

1 MR. RUDDY: Sure. Thanks again.

2 CHAIRMAN CONWAY: Now, it's our practice
3 to always have at our hearings to throw it open to the
4 public. I have one individual who has indicated he
5 would like to speak, and that Mr. William L. Hicks,
6 who from the public would like to come before us.

7 Mr. Hicks. Mr. Hicks, it might be a
8 little helpful if you give a little of your background
9 for the record.

10 MR. HICKS: Thank you, Mr. Chairman, for
11 this opportunity to provide some thoughts to the
12 Board.

13 My background consists of some 30 years in
14 the Rickover program on the operational and inspection
15 side, so I have seen that at some detail.

16 And for the last 12 years, I have been
17 associated within DOE primarily in Defense Programs,
18 but also with significant amount of time in some of
19 the other nuclear activities in the area of
20 operations, oversight, assessments; some of these
21 areas that you're talking about.

22 If you like, I can provide some additional
23 information for the record after we're complete.

24 I thank you for the opportunity to provide
25 my thoughts, and these are my thoughts for the Board,

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1 as you review the status of DOE including the NNSA
2 oversight management of contracts and contractors.

3 As you noted in the notice of this
4 hearings, this will focus on what impacts, if any,
5 DOE's new initiatives may have or might have had upon
6 assuring adequate protection of the health and safety
7 of the public and workers at the DOE defense nuclear
8 facilities.

9 As I noted, my experience includes 30
10 years in the Navy Nuclear program, 12 years within DOE
11 and NNSA complex associated with operation, oversight,
12 and management of nuclear activities. The
13 observations and conclusions in this presentation are
14 based on that experience coupled with my evaluation of
15 the ongoing efforts to reorganize the NNSA and to
16 change the DOE/NNSA oversight model.

17 The discussion in the presentation is
18 going to focus primarily on the nuclear activities and
19 the risks from those activities. I believe it's an
20 important focus for several reasons. First, you are
21 the Defense Nuclear Facilities Safety Board. You have
22 a primary focus on the safety of nuclear facilities
23 and activities.

24 Secondly, I believe the nuclear activities
25 present the potential for the most severe consequence

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1 to the public and the worker as well as the
2 environment should a significant accident occur.

3 Thirdly, I believe that if we lose focus
4 on the severe consequences of a nuclear accident, we
5 become complacent and look to historical statistics
6 concerning industrial construction type accidents as
7 a basis for reduced regulation and vigilance. I
8 believe this phenomenon is one of the critical lessons
9 and conclusions from the Columbia accident. The
10 ongoing and proposed NNSA/DOE oversight model seemed
11 to justify a past record of performance without
12 consideration of the processes that defined that
13 performance or the minimum controls to ensure
14 continuation of the record of zero significant nuclear
15 accidents. I believe it is reckless in the extreme to
16 depend on OSHA [Occupational Safety and Health
17 Administration] statistics to justify reduction of the
18 defense-in-depth safety management systems and
19 programs that provide the appropriate assurance that
20 a nuclear accident with unaccepted consequences will
21 not occur.

22 As I consider the question of adequate
23 oversight, I realize I can't evaluate the adequacy of
24 oversight without a better understanding of the
25 purpose of the oversight and the credit in the overall

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1 management and regulatory strategy ascribed to
2 oversight. Prior to the evaluation of oversight, the
3 entire regulatory model of which it is a part must be
4 understood.

5 During the initial public meeting of this
6 series, Jim McConnell, the Deputy Technical Director,
7 describes three separate and possibly conflicting
8 responsibilities assigned to DOE/NNSA. The
9 responsibilities are as a customer for the products,
10 including research and remediation, developed by the
11 contractors; responsibility as the landlord of the
12 facility in which the contractors create product; and
13 as the sole regulator of nuclear activities. As Mr.
14 McConnell discussed, the goals of the customers or
15 program side of DOE may be in conflict with the
16 regulatory responsibilities. DOE and NNSA is unique
17 in that the Atomic Energy Act assigns to it the
18 responsibility to manage the development of the
19 products and infrastructure as well as to regulate the
20 activities. As you know, from the civilian sector,
21 the NRC [Nuclear Regulatory Commission] was
22 established to avoid the conflict that exists within
23 DOE/NNSA today.

