work while we attempt to fill our vacancies.

The Pantex Site Office managed staffing plan reflects a FTE ceiling of 82. Currently I have 70 personnel on board and we're actively recruiting to fill those vacant positions. We are a technically focused organization. Of the 70 personnel I have on board, 44 of them are in the technical qualification

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program. Of those 44, 33 are fully qualified under the qualification program, 8 are in process of completing our requirements for qualification. And we are in the process of developing and issuing qualification standards on three.

Many of the staff on the TQP [Technical Oualification Program] also other possess qualifications certified professional such as certified hazardous materials manager, engineers. certified safety professional, certified and environmental manager.

In addition to the 44 in the technical qualification program, 13 other personnel are also engaged in professional certification programs to include personnel in the safeguards and security, Quality Assurance, contracts and procurement, and property management.

There are several areas where I have requested part-time technical support from the NNSA Service Center. These areas have been identified because they demand specific expertise, and the Site's workload does not warrant a full-time position. The technical areas specific I have requested are: criticality safety, Software Quality Assurance, seismic engineering, and the assessment of the

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contractor's training programs.

I recognize the Board's concern with the decrease in the number of Facility Reps at the Pantex Site Office, and I would like to share my perspective regarding our FR [Facility Representatives] needs.

As some of you are aware, I began my career in DOE as Facility Rep for the production reactors at the Savannah River Site Office. That experience solidified in my mind the benefit and the need to have federal employees on the floor who have unencumbered access to all areas of the Plant and have technical understanding of the contractor's work activities and processes. Over a period of years, I have also come to recognize that the Department and its contractors have significantly improved the formality of its operations since the inception of the FR program.

In my opinion, it is appropriate for the NNSA to utilize the flexibility inherent in the FR standard for Sites to re-evaluate the effectiveness and the staffing levels of their FR programs. I led the Workload Reduction Initiative Team charged with developing guidance for the NNSA Facility Rep program. I volunteered for this assignment because: first, I'm one of the few senior managers in DOE and NNSA who

qualified and held the position as a Facility Representative, and; second, I believe that I would provide invaluable input to ensuring that FR program remained effective and viable.

I want to make it very clear I fully support the FR program and rely on it to manage my site. However, I believe there is room for improving the effectiveness and the efficiency of FR program while also providing reasonable adjustments to account for the significant maturation of the contractor's conduct of operations which has taken place over the last ten years.

The FR Program Implementation Guidance is intended to better focus the Facility Rep's attention on the proper implementation of technical safety requirements while ensuring the contractor continues to protect the workers from standard industrial hazards. Efficiencies are gained through a better integration and prioritization of our Site Office subject matter experts resources, not through the cessation of contractor oversight.

It is accurate to say that the manner in which I have distributed by staffing allocation does not provide substantial backup capabilities in the Facility Rep ranks. Nevertheless, I submit that the

Site Offices by design have breadth with little depth.

We are an organization that must possess diverse technical expertise with very little redundancy.

Although redundancy does provide additional confidence, it is not mandatory to provide reasonable assurance of contractor performance.

By integrating my staff's subject manner expert oversight capabilities with an effective Contractor Assurance System, I believe the Facility Rep staffing level is appropriate at Pantex. We will continue to evaluate our organizational needs and make any adjustments as part of our continuous improvement process.

The Pantex Site Office is in frequent communications with Headquarters personnel, either through email, telephone conferences, meetings as we carry out our mission. On a monthly basis, I provide the Administrator with an update of activities that are going on at the site. I also include in this communication any issues or concerns which I believe he should be aware of. I usually receive an immediate response from the Administrator.

I also participate in a weekly conference call with the NNSA Acting Chief Operating Officer where information regarding activities at the various

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site and Headquarters is exchanged.

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I also participate in the periodic Leadership Coalition meetings that are led by the Administrator. The Leadership Coalition consists of the Administrator and representatives from his immediate staff, Deputy and Association Administrators, Site Managers and Service Center Director.

