NUCLEAR REGULATORY COMMISSION

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1	UNITED STATES OF AMERICA
2	NUCLEAR REGULATORY COMMISSION
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4	MEETING WITH NRC STAKEHOLDERS
5	PROGRESS OF REGULATORY REFORM
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7	THURSDAY
8	OCTOBER 18, 2001
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10	ROCKVILLE, MARYLAND
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12	The meeting commenced at 9:00 a.m. at Two
13	White Flint North, 11455 Rockville Pike, Rockville,
14	Maryland.
15	PRESENT:
16	Chairman Richard A. Meserve
17	Commissioner Greta J. Dicus
18	Commissioner Edward McGaffigan, Jr.
19	Commissioner Jeffrey S. Merrifield
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1	ALSO PRESENT:
2	UNION OF CONCERNED SCIENTISTSDavid Lochbaum,
3	Nuclear Safety Engineer
4	NUCLEAR CONTROL INSTITUTEDr. Edwin Lyman,
5	Scientific Director
6	CONSTELLATION NUCLEARRobert Denton,
7	President
8	SOUTHERN NUCLEARGeorge Hairston,
9	President and CEO
10	DETROIT EDISONDouglas Gipson,
11	Executive Vice-President, Power
12	Generation and
13	Chief Nuclear Officer
14	NUCLEAR ENERGY INSTITUTEJoseph Colvin,
15	President and Chief Executive Officer
16	INSTITUTE OF NUCLEAR POWER Fred Tollison,
17	OPERATIONS
18	ELECTRIC POWER RESEARCH Dr. Theodore Marston,
19	INSTITUTE
20	Chief Nuclear Officer
21	STATE OF CONNECTICUTDr. Edward Wilds,
22	Director, Division of Radiation, Department of
23	Environmental Protection
24	NRC DEPUTY EXECUTIVE DIRECTOR William Kane
25	FOR OPERATIONS

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1	ALSO PRESENT: (CONT.)	
2	NRC OFFICE OF NUCLEAR REACTOR	Samuel Collins
3	REGULATION	
4	NRC OFFICE OF NUCLEAR	Ashok Thadani
5	REGULATORY RESEARCH	
6	NRC GENERAL COUNSEL	Karen D. Cyr, Atty.
7	NRC SECRETARY	Annette Vietti-Cook
8	NRC DEPUTY EXECUTIVE DIRECTOR	Patricia Norry
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1	P-R-O-C-E-E-D-I-N-G-S
2	(9:00 a.m.)
3	CHAIRMAN MESERVE: Why don't we get
4	underway. Good morning. I am Richard Meserve. I am
5	the Chairman of the Regulatory Commission. And on
6	behalf of the Commission, I would like to welcome
7	everyone to this meeting with the nuclear regulatory
8	stakeholders on the topic of progress of regulatory
9	reform.
10	We are pleased to have a panel
11	representing a broad range of our various
12	constituencies, including public interest groups,
13	nuclear utilities, financial communities, nuclear
14	industry associations and the states.
15	Before I introduce our panelists, I would
16	like to make a few opening remarks.
17	The events of September 11 and their
18	aftermath have deeply affected all of us in many ways
19	both personally and professionally. While security at
20	nuclear power plants and other nuclear facilities has
21	always been a key concern for the commission, the last
22	five weeks have seen these issues pushed to the
23	forefront. I and my fellow commissioners continue to
24	be fully engaged on these issues and we are determined
25	to see that the American people can have confidence

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that our licensees' operations are carried out in such a way as to protect the health and safety of the public.

At this time, we are not aware of a 4 credible threat directed at our licensees' facilities. 5 6 As all of you may know, there was an event last night 7 at Three Mile Island where there was a threat that we had to take seriously at that time that did require a 8 9 response in various actions by ourselves, our 10 licensees and various other federal agencies. That threat was determined this morning not to be a 11 12 In any event, we have maintained a credible one. 13 heightened security status since September 11 at all 14 of our nuclear power plants. Licensees have taken a 15 number of steps to strengthen security at nuclear 16 facilities. And the NRC has worked with many other 17 agencies of Government to assure a coordinated response. Staff has also been directed to undertake 18 19 top-to-bottom review of the NRC's security 20 requirements so as to assure that there is an 21 appropriate programatic response to the events of 22 September 11. I expect there will be many changes at 23 the NRC and elsewhere in Government as a result of the 24 heightened nature of the terrorist threat that our 25 Nation confronts.