24 Much of the effort of the Board in the
25 last 12 years I have been associated with DOE/NNSA has

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1 focused on various aspects of these regulatory
2 responsibilities. Some elements of the regulatory
3 model have been developed, various initiatives have
4 evolved, been criticized, modified and disappeared in
5 the name of streamlining, graded approach, necessary
6 and sufficient, etcetera. However, despite the
7 emphasis of the Board and many within DOE and NNSA, I
8 do not believe that a clear, holistic model to
9 accomplish the regulation of nuclear facilities and
10 activities within DOE and NNSA has been defined and
11 sustained. Without such a model, it's not possible to
12 judge the adequacy of any individual part or
13 initiative.

14 I believe a regulatory model must have
15 three elements: requirements, implementation, and
16 enforcement.

17 Requirements for the control of the
18 hazards of nuclear activities are now adequately
19 defined, I believe. In general, they are included in
20 the contracts or are laws that all DOE/NNSA
21 contractors must meet. The foundations for the
22 requirements are within the Nuclear Safety Rule, 10
23 CFR 830, and the Radiation Protection Rule, 10 CFR
24 835.

25 The Nuclear Safety Rule specifies

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1 requirements for Quality Assurance programs,
2 Documented Safety Analysis and safety management
3 programs. Other DOE/NNSA orders and contract
4 requirements specify the attributes for the safety
5 management program. The Board has been actively
6 involved in assuring the adequacy of the requirements
7 starting, at least to my knowledge, back with
8 Recommendation 90-2 [DOE High Priority Defense Nuclear
9 Facilities: Design, Construction, Operation and
10 Decommissioning Standards].

11 Implementation. As I look at it,
12 implementation is the action to develop programs and
13 processes through which requirements will be met,
14 followed by the deliberate execution of the programs
15 and processes to achieve the results specified in the
16 requirement.

17 The record across DOE and NNSA complex of
18 implementation is not as clear, consistent, or
19 persuasive as the record in the definition of
20 requirements. A number of initiatives have supported
21 implementation. Operational readiness reviews [ORR]
22 verify the satisfactory implementation of the DSA
23 [Document Safety Analysis] and safety management
24 programs when an activity has been started or
25 restarted.

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1 The Integrated Safety Management System
2 [ISMS] initiative, including verification of the
3 implementation of the system, provided a baseline of
4 implementation of the safety management programs as
5 well as many work safety initiatives.

6 The ISMS initiative provided a
7 comprehensive regulatory framework. It might even be
8 argued that the ISM initiative does define a
9 regulatory model. However, the effectiveness of the
10 ISM system is not being consistently monitored nor
11 have consistent expectations been enforced. In the
12 current draft oversight policy, expectations
13 associated with a robust ISMS are barely mentioned.

14 The implementation of subpart B of the
15 Nuclear Safety Rule provides another opportunity to
16 achieve and verify implementation. The development,
17 review, and approval and implementation of the
18 required DSAs has occurred with significant variations
19 across the complex. In some cases the review of the
20 submitted, rule-compliant, DSA prior to approval is
21 thorough and adequate. In other cases, less effort
22 with less competence is applied to the review. In
23 some cases there's a formal process to verify the
24 adequacy of the implementation of the approved DSA.
25 At some sites, the contractor accomplishes the

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1 verification. At other sites, DOE or NNSA verifies
2 adequacy of implementation. However, in some cases,
3 neither DOE and NNSA nor the contractor has formal
4 processes to ensure accurate and complete
5 implementation of the DSA. This lack of consistency
6 indicates that there is not a clear regulatory model
7 being followed by DOE and NNSA.

8 More importantly, my observation is that
9 in some cases the implementation does not achieve the
10 expectation of the requirements, and there is no
11 systematic process to detect the inadequate
12 implementation. In these cases the level of risk
13 exceeds that which DOE and NNSA as the regulatory as
14 accepted.

