sending letters back to contracting officers, and the 1 presidents of the company or the managers of DOE may 2 or may not even have known about the letter, nor was 3 the letter clear and communicated what the issue was 4 or what the resolution of the issue was. 5 So is it fair to say then DR. MATTHEWS: 6 the business contract means 7 that managing the aspects, and as far as the safety and operational 8 you've got strong ownership of that? 9 I've got strong ownership MR. SCHEPENS: 10 for the business, safety, and engineering aspects. 11 It means it all, and I'm technically competent to do 12 You have to be technically competent, you just 13 that. can't be business competent. 14 15 DR. MATTHEWS: Good. Thank you. CHAIRMAN CONWAY: Thank you. You don't 16 believe in the Harvard Business School that you don't 17 really have to know the product, just know how to 18 19 manage it. Right? 20 MR. SCHEPENS: Right. 21 CHAIRMAN CONWAY: Mr. Aromi. I think it's still morning. 22 MR. AROMI: 23 Good morning. Before I say the first words, while the screen is coming up, I think that managing the 24 25 contract or managing the contractor notwithstanding, **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. WASHINGTON, D.C. 20005-3701

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having a customer who knows what they want and is 1 willing to interface with you, is having a customer 2 that you can work with, and work under, and for, and 3 that's where we are. We have a working relationship, 4 and Roy and I make sure that it happens at all levels 5 of the organization, and we're not there yet, but 6 we're working on it, and I think --7 I have your complete 8 CHAIRMAN CONWAY: 9 statement, and I'm prepared to put that in the record, and if it's agreeable with you, would you 10 touch upon the high points? 11 12 MR. AROMI: I certainly will. Thank you. 13 CHAIRMAN CONWAY: Thank you, and I just would -MR. AROMI: 14- I would open with the fact that we obviously 15 appreciate the opportunity to be here, but a little 16 17 bit of history from CH2M Hill's perspective. We 18 purchased the Lockheed-Martin Hanford contract 19 company and its contract from DOE and took over 20 operation in January of 2000. We assumed all of their 21 policies, their procedures, and their organization, and by the end of 2000, and moving into 22 23 2001, we embarked on a rather major independent 24 assessment benchmarking ourselves against commercial 25 practices and best in DOE facilities, and flowing out

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of that first guarter of calendar 2001, we began to 1 2 embark on a rather major overhaul of the company. major issue for The first us was 3 installing a corrected action management system that 4 was different and had integrity, and that system is 5 the first all-encompassing zero threshold system at б 7 Hanford, and we began to put that in place in the summer and fall of 2001, and we've been working and 8 living with that system since, and it's gone through 9 10 the traditional curves, and I'm going to talk about that later in the presentation, with the change of, 11 at one point in time, 9000 items in the system that 12 13 are now under control. It's mature, it's developed, and it's moved on, and we're -- in 2002, February in 14 15 president of fact, 2002, Ι became the the 16 Roy came into ORP in June of 2002, and organization. 17 so we've had an opportunity to grow and change this together, but it wasn't until 2002 that we instituted 18 19 an official independent assessment program with a 20 manager dedicated to independent assessment in our 21 and reporting directly to the president's company

office.

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The second slide I don't think we have to discuss at all. You know the business we're in. I would stop on the third slide, if I could. We

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believe that management in our workforce are making 1 significant strides and improving our operations. 2 Since June of last year and September of this year, 3 we've begun to see results from our efforts at 4 As you can see, we have 5 performance improvement. reduced the number of operational events to one 6 [Technical Safety Requirement] 7 third, reduced TSR to 20 percent, cut our reportables in 8 violations half, reduced the corrective action backlog to 20 9 percent, and so forth. 10

One measure of our commitment control is 11 the number of delinquencies we have in completing PER 12 [Problem Evaluation Request] corrective actions, and 13 PERs are problem evaluation requests that are the 1415 foundation of our corrective action management threshold 16 tracking system. The PERs are zero program, a reporting document, and, whereas, we were 17 close to 50 percent delinquency rate on completing 18 19 actions on schedule a year ago, this chart shows five percent, and as of November, we were at 1.8 percent 20 delinquent. Central to our ability to improve is our 21 22 self-assessment program.

The next slide simply outlines the flowdown of requirements, and you're familiar with that, so if we could move on, our self-assessment process

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is many forms of assessment, from highly-structured independent assessment to major work processes to surveillances.