In addition, my staff is in frequent contact with Headquarters personnel regarding their areas οf responsibility to include: (a) weekly televideo conferences with NA-12 & 13 [NA-12: Military Application and Stockpile Operations; NA-13: Program Integration] regarding the programmatic activities; (b) monthly telephone conferences with the Associate Administrator for Facilities and Operations; weekly telephone conferences with the Office of Business Operations; (d) weekly conferences with Office Planning, of Programming, Budget Evaluation. In addition to these scheduled calls, the Site Office personnel are in frequent contact with Headquarters personnel to provide information or seek quidance. All of the aforementioned forms communications and contacts serve to help Headquarters be informed on an ongoing basis of the

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I'd also like to spend a few moments talking about the Columbia Investigation Report and the actions that we have taken.

Upon receiving the copy of the Columbia Investigation Report, I distributed it to my senior staff and made it mandatory reading for my technical managers. I also provided a copy to the BWXT Plant Manager and his Deputy and commenced a dialogue with him on the report.

I believed that the lessons learned identified in the report were extremely important for both NNSA and the contractor managers at the Plant to understand. Therefore, I convened an offsite meeting with my technical managers and BWXT Pantex technical managers to discuss the implications and recommendations outlined in the report.

The offsite meeting focused on Chapters 6, and 10 of this report. The meeting structured in such a way that a brief summary of each chapter was presented, which was followed by an open discussion by all participants. The meeting concluded brainstormed listing of critical that are both necessary and sufficient to improve the safety throughout all the Pantex

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The next steps include condensing this list into a concise list of factors that will be further developed into Pantex-specific actions to be undertaken in the near future.

Areas that have captured my attention are the concept of the normalization of deviance, and the role and effectiveness of the independent safety organizations. We are taking a serious look at the events surrounding this tragedy and those conditions that contributed to the accident in a sincere effort to apply the lessons learned to our own operations.

conclusion, Ι believe In that the identified federal oversight of contractor activities at the Pantex Plant resulting the NNSA re-engineering is sufficient to ensure safe and environmentally sound operations. A portion of the Pantex Site Office reengineering actions is based on placing increased accountability on the contractor. As such, the contractor is charged with developing and continuing to improve a Contractor Assurance System to formalize the manner in which it would bolster its internal oversight activities.

The contractor initiated the implementation on their plan on October 1, 2003, with

2 I am monitoring the effectiveness in the 3 Contractor's Assurance System in relationship to its 4 staffing decisions I made during our re-engineering efforts based on a robust Contractor Assurance System. 5 6 I will make internal staffing adjustments or request 7 additional resources if I am not convinced that the 8 CAS is working as intended or the Service Center 9 support is available as I desire it. 10 Again, I would like to thank you for the 11 opportunity to share my perspective on the NNSA re-12 engineering effort. And I am available for any 13 questions. 14 CHAIRMAN CONWAY: Thank you, Dan. 15 Dr. Eggenberger? VICE CHAIRMAN EGGENBERGER: 16 You made a 17 reference to what you needed was the appropriate level 18 of oversight. What is the appropriate level of 19 oversight? 20 MR. GLENN: The appropriate level of 21 oversight is to have an understanding of all the work activities that my contractor performs at the site so 22 23 that there is not a situation where I would find that the federal staff is unaware of either contractor work 24 25 activities or the programs that they use to do that.

full implementation scheduled for October 1, 2004.

That does not mean that my federal staff is aware of every single activity that takes place, but there is a process in place that assures that we sample, we are made aware of issues, and that we develop corrective actions to address those deficiencies that come up.

So, as long as there is input in the different functional areas that make its way up through the system and are evaluated in all the different work activities, then I consider that sufficient oversight.

VICE CHAIRMAN EGGENBERGER: Do you need to be overseen?

MR. GLENN: Sir, the work that we do is very important for the nation, and it includes there inherent risk associated with that. Because of those risks, the direct answer is yes. I think we talked about that's one of the lessons from the Columbia accident investigation. You get redundancy in the oversight.

I welcome external reviews of my work activity at the site. I want to make sure that I'm doing the best job for the citizens of this country. So any review is welcomed, and we try to take the lessons or the recommendations that come from those reviews and improve our operations.

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VICE CHAIRMAN EGGENBERGER: What is that appropriate level of oversight on you; have you thought about that?