15 Enforcement is the critical third leg of
16 an adequate regulatory model. DOE/NNSA documents does
17 not define a comprehensive enforcement model into
18 which oversight is one part. Glenn Podonsky testified
19 on October 21 that his office performed some, but not
20 all, of the functions normally associated with a
21 regulator. He explained what he did not do. He
22 explained what his office did, but not how that fit
23 into a holistic regulatory model. He acknowledged
24 being a source of information for decision-makers, not
25 a regulator and not empowered to enforce. His

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1 presentation also noted the Price-Anderson Amendments
2 Act enforcement office performs some enforcement
3 functions, although how these functions fit into the
4 overall regulatory model was not discussed.

5 NNSA testimony defended deregulation of
6 oversight and regulatory responsibilities to the field
7 without benefit of a basis of why that action was
8 consistent with a comprehensive regulatory model. It
9 was also acknowledged that the processes in the field
10 have not yet been fully defined or implemented. It
11 was further indicated that NNSA Headquarters did not
12 intend to oversee or inspect the adequacy of the field
13 oversight program or the effectiveness of the
14 implementation of those programs. No compensatory
15 measures were identified to be in place during the
16 transition.

17 The Under Secretary of Energy focused on
18 worker accident statistics as a measure of the
19 adequacy of the oversight using much the same logic as
20 NASA leading up to the Columbia accident. He also
21 focused on the importance of speed in the clean-up and
22 risk reduction and the detrimental affect of non-value
23 added requirements. In many cases, the non-value
24 added requirements are the defense-in-depth safety
25 management programs that are mandated to ensure the

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1 accident with unacceptable consequences does not
2 occur. When regulating high consequence nuclear
3 activities, the only acceptable statistic is zero.
4 His discussion approaches an analog to an argument for
5 speeding on the highway since less time will be spent
6 in the dangerous highway environment.

7 During the testimony from Naval Reactors,
8 it was clear that a complete regulatory model is in
9 place and is effective. I had many years of personal
10 experience in many aspects of that holistic model and
11 can attest to its effectiveness and completeness. The
12 role, process, and expectations for enforcement and
13 oversight are clear. The Chairman's September 2nd
14 letter to Admiral Bowman further attests to the
15 continuing effectiveness of Naval Reactors.

16 Oversight is clearly an element of the
17 enforcement leg of a regulatory model. However, since
18 DOE and NNSA has never had a defined regulatory model,
19 there has never been a clear oversight model. Little
20 effort beyond the vague terms of "graded approach" or
21 "risk based" has been given to the definition of
22 oversight expectations, criteria, or measurable
23 results. As a result, oversight success is judged
24 through OSHA statistics vice the adequacy of the
25 implementation of the safety management programs that

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1 define defense-in-depth for nuclear activities.
2 Little distinction is made between nuclear and non-
3 nuclear activities. The high level expectations of
4 the ISMS feedback and improvement function permit a
5 definition of oversight expectations. However, as can
6 be seen from a review of ISMS verification reports as
7 well as the OA reports, feedback and improvement
8 expectations or requirement frequently were and are
9 not adequately defined and not effectively
10 implemented. DOE Policy 450.5 concerning line ES&H
11 oversight also provides a reasonable set of
12 expectations at a high level but they, too, were never
13 effectively implemented.

14 NNSA and DOE have recently promulgated
15 draft policies associated with oversight. The NNSA
16 policy document concerned line oversight and
17 Contractor Assurance System is seriously flawed,
18 although it still is a work in progress.

19 DOE Draft Policy 226.1 [DOE Oversight
20 Policy] and the implementing guidance in the DOE Draft
21 Notice 226 provide little improvement on the existing
22 requirements specified in ISMS Policy 450.4 and the
23 line ES&H Oversight Policy 450.5. It does, however,
24 have one significant reduction in that it fails to
25 require any DOE/NNSA Headquarters line oversight or

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1 verification of field performance. What it will
2 accomplish is to further delay maturity of the
3 oversight and assurance systems already in place as
4 well as to codify the current lack of structured
5 Headquarters line oversight of field programs and
6 performance. Since DOE Policy 226.1 is applicable to
7 NNSA, it is not clear that the NNSA LO/CAS [Line
8 Oversight/Contractor Assurance System] effort is
9 necessary or serves any useful purpose towards the
10 definition of the oversight element of an overall
11 regulatory model.