I'll flip over to the next slide, which shows the relation of the various parts. The Senior Safety Review Board is funded out of my office, and I'll talk about that in a minute. The Independent Office and our Program Office for Assessments reports directly to the president's Assessments office now, and reviews, as you can see, the various 10 relationships. We can move on. 11

12 In Independent Assessments base, we use a vertical slice technique on what we might call our 13 2003, major product lines. In Fiscal Year for 14project management looked at using 15 example, we project W211 as the focus. In the waste management 16 17 program, we centered on implementation of DOE Order Management], and in 18 435.1 [Radioactive Waste focused on the double-19 maintenance management we 20 shell tank operations, and for construction 21 management we used Project 314. The vertical slice allows us to pick up our own activities, but also 22 23 those of our subcontractors, and Project 211 and 314 as you know are upgrades to our double-shell tank 24 25 farm operation and have a good deal of interface

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between subcontractors in the field and our own workforce.

independent Our assessments are 3 performance and effectiveness based, but they have a 4 compliance aspect to them, more so than management 5 Independent assessments are one method 6 assessments. we use to evaluate subcontractor operations, as I 7 8 mentioned. Our independent assessments are led by NQA-1 [American Society of Mechanical Engineers, ASME 9 Quality Assurance for Nuclear Facility 10 A-1, NQ Applications] qualified lead auditors, even though 11 12 the assessments are ISMS-based. We have two qualified auditors including the head of the group. 13 14 We have just in the last -- beginning this year, this fiscal year, added three more full-time employees to 15 that group, and we intend to get at least two of them 16 qualified at the NQA-1 level by the end of this year. 17 Results from the independent assessments 18

are obviously offered to the people who were assessed, but they are also presented to senior staff at a separate presentation meeting. In Fiscal `03 we generated 63 problem evaluation requests out of those independent assessments.

24 Management assessments are just that, 25 obviously. They're assessments by managers of their

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forwardactivities. They're meant to be 1 work needs and looking, strategic looking to future 2 requirements, hopefully to ward off upcoming issues. 3 They tend to focus on performance and effectiveness 4 such as the level of technical rigor and engineering 5 activities. Fiscal Year `03 was the first full year б this management assessment program, during the 7 of course of which we qualified approximately 30 leads 8 9 using a qual card approach and trained over 80 10 managers in assessment techniques, so our managers, as they set up their programs, had tools to use, 11 12 people who were qualified. in major 13 Senior managers each

organization, whether it be engineering or project 14 operations, closure 15 delivery, waste projects, 16 determine the topical areas for the assessment within 17 their organization, and assign managers to develop 18 and perform the assessments. The results of the 19 organizations assessments are reported to the senior 20 manager who uses those results, but who also has to 21 roll those results up and report those directly to my 22 office.

I might comment, the structure of our office, because of the way our contract was written originally, I have the president and the deputy

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general manager and executive vice president in our 1 Effectively, my deputy general manager and 2 office. executive vice-president operates as the COO [Chief 3 Operating Officer] of our organization. 4 We simply I point that out because with 5 don't use that term. management assessments you have a tendency, at least б important things to do 7 managers, to find more sometimes, with those assets and those managers who 8 have been assigned to the task of performing the 9 One way that we've chosen to 10 management assessment. opportunity slate management 11 overcome that to 12 assessments is to put them in our integrated 13 schedule.

referred 14 Roy to his work being Now schedule. 15 integrated into our We do а daily 16 schedule, meaning we call it the decision-makers' 17 with high-level managers the vicemeeting at president level attending on a daily basis, and Roy's 18 19 staff attends, too, and we schedule everything but 20 our level of effort work, and we do schedule these Even doing that, we started 21 management assessments. to see last spring a slippage in good reasons why a 22 23 management assessment had to be deferred, and so 24 today the only way you get to defer something that's 25 on the schedule is if you get the deputy general

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Dave Amerine's, permission to defer it, 1 manager, otherwise it doesn't get deferred, and you'll see in 2 a later slide that nothing gets deferred anymore. 3 Now in the fall of 2001 we established a 4 Safety Review Board [SSRB] consisting of 5 Senior executive-level personnel. They're independent, б tasked with looking at areas where we have emerging 7 issues or a need for a focused look. For example, in 8 9 the end of last year, just about this time, we embarked upon a major reorganization of our company, 10 and we were aiming at an April 1st implementation. 11 12 We invited our Senior Safety Review Board in to look at our transition plans before they were implemented, 13 to guarantee that our transition plans that would 14 15 take us from the old organization on April 1st to the new, adequately covered all of the aspects of our new 16 17 ISMS certification that had just been recertified 18 the previous August. So we brought them from the 19 outside to do that.