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1	Other issues that were before us before
2	September 11 are still before us. We must continue to
3	work on these other matters as well. One of the most
4	significant initiatives in which we have been engaged
5	is our effort to risk inform our regulations. We
6	continue to believe that risk insights can be employed
7	to better ensure the safety of our licensees'
8	facilities and operations and we support changes in
9	the regulatory process accordingly.
10	The purpose of this meeting is to solicit
11	the views and concerns of our stakeholders on the
12	broad subject of regulatory reform. This is intended
13	to be an open forum in which we receive input from
14	representatives of the various sectors, take what we
15	hear from you today into account as we move forward.
16	Let me now introduce our panelists and
17	proceed with the meeting. From left to right from the
18	point of view of the audience, our panel includes Mr.
19	Ashok Thadani, Director of the NRC's Office of Nuclear
20	Regulatory Research; Dr. Theodore Marston,
21	Vice-president and Chief Nuclear Officer of the
22	Electric Power Research Institute; Mr. Joseph Colvin,
23	President and CEO of the Nuclear Energy Institute; Mr.

David Lochbaum, Nuclear Safety Engineer of the Union 24 25 of Concerned Scientists; Hairston, Mr. George

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President and Chief Executive Officer of Southern 1 2 Nuclear; Hub Miller was intending to be here, but in 3 light of the events last night is unable to join us Robert Denton, President 4 this morning; Mr. of 5 Constellation Nuclear; Mr. William Kane, NRC's Deputy Executive Director for Reactor Programs; George, did 6 7 I skip over you? I'm sorry. I'll come back and do the commissioners at the end. 8

MS. NORRY: I'm sitting.

10 CHAIRMAN MESERVE: Pat Norry is here; Mr. Douglas Gipson, Executive Vice-president, 11 Power 12 Generation and Chief Nuclear Officer of Detroit 13 Edison; Dr. Edwin Lyman, Scientific Director of the 14 Nuclear Control Institute; Dr. Edward Wilds, Jr., 15 Director, Division of Radiation of the Department of 16 Environmental Protection of the State of Connecticut; 17 Mr. James Asselstine, Managing Director, Fixed Income Research for Lehman Brothers; Mr. Fred Tollison, 18 19 Executive Vice-president of the Institute of Nuclear Power Operations; and Mr. Sam Collins, Director of the 20 NRC's office of Nuclear Reactor Regulation. Sprinkled 21 22 throughout the panel, of course, are my fellow 23 commissioners, Edward McGaffigan on my right; Greta 24 Dicus on my right; Jeffrey Merrifield on my left; Nils 25 Diaz, as all of you know, has recently rejoined us,

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but prior commitments require that he not be here and he asked me to send his regrets that he could not join us this morning. We have senior managers available in the room if necessary to address specific questions in their area of responsibility.

6 With that, let me turn to my colleagues to 7 see if they would like to make some opening remarks. 8 Okay. Let us proceed. I suggest that we proceed or 9 start with our outsiders, not the NRC staff. The NRC 10 staff, of course, will have their opportunities to What I suggest we do is engage in the discussion. 11 12 sort of walk around the table and ask for people to 13 gave their comments, concerns, issues and so forth. 14 After everyone has had the opportunity to make some 15 opening comments, we can then have a discussion of the 16 principal points. With that, why don't we proceed. 17 And our first speaker is Dr. Theodore Marston.

18 DR. MARSTON: Thank you, Mr. Chairman. 19 This is a real pleasure to be here as a member of the 20 stakeholder committee. My comments today will be 21 focused on the improvements we have seen in the last 22 20 years involved in our risk assessment and risk 23 management program. And I would like to preface my 24 remarks by saying I worked in a number of industries, the chemical 25 including petro-chemical, refining

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1 railroad, etcetera, and who use quantitative risk 2 But I think the nuclear industry has assessments. 3 benefitted the most from that, although I must say that we committed more time than resources into the 4 5 development the of risk assessment management 6 approach. My comments have been provided to you in a 7 paper that we submitted earlier this year at the request of NEI and it's called, "Safety Benefits of 8 Risk Assessment at U.S. Nuclear Power Plants." 9 The 10 details, really, of the outline the paper transformation from a deterministic compliance culture 11 12 to a risk-informed safety culture. And I think some 13 of the benefits of this transformation are worth 14 All of the plants have models of expertise noting. and experience with applications. We have seen in the 15 16 last 10 years that the average core damage frequency 17 has been reduced by a factor of 3. And this is not as a result of modeling improvements, but a result of 18 19 equipment reliability improvements, performance 20 improvements. With the decrease in core damage 21 frequency, we have also seen an improvement in 22 capacity factor of our plants by over 20 percent. We 23 are running almost 90 percent right now. We have seen 24 the scram rate reduced by a factor of 4. And 25 according to your own calculations, you have seen

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5 think the important thing for Ι the 6 country's perspective that this has now increased our 7 nonemitting contribution to our society. Very important. We are contributing about 70 percent -- 76 8 9 percent of the nonemitting generation. And that is 10 important when we look at a global climate change think four insights from this 11 perspective. Ι 12 assessment are important. One we found out that 13 design basis accidents really are not the major 14 contributors to risk. We found the more commonly occurring transients such as trips, loss of outside 15 16 power and small rate locusts (phonetic) are, in fact, 17 the major contributors. And many steps have been taken We also found the dominant 18 to improve that. 19 contributors are very plant specific. That is an 20 important one. And finally, we found that only a fraction of the traditional safety equipment really 21 contribute to the prevention and mitigation of risk or 22 23 core damage events. And there are a number of specific examples, which I won't go into. 24 The 25 industry has had a number of voluntary initiatives.