12 The specific elements or attributes
13 defined in the draft oversight policy are in general
14 appropriate and if effectively implemented could
15 provide a significant element of the enforcement leg
16 of a holistic regulatory model. The fatal flaw is in
17 the lack of commitment to a process for assurance that
18 the elements and attributes will be met and
19 maintained. The underlying assumption seems to be
20 that DOE and NNSA need only define expectations and
21 that they will be met. Contractors will apply the
22 necessary resources and take the necessary actions to
23 achieve the desired elements without intrusive
24 oversight. DOE and NNSA field elements will do the
25 same. Does this approach it within an adequate

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1 regulatory model for the regulation of nuclear
2 activities? I think that it does not.

3 My experience in 12 years across the DOE
4 and NNSA complexes is that the implied assumptions are
5 far from reality. Assessment and oversight activities
6 required resources that take from profits or award
7 fees. Therefore, in general, contractors voluntarily
8 applied minimal resources to assessment and less
9 resources to issues management to improve performance.
10 DOE/NNSA personnel hear the message that oversight
11 detracts from the contractor's ability to do more work
12 and is intrusive. Therefore, the pressure on the Site
13 Office is to reduce oversight and allow the contractor
14 to perform. The mantra is to tell the contractor
15 what, not how, and let him do it. If the risks were
16 minimal and the worker safety were regulated by
17 others, that attitude might be appropriate for DOE and
18 NNSA in their role as a customer. However, as the
19 regulator for the high consequence nuclear activity,
20 the assumptions are not appropriate, and the strategy
21 fails to meet the intent of the Atomic Energy Act.

22 In summary, I believe firm conclusions
23 concerning oversight must be made in the context of an
24 overall holistic regulatory model. DOE/NNSA should be
25 expected to have defined that model within which the

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1 oversight component can be judged. Until such time as
2 that regulatory model is defined, adequate oversight
3 must be judged in comparison to other government
4 organizations and industries with similar risks and
5 consequences such as NASA, NRC, or Naval Reactors.
6 When judged against the standards of those examples,
7 the DOE and NNSA oversight is not adequate. While the
8 attributes defined in the draft policy may be
9 adequate, the lack of a defined process or expectation
10 to ensure implementation and continued adequacy is a
11 fatal flaw in the nuclear regulatory environment.

12 Further, I conclude that in this period of
13 transition, expectations from existing programs and
14 policies as ISMS and line oversight are not being met
15 and that no compensatory measures are in place. Most
16 NNSA Site Offices lack procedures, staff, and
17 competence to meet all of these newly assigned
18 responsibilities. Contractors are allowed to believe
19 that there will be no verification of the adequacy of
20 the assurance program they implement. EM [Environment
21 Management] is encouraging reduction of requirements
22 and "non-value added" processes which defeat the
23 defense-in-depth safety management programs that are
24 important to prevent the high consequence nuclear
25 accident.

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1 The importance of the Defense Board has
2 never been more apparent. Your forceful and timely
3 intervention must reverse this trend. In the near
4 term, the Defense Board becomes a critical
5 compensatory measure in the field. The longer-term
6 action should be to force the description of the
7 regulatory model within which DOE/NNSA oversight and
8 contractor assurance may be judged. The final step is
9 to ensure that the programs to implement the
10 regulatory model are sound and that they achieve the
11 desired outcome.

12 I thank you for this opportunity to
13 present my personal observations and conclusions
14 concerning this important subject. Subject to your
15 questions, that concludes my testimony.

16 CHAIRMAN CONWAY: Thank you, Mr. Hicks.
17 Dr. Eggenberger?

18 VICE CHAIRMAN EGGENBERGER: I don't have
19 any questions, but I'll make a comment.

20 I think this provides an excellent summary
21 of what we've heard to date. And I understand what
22 you said very clearly.