20 The SSRB provides that independent check 21 independent check and an on our assessment 22 They are, for example, scheduled in the activities. 23 week of December 8th, which I quess now is just next 24 week, to begin a full-week assessment of how we are 25 implementing our procedure 005 on management

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assessments. You might know some of the names of the 1 They've been with us now two years, and are 2 folks. fairly experienced. They include Jim Cross, Joe 3 Cowan, Herb Berman, Spence Williams, Bob Tiller, and 4 John Longenecker to name a few. Again, that Senior 5 Safety Review Board reports to the president's office б and is funded out of our office. 7 The management observations are scheduled 8 9 by managers and focus on detailed implementation of work controls. I just want to point out that we did 10 11 1100 management observation program walkover throughs by managers, over half of which resulted in 12 evaluation 13 problem requests last year, PERs. 14 Specialty assessments are also part of the program 15 and as you said, this is in the record, and I'll just 16 pass over that. 17 Oversight of contractors. I mention that 18 we pick it up in our independent assessments and our 19 assessment program. The outlines of the program are 20 here. The reference to inspection by Fluor Hanford, 21 as you all recall, the Lockheed-Martin Company was 22 originally of [Project Hanford part the PHMC 23 Management Contract], and there are a number of 24 functions where we still today purchase services from 25 Fluor Hanford. The qualified suppliers list is one NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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of those today, but we do oversee them as a subcontractor, and so we're very comfortable with where they are on that list and delivery of those products.

Now we get to project corrective action 5 Assessment activities that we perform management. б 1000 forms of documented 7 over result in an assessments during last year, being a typical year. 8 9 They generated over 700 PERs from the assessments. The Corrective Action Management process we have 10 installed and continue to work to improve, follows 11 INPO guidance on corrective action management. 12 We 13 seek a zero-based level of reporting issues for 14 correction, promptly for screen the PERs we 15 significance, we grade the PERs based on the 16 significance, we trend PERs for repetitive problems, 17 and perform rigorous analysis of significant 18 This calendar problems. year we received 19 approximately 4800 PERs. They covered a host of 20 lighting problems from bad in а staircase to 21 potential technical safety requirement violations. 22 They are written by a broad cross-section of our 23 workforce, including everyone from vice-presidents, 24 managers, first-line supervisors, and crafts.

Everyone in the company has had training

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in how to initiate a PER on our computer systems, and hard copy if they can't get to a computer. The only use company restriction on their in our is on jurisdictional issues covered the collective by bargaining agreements specific or on employee concerns that do not have safety-related or safety significance to them.

PERs are screened each day and graded to 8 9 seven categories from significant PERs through PERs 10 with resolution already, track until fixed, 11 performance improvement, and evaluation which we call 12 PIE SIMS [Performance Improvement Evaluation Survey 13 Information Management System], trend only further 14 evaluation and simply invalid, which mav be а 15 determination.

16 Significant PERs get special handling. 17 They require a trained, root cause analyst to 18 evaluate the PER and lead a team of people to 19 determine extent of condition, root and contributing causes; they develop corrective action plans, and the 20 21 plans for an end-point assessment to evaluate the 22 corrective action effectiveness. The results of the 23 team's efforts then presented are to the CARB 24 [Corrective Action Review Board] which consists of 25 seven of my direct report staff and is chaired by