MR. GLENN: Well, it would include sort of same type of activities that I set for the the oversight for overseeing my contractor. It is that anyone that looks at the Pantex Site Office should be able to take a look at our methods, our processes that we use to determine: have they covered all functional areas? Are they aware of security aspects? Are they aware of the weapons disassembly aspects? Are they aware of the industrial hygiene program? Those kind of questions external oversight should look at the Pantex Site Office and convince themselves that, yes, the Pantex Site Office is aware of all the programs, they are looking at areas that are important for the safe operation of the site. And they should be able to then assess whether they filled their voids in the scope of the oversight that I'm doing or if there are -- I mean, we will always find differences in the depth that you go into the oversight as far as opinions from different groups. But I think the most vital part in assessment: have we, as a Site Office, covered the adequate breadth of it.

VICE CHAIRMAN EGGENBERGER: Now, you made

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a list of oversight activities both by yourself and by 1 Headquarters, and you kind of went through that list; 2 Facility Representatives, SMEs out of your office, the 3 broad issue of just NNSA Headquarters not details, GAO 4 5 IG, and it went on. It was a long list. Now, how does that list fit together into 6 7 the appropriate oversight program? Just a list of things, in my view, isn't very useful. 8 9 MR. GLENN: Yes, sir. I think the --10 VICE CHAIRMAN EGGENBERGER: That's why I 11 asked what is appropriate oversight, and I was hoping 12 that you would come up with an oversight model or an 13 oversight theory, and I hadn't heard that yet. So 14 maybe you might want to --MR. GLENN: Sir, the Pantex Site Office is 15 responsible for overseeing all the work activities. 16 17 My oversight program needs to cover all of that. I 18 don't rely on external Sites to fill complete areas 19 that my Site doesn't cover. What I do rely on is that 20 the external oversight, to take a look at the areas 21 that my Site is looking at and determine if that's sufficient or not. 22 23 The GAO, IG, those topics come in. 24 times those topics are identified for other reasons.

What we do is we take those reports, we look at those

recommendations to determine, "Do I need to make 1 changes to my oversight program to enhance or redirect 2 3 it so that they cover the voids that are there?" I believe that the Site Office oversight needs to 4 cover and needs to stand on its own, and then all 5 other items that Ι mentioned the 6 those 7 redundancies that are built into the system to make sure that there aren't voids in it. 8 9 VICE CHAIRMAN EGGENBERGER: One way maybe 10 11 12 with operations, and one associated

of looking at it is that maybe somebody could divide what you do at Pantex into two things: one associated with infrastructure, engineering and analysis. course, engineering and analysis overlap into both the operation itself and the infrastructure part of the operation.

Now, you said that you're weak on some of the infrastructure items in the form of certain experts that you need in order to do those kinds of things. And you would expect to get them from another source, such as this Albuquerque -- I forget what the word.

> CHAIRMAN CONWAY: Service Center.

VICE CHAIRMAN EGGENBERGER: Service Center operation.

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I'm going to give you an example and then I'm going to be quiet. We put together a list of things that the Board has unearthed and that you have unearthed and Headquarters has unearthed that the contractor did not unearth across NNSA. And the bottom line for that list is the necessity of having a coordinated and well structured oversight program.

Now, the thing that irritates the Board is that the Board finds things. You know, we're a little entity and we shouldn't find anything. We're not oversight. We just find things. Let me give you an example. This is an example that didn't cost very much money, and it's very small but it's highly important. And this is called the roof cracking issue in 12-64 [a Pantex Plant facility]. You're familiar with that?

MR. GLENN: Yes, sir.

VICE CHAIRMAN EGGENBERGER: Okay. That was first talked about formally by us in June of 1998. Informally, it was talked about earlier. That is an infrastructure issue and a safety issue. Okay? They were both safety issues.

You are not staffed to deal with the analysis and issues that were bound in the roof cracking situation. The Department was not. The

Department is not. You are not. We've been hassling 1 with this simple sophomore engineering problem for 2 It's five years. And finally something 3 five years. has come about that. 4 Those things should never happen in an 5 oversight operation that understands what's important 6 and how things work. It's just very irritating that 7 things like this happen. 8 So we can go down each one of these other 9 items also. And my message to you is: I think you 10 need to give it some thought on what oversight you 11 really need and what oversight needs to be given to 12 13 you on your operation. And Headquarters certainly 14 should give a lot of thought to this. The disbanding of the technical group in 15 Headquarters just doesn't fit with what 16 Ι 17 discussed. So that's all I want to say. And I just 18 think that you don't have the situation under control 19 The two things -- operations: you do a 20 vet. reasonable job at operations. The engineering and 21 22 infrastructure needs a lot of help. 23 Thank you, Mr. Chairman. CHAIRMAN CONWAY: Dr. Mansfield? 24 25 DR. MANSFIELD: My concerns are similar,