23 Thank you.

24 CHAIRMAN CONWAY: Dr. Mansfield?

25 DR. MANSFIELD: Thank you, Mr. Chairman.

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1 I second that. This is a valuable
2 contribution. A clear definition of what I believe
3 DOE's expectations should be for a regulatory
4 framework.

5 I am encouraged that Integrated Safety
6 Management in your view, could provide a comprehensive
7 framework. To the extent that it doesn't yet, is it
8 possible in your view for Headquarters to have metrics
9 for the implementation of ISMS at the sites that would
10 give them the degree of knowledge of ISMS execution
11 that they would need to be effective regulators? Are
12 there metrics that could be established that would
13 allow Headquarters to effectively do that?

14 MR. HICKS: In thinking about this, it's
15 not clear to me what we would use if we put under the
16 term of metrics. But I think back to a letter that
17 EM, that Jessie Roberson wrote about a year and a half
18 or two years ago in which she required that each of
19 her sites accomplish the annual verification of
20 effectiveness of ISM that's called for in the DEAR
21 [Department of Energy Acquisition Regulations] and
22 that they report on that. Were that to be done
23 diligently with some degree of independence as was
24 intended in the ISMS guidance and then reported
25 appropriately with the kind of metrics that come out

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1 of a review of the effectiveness of the ISMS system,
2 I think that the answer to that is absolutely yes, it
3 could. The problem, again, as I tried to say is that
4 only at one or two sites in the complex is there a
5 diligent effort to actually do an annual review and,
6 to my knowledge -- I'm not knowledgeable of how the
7 reports are being evaluated and looked at within EM --
8 there is no similar requirement within NNSA that I'm
9 aware of. But that system defines the requirements,
10 talks about the rolldown in requirements. I mean, I
11 listened to Ruddy talk about his requirements model,
12 and that's clearly the ISMS model of understand the
13 requirements, have the flowdown document, and so if
14 any change occurs, you can go right into the system
15 and see how that changes effect.

16 Diligent implementation and review,
17 verification of effectiveness as the DEAR requires, I
18 believe would have the desired effect. However, that,
19 too, has passed, and we're approaching a new paradigm,
20 whatever that new paradigm may be is what it would
21 appear to me.

22 DR. MANSFIELD: DEAR has obviously chosen
23 the mechanism that the Site Office, relevant Site
24 Offices, would review the ISM programs and provide a
25 summary report as well to Headquarters. Is there a

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1 role for intrusive Headquarters' involvement and
2 verification of ISM?

3 MR. HICKS: I believe absolutely there is.

4 DR. MANSFIELD: Okay.

5 MR. HICKS: I mean, I harken to some of
6 the things that we've done within DOE, the
7 verification process, the ISMS verification process
8 caused a significant amount of improvement, I believe,
9 in the way that the complex was managed. The
10 Operational Readiness Review process has caused --
11 when it has been applied -- it has caused some
12 improvement. But these things have not been
13 systematic, they have been kind of ad hoc.

14 If I go back to my Naval Reactors
15 experience, I had experience as the customer. I was
16 the regulator. I was the senior member of the Nuclear
17 Power Examining Board. I was a squadron staff. I was
18 a squadron. And in all of those cases there was a
19 systematic expectation of verification of your
20 implementation of the requirements. And it's that
21 systematic expectation that you have asked Mr. Glenn
22 and Mr. Brumley do they believe that external -- that
23 a Headquarters' validation of the effectiveness of
24 their work is appropriate? I think they have agreed
25 that it probably is. I know there is some other

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1 communications going on about that. But clearly both
2 the incentive of somebody coming in that your boss
3 works for to look at you and the incentive of a fresh
4 set of eyes, you just can't lose the value of that.
5 And when you're in something as critical as nuclear
6 oversight. Trip, slips and falls; ladder safety; we
7 have lots of regulations of those things, lots of
8 people understand them. Any individual being hurt is
9 bad. But we're talking about the public being damaged.
10 We're talking about significant risk to the complex
11 and to the nuclear weapons mission, and in those
12 areas, a different set of rules ought to apply, and we
13 don't do that. We don't see that.