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1	Dave Amerine, our Deputy General Manager. Rarely
2	does a corrective action plan make it through this
3	gauntlet on the first attempt. Most often that team
4	is sent back to make changes and come back to the
5	CARB.
6	In addition, we perform trend analysis on
7	all PERs. Using codes assigned PERs during
8	processing, we can trend on work processes,
9	consequences, functional area, and other criteria.
10	Using statistical techniques, we identify trends for
11	evaluation, and PERs are written on apparent trends,
12	and these PERs are entered into the corrective action
13	process, just like any other PER. Oversight of this
14	process is managed through the President's Quality
15	Council, where issues and trends are reviewed
16	monthly. The quality council is staffed by our
17	quality manager, Rich Higgins.
18	CHAIRMAN CONWAY: Excuse me, Mr. Aromi,
19	with your permission then, I'll put the rest of your
20	prepared statement in the record as given.
21	MR. AROMI: Absolutely.
22	CHAIRMAN CONWAY: Dr. Eggenberger?
23	VICE CHAIRMAN EGGENBERGER: I have no
24	questions.
25	CHAIRMAN CONWAY: Dr. Mansfield?
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1	DR. MANSFIELD: No questions.
2	CHAIRMAN CONWAY: Okay. Dr. Matthews?
3	DR. MATTHEWS: Yes, just one question,
4	and it's basically the same one I asked Roy Schepens.
5	You've got a lot of trending tracking and data
6	following type of things, close-out actions, but the
7	one I'm worried about, as I said before, is the high
8	consequence, low probability nuclear issue. How do
9	watch that one? How do you keep yourself comfortable
10	that you've avoided that as you go into this
11	accelerated clean-up, you've got a pretty
12	accelerated, aggressive schedule to start pumping
13	things out of the single-shell tanks?
1.4	MR. AROMI: The work in front of us is
15	the work that we've been anticipating for years. We
16	had very dangerous work when we had the whiting watch
17	list and the 40 tanks, and we had extremely dangerous
18	situations when we didn't have adequate
19	characterization of what was in the tanks, and we
20	have gotten past those things, and we've gotten past
21	those things with this workforce. We are working on
22	the processes to guarantee that we have structure in
23	place so that as we move forward on our schedule to
24	do the things we've been planning to do, and after
25	all, acceleration isn't a word that we necessarily
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1	have to use in terms of where we're going and single-
2	shell tanks for example, on the Tank Farms. We've
3	had a TPA [Tri-Party Agreement] requirement to have
4	those 149 single-shell tanks empty by 2018 for a
5	number of years now, and we've been moving along a
6	path to get there. We don't have any empty today, so
7	we need about ten a year for the next 15 years to get
8	there, and that's the plan we're trying to construct.
9	But in the meantime, we have been moving to upgrade
10	our systems engineering, we've been moving to upgrade
11	our processes, but we're not there. Vigilance is the
12	key.
13	DR. MATTHEWS: Okay. Thank you.
14	CHAIRMAN CONWAY: The bottom line,
15	however, is that when you start to make the
16	transfers, that your technicians, your operators,
17	know what they're doing, that they've been properly
18	trained. I gather you tried to start up an S-112
19	yesterday, and you've actually turned out the
20	operators even know how to stop the transfer pump,
21	and you guys, your management, stopped them.
22	MR. AROMI: Well, that's absolutely
23	correct.
24	CHAIRMAN CONWAY: Yes, but you took the
25	action to stop it, but here again, you can have all
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the best engineering, everything, but unless the guy who puts his hand on the throttle knows what the hell he's doing, and is properly trained to do it, they can screw you up all the time. I mean, we learned that in Three Mile Island. The best top management, financial, and everything was all dependent upon the fellows down in the control room that put their hands on the actual equipment.

9 MR. AROMI: I certainly would hesitate to 10 come to conclusions at this moment. We're still 11 working on root cause and analysis, but in addition 12 to the fact that we made a decision to stop because 13 the computer operators are not trained --

14CHAIRMANCONWAY:Absolutely.15Absolutely.

16 AROMI: It's also clear that the MR. 17 readiness steps we went through that allowed us to 18 believe we were prepared are faulty, and it's clear 19 for us that we made a judgment that our operators 20 were at this level, and had been doing this type of 21 operation, and that the delta between that and where 2.2 we are in S-112 is this big, and today it's clear 23 it's something much different.

CHAIRMAN CONWAY: But we've seen that at Hanford, and we've seen that elsewhere. So it's not

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1	something unusual that we haven't seen before.
2	VICE CHAIRMAN EGGENBERGER: Well, and
3	those may be the easy problems because you're making
4	the transfers, you're doing the mixing, you're
5	attempting to adjust the chemistry, and those are
6	difficult problems, and I think it's going to be more
7	difficult than what everybody believes it's going to
8	be. Adjusting the chemistry is not going to be easy.
9	We talked about this with Roy a couple of days ago.
10	
11	CHAIRMAN CONWAY: Mr. Henschel.
12	MR. HENSCHEL: Good afternoon, Mr.
13	Chairman, members of the Board.
14	CHAIRMAN CONWAY: Yes, it's 12:15 now.
15	MR. HENSCHEL: May I have the first slide
16	please?
17	CHAIRMAN CONWAY: Again, if I may Jim, if
18	you would be I'll put your whole statement in the
19	record, and if you could sort of hit the highlights,
20	if you will.
21	MR. HENSCHEL: I'll be brief. First of
22	all, I wanted to point out that we're a little bit
23	different than some of the other projects in the
24	complex, and that we are building something that's a
25	design-build construction project. Safety is the
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