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The NRC has also mandated initiatives such as station blockout, the atlas rule and the maintenance rule. So I think we made a lot of progress. However, I think more progress is certainly appropriate in this means.

We still have a number of deterministic 5 6 regulations that we really don't believe contribute a 7 lot to safety but do draw significant resources from both the industry as well as the regulatory situation. 8 9 And we think that it is important. And some of those 10 events are large rate locust, improvements in service inspection and service testing and single point 11 12 failure criteria. And I think as we go forward, as 13 the industry becomes more competitive, it is more 14 imperative that we pursue the elimination of not 15 safety significant regulations and resource diversions 16 for a number of reasons. We need our existing fleet. 17 We need to have that license renewed. But also, if we want to have a deployment of new nuclear power plants 18 19 in this country, which is essential to reduce the 20 carbon dioxide burden that we are contributing to the 21 world, we really have to go a more risk-informed 22 regulatory process. So that is the end of my 23 comments.

24 CHAIRMAN MESERVE: Thank you, Dr. Marston.25 Mr. Colvin.

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MR. COLVIN: Good morning and thank you very much, Chairman and ladies and gentlemen for the opportunity to be with you today. I would like to focus my comments really in two areas. The first is on the regulatory oversight program and risk informing of regulations; and secondly, a few comments about moving forward with new nuclear power plants in the

9 With respect to the regulatory oversight 10 process, it is clear that the Nuclear Regulatory Commission working with the stakeholders has made 11 12 almost incredible progress from the standpoint of 13 revising the regulatory oversight program and putting 14 in place a system that is transparent with a clear focus on safety and providing the types of indicators 15 16 and measures and to provide a reasonable approach for 17 both the public, for our companies and for the NRC to look at in how we provide the necessary oversight that 18 19 the NRC provides to ensure the safety of the public 20 health.

The biggest challenge that we have moving forward, while we made tremendous progress on that, is now go back and take a look at the regulations we have and revise the regulations that we have to incorporate these risk insights and the performance-based

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1 approaches consistent with those used in the 2 regulatory oversight program. We put a lot of effort 3 in this and made some progress, but quite honestly, that progress is slow. And most likely, at least in 4 5 my opinion, the reason that we haven't made some of 6 that progress really relates to what Ι would 7 characterize as cultural issues that exist both within the industry and within the regulatory body. We need 8 9 to streamline some of the processes and make some 10 appropriate changes.

We submitted a letter to the commission on 11 12 September 10 that provides a lot of the details and I 13 won't take time this morning to go into those, but we 14 think there are some opportunities to significantly improve the processes and achieve some of these gains 15 16 in these programs while still maintaining the 17 necessary focus on safety. Just one example perhaps, we got a lot of the programs where we have bundled 18 19 some fundamental -- or I guess proposals and also 20 perhaps some future types of work that needs to be done that have been bundled together with some issues 21 which, in fact, can be dealt with on an accelerated 22 23 basis. While some of that information needs to be 24 dealt with, it doesn't necessarily need to be dealt 25 with with the issue that is most at hand and most

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important. And again, our letter focuses on that. And we are continuing to work with the agency and with the other stakeholders in moving these processes forward.

But the second point I wanted to make 5 6 really relates to new plants. And Ted Marston kind of 7 alluded to this, but I just wanted to make the point that even after the events of September 11, our 8 9 interests from the industry standpoint, in new nuclear 10 power plants has not diminished in the least and in many ways has been accelerated in our thinking because 11 12 nuclear power plants provide a very, very our 13 important part of our Nation's critical infrastructure 14 our electricity supply. And as we look to issues 15 related to energy security of our nation, nuclear 16 power plants and using uranium fuel, provide a very 17 important part of our future thinking. We are still moving forward working with the commission, with 18 19 individual utilities and through NEI on early site 20 permitting programs and planning. We are still 21 intending to move forward in those areas. We are also continuing our activities to work with the agencies on 22 23 issues relating to the combined operating license. 24 One of the areas that we have a great 25 benefit and new opportunity in new plants is to