14 DR. MANSFIELD: Thank you.

15 CHAIRMAN CONWAY: Dr. Matthews?

16 DR. MATTHEWS: Thank you.

17 These are strong words, Mr. Hicks. And
18 the strongest part that I see in here is implied --
19 kind of implied -- that you feel that we're as a
20 result of the re-engineering and a result of the new
21 oversight policies, that we could be moving closer to
22 a high consequence nuclear accident. My question is:
23 is that the message, the take away message from this,
24 and what evidence do you have? That's a real scary
25 statement.

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1 MR. HICKS: Let me define it this way: As
2 I watch the evolution of improvement of the management
3 of the complex from 1992, which was when I became
4 associated with the complex, through the completion of
5 the implementation of the Integrated Safety Management
6 initiative I think that there was always a improving
7 status of the defense-in-depth, the safety management
8 programs that are important to maintaining the zero
9 risk of the unacceptable consequence accident.

10 Since the last verification of the
11 Integrated Safety Management System at each of the
12 sites, it's my view that improvement is no longer
13 occurring and that a degradation of the formality,
14 degradation of the holistic oversight is occurring.

15 Now, has that decreased to the point where
16 an accident is imminent? I doubt it. Has it
17 decreased to less than it was at the height of ISM?
18 I believe it absolutely has. Do the processes that I
19 see being put forth cause me to think that there's
20 going to be a turnaround and it's going to be
21 improved? I don't think it will.

22 So I think that what we're doing is we're
23 seeing a slide back into the good old days before the
24 Defense Board, before some of the other openness
25 initiatives that have occurred in the last ten years.

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1 And that turning the complex over, pushing the
2 responsibility to the field, getting rid of that
3 defense-in-depth. Defense-in-depth is important not
4 only in safety management programs, but it's important
5 in the oversight of the implementation of those
6 programs, and it's that that I see slowly going into
7 the -- deteriorating.

8 And so is an accident imminent?

9 DR. MATTHEWS: I didn't ask imminent.
10 Greater than zero?

11 MR. HICKS: No, no. I don't believe that
12 it is. But if you listen today, and you have listened
13 to the other testimony, and I know that you have, Bill
14 Brumley talks about programs in being and he is, in
15 fact, doing the oversight. And Glenn talks about
16 training programs being developed, processes being put
17 into place, but in my judgment, a large proportion of
18 what you heard today was "plans to do what we said" as
19 opposed to "processes in place doing what we said with
20 little or no compensatory action in place that says
21 while I am putting these new processes in place, I
22 have these old processes that are still effective."

23 450.5 line oversight remains, at least the
24 last time I checked, is a requirement of the
25 Department. There is, for all intents and purposes,

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1 no Headquarters line oversight of the field.

2 Now, there are some metrics that are being
3 monitored, there's some you tell me the information,
4 and I will look at what you tell me, and I will
5 evaluate that. But as far as going out to the field
6 and verifying that what we think is there is what's
7 really there, which is what 450.5 intends, I don't
8 think that's happening anywhere.

9 DR. MATTHEWS: Let me just follow up a
10 little bit if I can. In my experience, the technical
11 -- real true technical expertise for understanding the
12 safety of these systems and avoiding the high
13 consequence accidents -- really resides at the sites.
14 And so I wondered if you've seen a degradation in that
15 capability and this trend toward putting more
16 responsibility and authority at the sites where the
17 expertise mostly lies? I could come to a different
18 conclusion than you have. I'm curious what you think
19 about that.

20 MR. HICKS: Well, you and I would look at
21 this slightly differently, I'm sure. You would say,
22 I believe, that the technical expertise is there, we
23 have adequate technical expertise. Then, therefore,
24 we have adequate assurance of safety.

25 I would look at it differently. I would

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1 look at it more in the Naval Reactors model, which was
2 that the most conscientious perfect person makes
3 mistakes. And that if you can accept those mistakes,
4 then you can accept the consequences of whatever those
5 mistakes bring.