and some of the examples that I might cite are equally familiar. Some problems that you run into are just too hard to do and you're not expected to have, for instance, a nationally known lightning expert. But the Department is supposed to have one if it's going to carry on nuclear weapon activities. You know, the Department has got to be self-sufficient, and they've got to be able to provide you with what you need when you need it. And you have to have, not considerable certainty, not a warm feeling, but absolute certainty that you're going to be able to get the technical help from wherever, from Sandia or from the Service Center.

My worry is that as you dilute your technical capability by relying more on the CAS -- and I think it is a dilution, it's certain diminution if not a dilution -- it becomes harder and harder for you to recognize what you don't know.

VICE CHAIRMAN EGGENBERGER: That's right.

DR. MANSFIELD: And that frightens me.

Furthermore, at your level you know this is something of a zero sum game. I mean, BWXT has to add capability or take the reassigned capability to do the CAS system while you're lowering your number of people and diminishing them of FTEs that did similar things before. You're relying on the CAS system to

tell you what your own people told you before.

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The next step up the chain is Headquarters no longer has the capability to really do technical analysis and oversight to find out what's going on. They're relying on your understanding of -understanding of what the problems solutions are. Diminution of your capability in the Site Office coupled with essentially the elimination of it at Headquarters is really frightening to me. And especially when it's manifest in the fact that you say that you talk to Headquarters weekly and your people talk to them weekly. It would seem to me the more appropriate time would be hourly; that somebody at Headquarters would always be bugging you about the status of some corrective action.

I could just imagine if, say, Naval Reactors [NR] would have written testimony like yours. Can you imagine [Admiral] Rickover's organization allowing any shipyard to say that I'll talk to you weekly? I mean, they were talking to them all the time. Every issue has got somebody at Headquarters that tracks it.

For instance, on MoveRight, the problems with MoveRight that became obvious almost as soon as we started implementing it. Who at Headquarters did

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you notify? Who at Headquarters bugs you on this? That's an important enough program. You're relying on it, and you're relying on it. I'm pointing to Mr. Glenn and Mr. Mallory. You're relying on it for an important safety function. It's mysteriously failing in ways that might have been fixed during its design but weren't.

You know, this is sort of like a failing brazing in a sea water system, right? Headquarters in the Naval Reactor program would never, never let that go without daily attention. Who at Headquarters was providing daily attention to you on MoveRight? Anybody?

MR. GLENN: When the issues happened at the Plant, I contacted Dr. [Everet] Beckner and Dave Beck. They were my primary interfaces on the operational issues that occurred. What we've done is the contractor's put together a whole plan. The issues with MoveRight were the overall movement of material at the site program. We've identified those problems, and we are trying to -- you know, they are working on those issues.

DR. MANSFIELD: Yes, I realize that. But that's the answer that I expected. But did, for instance, Dr. Beckner or Mr. Beck say, "I want you to

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be in contact everyday with such-and-such?" Fill in 1 the name: who's the name? Who at Headquarters knows 2 enough about software assurance to make sure that 3 you're doing the problem right and that Beckner knows? 4 There wasn't a name on --5 MR. GLENN: DR. MANSFIELD: That's the answer. That's 6 7 the answer I expected. I want to point out that the situation we're designing normally will have nobody at 8 Headquarters that will be technically on top of fixing 9 1.0 things when major safety issues comes up. You will have someone and they will be, you know, as good as 11 let it be noted that 12 you can make them. But Headquarters, who is singularly responsible for the 13 14 safe operation of the system, doesn't have anybody. Now, would that happen in Naval Reactors? 15 I just don't think so. 16 17 The fundamental point that I'm getting at is that you changing the system or DOE and NNSA is 18 changing the system, making you change the system, in 19 20 ways that are very much in the direction opposite of what organizations that did difficult engineering have 21 22 found worked very well. 23 You mentioned [chapters] 6, 7, 9, and 10 24 of the Challenger report. But Chapter 11 is even more