6 Challenger leads you, or Columbia leads
7 you to that: that some people made some judgments
8 about the safety of the conditions that existed. And
9 so it was a knowledge-based environment.

10 I believe, and my whole thesis is that in
11 order to ensure the safety, you need the defense-in-
12 depth that is provided by the process-based
13 environment. We have processes for DSAs. Those
14 processed take into account the significant technical
15 evaluations that you talk about, and they result in a
16 number of controls. The controls are only as good as
17 the implementation of those controls. Those technical
18 experts in the field don't look at the implementation
19 of the controls so much as they look at the adequacy
20 of the control that's defined. The process. The
21 process of the formality of operations. The process
22 of configuration management. The process of training
23 and qualification. Those processes are what make sure
24 that those controls maintain the high probability of
25 the zero accident.

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1 If we get rid of those processes, either
2 through thinking they're not important because they're
3 slowing us down or because they're too expensive and
4 if we get rid of them, we haven't caused an inability
5 to do the work, then we increase the risk because we
6 reduce the defense-in-depth that those processes have
7 given us.

8 And all of our argument is about how much
9 of that defense-in-depth is necessary, and how much
10 can we depend on the strong individual capability of
11 that individual on the floor? And if that individual
12 on the floor is doing ladder safety or is doing some
13 OSHA something that's going to hurt himself and maybe
14 a coworker beside him, we have one level of concern.
15 But if what he's doing is working in a hazard nuclear
16 facility, whether it's one for which we don't quite
17 understand the criticality safety concerns, or whether
18 it's one in which we're doing nuclear explosives, or
19 whether it's one where we're packaging and handling
20 highly enriched uranium, then my thesis and the thesis
21 of the safety rule is you need to have those defense-
22 in-depth processes in place because we can't depend on
23 the perfect performance of each individual every day
24 to make sure that we don't have the accident. We've
25 got to have the processes, and those processes are

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1 what are being allowed to deteriorate as we don't
2 anymore enforce or we don't enforce it and evaluate
3 how we're doing on CONOPS, how we're doing on
4 training. The Board has pointed out some issues with
5 training and qualifications associated with nuclear
6 operations, the fact that it's not being overseen, on
7 and on.

8 We found at Bechtel Jacobs in Oak Ridge
9 that the training qualification program didn't even
10 exist. It had been done away with.

11 DR. MATTHEWS: It's a good answer. I
12 wouldn't go any further.

13 CHAIRMAN CONWAY: Okay. Mr. Hicks, over
14 the years there's been a number of outside studies of
15 DOE. And two of them I can think of, was it the
16 Galvin Report and 120 Day Report, both of which
17 complained of too much oversight by DOE on
18 contractors. I don't know if you're familiar with
19 those two reports. There have been others. But would
20 you have any comment on those reports? Are you
21 familiar?

22 MR. HICKS: No, I'm familiar, at least in
23 general with both of those reports.

24 CHAIRMAN CONWAY: Right.

25 MR. HICKS: And in both cases my cynical

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1 view is that the folks who did those reports went out
2 and talked to the workers and talked to the managers
3 in the field, were told some things, wrote them down
4 and issued the report. And that there was not
5 necessarily an understanding of the nuclear safety
6 requirements.

7 It was if you focus your attention in this
8 subject as a customer. Why do weapons cost so much?
9 Why does it take so long to start up enriched uranium?
10 You come to the conclusion that there are too many
11 hoops to jump through. You say, well okay. Let's get
12 rid of some of the hoops rather than say, gee, those
13 hoops are important so let's figure out how to get
14 through them more efficiently. And so we're in this
15 dichotomy or dilemma of the customers. And I believe
16 that these reports were from a customer and from a
17 production focus as opposed to come in and tell me how
18 I'm doing regulating my activities.

19 So, you know, I think there is clearly is
20 some issue with the fact that DOE does have an
21 oversight model. Does not have a regulatory model.
22 And so in the early days we had NS [Nuclear Safety]
23 and EH [Environmental Health] sparring with who could
24 say no last, or first, or whichever. We've had a lot
25 of turmoil which has been talked about at these

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1 hearings before of non-value added oversight. And I
2 wouldn't disagree that there has been non-value added
3 oversight that has occurred. One of the places that
4 we talk about that we hear non-value oversight, the
5 ORR process. The ORR process in some places has
6 evolved to four separate reviews.

7 CHAIRMAN CONWAY: Yes.

8 MR. HICKS: And yet the fourth review --

9 CHAIRMAN CONWAY: Still doesn't do it.

10 MR. HICKS: -- frequently finds problems
11 that the other three didn't. And so until we can get
12 our performance to the point where the fourth review
13 really is a no brainer and finds nothing, I'm not sure
14 how for starting nuclear activities you can justify
15 saying one is okay because whatever the one doesn't
16 find probably wasn't important anyway. Are you
17 prepared to accept that risk as the regulator? And to
18 date, fortunately, DOE has not been willing to accept
19 that, and so we continue to do two ORRs and because of
20 other problems, that has evolved into a contractor
21 review and then a DOE line management assessment. And
22 so, as they say, in some places it's two and in some
23 places it's four.

24 CHAIRMAN CONWAY: Yes.

25 MR. HICKS: But we haven't gotten a track

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1 record yet to say it's okay. And that's one of the
2 disconcerting things about LO/CAS is that we're going
3 to get rid of the second and third reviews before
4 we've demonstrated that the first review is adequately
5 robust and effective.

6 CHAIRMAN CONWAY: Well, it seems to me to
7 follow your approach and with a process, a proper
8 process, you need technically competent people to work
9 the process.

10 MR. HICKS: Absolutely.

11 CHAIRMAN CONWAY: So my question then is
12 how does DOE obtain and retain good technical people?
13 And that's one of the big things we've been pushing
14 for a long time, and it seems it's very difficult to
15 get the technically trained people that obtain them
16 first and then keep them and retain them to do the
17 kind of process, undertake the kind of process that
18 you suggest.

19 MR. HICKS: And I don't have a good answer
20 to that, other than the obvious. I mean, I have
21 watched over the last 12 years the downsizing of DOE
22 and NNSA.

23 CHAIRMAN CONWAY: That's right.

24 MR. HICKS: And I have seen the outflow of
25 the talent, and I have seen -- Mr. Brumley talks about

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1 hiring freezes, and in fact the freeze was just
2 released or there has been a hiring freeze. And I
3 think that goes back to you have to feel an urgency to
4 have the technical confidence before you're going to
5 do what it takes to get the technical competence. And
6 I don't sense an urgency to retain it, because I don't
7 sense an understanding of the importance.

8 You believe it's important. I believe it's
9 important. But I don't think that that belief is
10 necessarily unanimous in terms that would allow the
11 Department to go to the Congress and to get the
12 understanding.

13 I mean, these decisions are not all being
14 made up the road in the Forrestal. They're being made
15 in response to some budgetary requirements. I mean,
16 I'm not so naive as to say as to say that there aren't
17 drivers external to the Department. And to the degree
18 that the Department has or has not made the case for
19 why they need more or less people, that's way outside
20 of my pay grade and experience.

21 CHAIRMAN CONWAY: Anything else?

22 Well, I thank you. Thank for the time you
23 have put into this to bring this to the Board.

24 Now, is there anybody else in the audience
25 that wishes to speak?

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1 If not, the Board will recess at that
2 time. And we will meet again. We'll recess until 9:00
3 a.m. tomorrow morning. Thank you.

4 (Whereupon, the Board recessed at 12:29 p.m., to
5 reconvene at 9:00 a.m. on December 4, 2003.)

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CERTIFICATE

This is to certify that the foregoing transcript in the
matter of: Meeting

Before: Defense Nuclear Facilities Safety Board

Date: December 3, 2003

Place: Washington, DC

represents the full and complete proceedings of the
aforementioned matter, as reported and reduced to
typewriting.