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35 engineering management organizations that have proved 1 correct in the past. 2 I want to point out that I'm far from 3 4 being happy that this is going to work or satisfied 5 that this isn't going to work. Because it's too much 6 different, unlike engineering too management 7 organizations that have worked in the past. CHAIRMAN CONWAY: Dr. Matthews? 8 9 DR. MATTHEWS: Yes. Dan, I want to pursue 10 the line of questioning on risk and balancing safety and productivity as they've talked about. 11 12 You talked about risk in the draft policy. 13 And in Ambassador Brooks' testimony, they said that 14 the NNSA plans to focus oversight and resources on the 15 highest risk facilities. Pantex, obviously, has some 16 pretty high risk facilities and operations.

wondered if you could sort of cite what today's three highest risk activities are, and give me some ideas of how you assess those risks, what processes you use to assess those risks, and what criteria you use to prioritize them?

MR. GLENN: In general, the three highest risks are dealing with the direct weapons operations do. And those risks are the thermal, we the electrical, and mechanical insult to the weapon.

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know,

develop

we think we have that well defined.

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Did that answer?

DR. MATTHEWS: Well, sort of. I thought

And we try to establish the controls to

We have developed our authorization basis

That then gets reviewed by the

That then gets approved by me as the

controls that

Along with that is assessment of the

for individual weapons activities that go through the

safety review team in federal staff with laboratory

risk acceptance official, and in that document, as you

implemented as a result of that. So I would say all

the risks or essentially the highest level risk are

associated with the nuclear explosive operations. And

facility design and support; where we do that work

activity. Again, in compliance with the 10 CFR 830

[Nuclear Safety Rule] requirements to establish an

authorization basis for the whole site, we have also

worked through a lot of modules that define both the

facility design and the general natural phenomenon

events that occur at the site so that the work that we

are doing recognizes the environment that it's being

mitigate or to prevent, put accident mitigators into

the

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done in.

the process.

you'd be a little more specific in your answer, but that's okay.

Do you use a classic risk base process for looking at consequence and likelihood when you identify [risks]? Because the reason I'm getting to this is that your resources are going to be focused on those high risk activities, and so there has to be a good solid basis for deciding where you put your limited resources.

MR. GLENN: Yes. I think we do use the standard and the risk assessment techniques identified on DOE Standard 3009 [Preparation Guide for U.S. Department of Energy Nonreactor Nuclear Facility Safety Analysis Reports], which is primarily a "what if" technology and then some individual cases of further risk analysis. But, yes, most of those are with the focus on the mechanical insults. The threats exist in all three areas; the thermal, electrical, and mechanical. So we have devoted a lot of our attention on interrupting the mechanical threats to the weapon primarily. Do more of that early in the process on those.

DR. MATTHEWS: And so I assume you'll focus your oversight in those areas primarily?

Okay. Now, as you said, you're now the

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risk acceptance official. 1 2 MR. GLENN: Yes. DR. MATTHEWS: You're also the contracting 3 4 officer. Therefore, you have both the responsibility for safety and programmatic delivery and security, I 5 assume, in there? 6 7 MR. GLENN: Correct. DR. MATTHEWS: So you've got to balance 8 9 those three major activities. And so I was curious, how you going to do that balancing? How you going to 10 11 make that decision whether to take a risk, put more resources on it? You know, and as part of that what 12 primary programmatic mission 13 are your three 14 deliverables, too, so you've got that down? So how do 15 you make that balance? Are you the decision maker or does it go up to Headquarters? And how do you get the 16 data to make sure you don't miss something and the 17 18 like? MR. GLENN: That's a large question. 19 how I can do to answer that. 20 The balance, first of all, my nuclear 21 22 operations experience gives me some -- my personal 23 opinion on what is an acceptable risk and what passes

the acceptance factor of formality of operations. And

I use that a lot when I weigh the decisions that come

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in.

Along with that, we have the formal development of the authorization basis that identifies the probability, the number of what is the probability of this specific accident occurring. So I can look at those numbers and focus attention on the ones that are more probable than others.

Now, to balance that so that there's a balance that goes on with understanding the uncertainty of those calculations and the consequences of those. And let's say I use my own personal judgment, I use the results of the formal hazard analysis process, and then we use the comments that come in externally on the work activity that we're doing to also assess that.

Now, you were saying that the three primary mission is to -- again, I tried to identify that early in my talk. My job as the Site Manager, I have to comply with law, and that covers all aspects of it. You know, I am expected to accomplish a mission at the site, too, and there are specific documents that define how many of our product is. And we consider that important to the Chief. And then we also assess the overall performance and recognition of the safety programs already working. Are we seeing

the reduction in the total reportable incidents over time? So we focus on that on the program level.

In there comes security, too. And as is often the case they're contradicting or conflicting priorities. Security changes don't necessarily promote some of the mission production. But we weigh that again. Under the security side I have analysis, vulnerability analysis, things that are performed that put it in a pretty good perspective for me. And then I figure out what I am comfortable with. And I always have the option of not authorizing the work to be accomplished.

And what we are seeing right now is a delay in authorization of some of this work. Some of these in the reductions that we have because we've lost folks and things and the transition that we see, we're not turning our back to looking at the activity. What is happening is it's taking us longer to convince ourselves we understand it, and that's delaying some of the work product. But that's where we weigh that, and that's where it's coming out is delay in some schedule aspects as we work through making sure that we understand all aspects of the problem.

DR. MATTHEWS: So, for example, would you delay disassembly in favor of applying the seamless

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safety type of rigging to that unit?

MR. GLENN: Yes. I mean, we have done that. Again, it's a balance of the work. If the work doesn't present any unique hazard, and there is a plan to improve, step-wise improvement of the process down the road, we do take a look at that. We assess is there a need to stop that work to make enhancements now, or can it wait? And we do make those judgments. Those judgments are reflected in an integrated weapons activity plan that we developed that prioritize our work to focus on our conventional high explosive weapons first and then the work secondly.

DR. MATTHEWS: Thank you.

CHAIRMAN CONWAY: Anything else?

DR. MATTHEWS: No.

CHAIRMAN CONWAY: Dan, let me say, as you correctly pointed out the Board has been a strong advocate the Facility Reps program. And personally, I've always looked upon you as an excellent example of the success of that program. You as a former Facility Rep are now a key manager in one of, I'd say, one of the most important sites and work that the DOE is responsible for. So I've looked upon the Facility Rep programs not only of the DOE having the eyes and ears of their people right down on the deck plates knowing

what's going on, but as a training program. Because we've always supported the idea of the Site Reps should not be kept in that position, but be given opportunities to move up the chain. And that's what we've been encouraging.

So it's a little bothersome to me when I see you're being given more responsibility out at the site, much more responsibility, and with less people. You're being cut back on the numbers of people you have at the same time you're being given responsibility. And where are you looking for more Business management. people? QA is where you're cutting back, Quality Assurance. And the Facility Rep program at your site, you're cutting back. So you're cutting back across the line on total numbers of people to do the work and the place now you're putting your emphasis is business management.

You're looking to the contractor to be responsible for QA. Well, the contractor has that responsibility right today. For the contractor to now be told he has to improve or get improved in that area, that's his responsibility right from the beginning under the current way of operations. But it's bothersome to me when I see what I think I see is a cutback in your technical competence people and

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reliance more on the contractor in that area, which is the safety area. And particularly, as I say, if we start cutting back on Facility Reps, we're not training the personnel that we're looking for. And we're not advancing, as the Congress asked us to do, to try to improve the technical competence. And that's one of the reasons we've been such strong support of the Facility Rep program.

Now, let me ask you, you're going to depend upon Albuquerque, apparently. Now, you have a problem and you don't have the technical competence now. Can you order them at Albuquerque to send you somebody, or do you have to go to Headquarters and say please arrange for somebody from Albuquerque to come help me? How are you going to get this assistance that you're going to be needing?

MR. GLENN: As you know, right now we're in the transition of the Service Center. The goal and the vision of that is I am responsible for, again, overseeing all the work activity; specific expertise that I just don't have and ones that need to remain current. Software Quality Assurance is a classic example of that.

CHAIRMAN CONWAY: Yes.

MR. GLENN: That is --

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CHAIRMAN CONWAY: So, can you order them 1 2 to come and help you? 3 MR. GLENN: The intent is, yes, I pick up the phone to the Service Center and say I need this 4 5 technical expertise at the Site. Send them to the Site 6 Office, and then --7 CHAIRMAN CONWAY: Okay. And they tell you, I'm sorry, they're tied up right now on something 8 9 Maybe next month I can send the guy over else. 10 because he's working on something else. Now, can you 11 say no, I want him right now, and I have to then 12 comply with your request? 13 MR. GLENN: I then go to that person's 14 supervisor up to the Service Center Manager and if I--15 CHAIRMAN CONWAY: And he tells you the 16 same thing? I mean, we're having problems like that 17 with the Laboratories. 18 MR. GLENN: Yes. 19 CHAIRMAN CONWAY: You need help from the 20 Laboratory, and call the Laboratory for you 21 assistance. And that's one of the problems we've been 22 trying to solve with, "We're the Laboratory; we'll 23 get around to it sometime." So I see the same problem 24 developing that we've had with the Laboratories giving you the assistance you need in a timely manner. 25

You're going to have the same thing, I think, of getting that kind of assistance. The first thing, you're going to have to find the guy who supposedly is at the Service Center, which they don't have right now. So you're already cutting back on your technical competence, in my opinion, and looking to the Service Center that doesn't have them yet. So you're already into a program which has not been put together yet.

So I also --

VICE CHAIRMAN EGGENBERGER: Yes. Furthermore, on our little example of the roof cracking issue. Evidently for five years, that meant nobody understood at your Site the importance of that issue. So, therefore, you are deficient in the technical capabilities to realize that you have a problem. And, so, if you can't recognize a problem, how can you ask for the people even?

CHAIRMAN CONWAY: No. Let's move on.

We would like see -- first off, the fact that you are getting all this, in my opinion, additional responsibility at the Site. It seems to me that's where you need more technical competence to help you, not less.

You wanted to say something?

DR. MANSFIELD: Yes. I'd like to explore

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another Pantex issue in this regard, and that is especially the notion of accepting risk.

Current authorization basis limits you to a single weapon operation within a bay or cell --within a bay, anyway. There's a proposal that says a certain weapon that be at stage one while working on another. Okay. We have been -- beg your pardon? Yes, you'll see why.

The issue we've been examining is how you're doing the Analysis Safety for that, particularly the risk assessment and controls. The proposal, apparently, is that since the initiating accident is essentially so unlikely as not to be worried about, that no controls are required to protect the second weapon from anything that might happen to the first because the probably of anything happening to the first is very small. We strongly question that, and we think you ought to, also.

And so my questions to you are: do you believe that the risk analysis in its current state conforms, for weapon staging in a bay, conforms to the requirements of [DOE Standard] 3009? And the second question is who at Headquarters is aware of the importance of this issue and has given you any direction on it?

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1 CHAIRMAN CONWAY: I'd hold off a bit on 2 We will discuss this more with you at a later 3 date on the particular problem we're facing right now 4 on that matter. You know what the matter is? 5 Yes, sir. Would you like me MR. GLENN: to respond now? 6 7 CHAIRMAN CONWAY: Well, if you can do it. 8 I don't want to get into classified --9 DR. MANSFIELD: Oh, no. This is not --10 CHAIRMAN CONWAY: I understand. 11 were getting into areas I would --12 MR. GLENN: As the Site Manager, I'm very 13 aware of the details of that topic. I have been in conversation with Dr. Beckner and Dave Beck on that 14 15 continuously for the last several months on that. 16 have a very clear picture in my mind of what the 17 threat is and how it should be analyzed, and I look 18 forward to presenting that with respect to --19 CHAIRMAN CONWAY: Yes. We will get 20 together with you on that matter. 21 Dan, let me say before I turn over to Mr. 22 Mallory, I think you're trying to do a good job, and 23 you are doing a good job now -- and with all the 24 responsibilities you have on your shoulders, more help 25 there. And to the extent that we can, we want to be

helpful to you. But I think, as I said before, you in 1 my mind personify one of the best in the DOE program 2 coming up through the Facility Rep program and 3 4 assuming the responsibilities that you've taken on down at Pantex. And I'd say this is one of the 5 toughest jobs that DOE has, and you have that job for 6 7 So I want to thank you for the effort and what DOE. 8 you've been doing today. 9 MR. GLENN: Thank you, sir. We certainly 10 appreciate your insights. And I quarantee you, we are thinking very hard and long about these changes. 11 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

missions at Pantex: (1) We evaluate, retrofit, and