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1	develop a new risk informed framework for the
2	licensing of these new nuclear power plants. We have
3	a lot of experience in the many, many years of reactor
4	operational experience. And if we take that and, in
5	fact, look at what we have done in the regulatory
6	oversight program and the risk informing of the
7	regulations that we have underway, I think we have
8	some great opportunities to start out in a new and
9	better way than we did the first time around.
10	There are a number of things we need to do
11	in working with the commission on and staff on part
12	52.
13	Still some issues that need to be dealth
14	with, programatic high-tech, generic treatment of
15	environmental issues relating to new plants.
16	Obviously, you are doing a lot of work in the hearing
17	process and issues relating to Price Anderson coverage
18	and how all those pieces fit together and integrate.
19	As we really intend to move forward, we look forward
20	to the commission's and staff support to work on these
21	important issues as we deal with the other issues that
22	are currently before us. Thank you very much.
23	CHAIRMAN MESERVE: Mr. Lochbaum.
24	MR. LOCHBAUM: Good morning. I think one
25	area we would like to point out as the greatest gains

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1 recent time has been the of public in area 2 participation. In the five years since I joined UCS, 3 there has been tremendous improvements in the area of public participation. The public meeting process over 4 5 the last year is a lot better than it was two, three 6 years ago. And I think that those initiatives that 7 are underway and already realizing improvements are 8 going to help public acceptance of what our regulatory 9 reform agency undertakes. And although there has been 10 some bumps in the road and some problems with public meetings in other areas, I think the gains justify 11 continuing the process and working around those bumps 12 13 or tolerating the bumps and proceeding forward with 14 the initiatives that are already underway.

regulatory 15 As far as the reforms 16 themselves, we continue to believe that the biggest 17 flaw in the process is the quality and scope or the risk assessments that are being used to drive the 18 19 regulatory reforms. The risk assessments pretty much 20 are limited to in analyzing risk of power reactors 21 operating at power. Low power shutdown risk is pretty 22 much excluded from the risk analysis. Spent fuel 23 safety is excluded from the process. And sabotage is 24 excluded from all, including the full power risk. 25 Therefore, there is not a complete picture of the risk

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and you can't make risk informed decisions if you don't have a more complete understanding of what the risk is.

Related to that or just as important as 4 5 is the process itself. The back fit rule that 6 protects licensees from undue addition of improvements that do increase safety levels at the plants but which 7 8 don't have a corresponding cost benefit. So 9 therefore, the agency cannot impose a new requirement 10 that clearly improves safety unless it is shown to be cost effective. But the reverse of that, which the 11 12 agency has as its top priority, going from a higher 13 level of safety to something less than that -- equal or less than that, isn't protected under the same 14 15 formal analysis. Basically a requirement can be 16 eliminated or lessened simply by agreement between the 17 agency and the industry. It seems unfair or it is unfair. And unless there is equal protection for the 18 19 public aqainst reduction or elimination of 20 requirements as there is for the industry when new 21 ones are imposed, the process itself is flawed and there can be mistakes made that reduce safety. 22 Since 23 one of the NRC's performance goals is to maintain 24 safety, it would seem necessary that that kind of

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process equivalence be provided before any more risk reductions are made. Thank you.

CHAIRMAN MESERVE: Mr. Hairston.

MR. HAIRSTON: Thank you, Mr. Chairman, 4 Commissioners and others in attendance. I have been 5 6 asked to talk on public confidence. I think we drew 7 straws and somehow I got the short end. And as I thought about, you know, in times like this, what do 8 9 you say about public confidence? And surely as the 10 winds of war blow across America for the first time in 150 years, this is an important topic. 11 Public 12 confidence, what does it mean? The commission has 13 appropriately identified this as one of your strategic 14 goals. I assure you that establishing and maintaining 15 a high level of public confidence in us and in our 16 regulator is essential to our current and expanded use 17 of nuclear power and technology.

As with the book, there are many story 18 Today, I would like to talk 19 lines that play out. about two, two factors that affect public confidence. 20 21 The first is how well we operate our plants today. It 22 is essential that we continue to improve our 23 operations, our safety. Our reliability is at an all 24 time high. This past Wednesday -- yesterday, I was at 25 INPO talking to 10 or 12 plant managers. And

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certainly what I had to say to them changed a little bit after September. And all of us were 50, 55, 60 years old and we can't go join up. Most of us have served, but there is something we can do for our Nation and that is to renew with vigor the excellence in which we operate our power plants. Our power plants are an essential infrastructure of the U.S. and we can do no less than to operate them with vigilance and vigor.

10 The second factor, I think, affects public confidence is the regulatory process. I want to make 11 12 a few comments about that. First, deliberate and 13 timely decision-making improves public confidence. 14 Certainly the work that has gone on over the last 10 15 years on the regulatory reform, the many inputs from 16 the stakeholders, the feedback from the stakeholders, 17 has increased public confidence in nuclear power. The transparency of the process alone is not sufficient. 18 19 Transparency only provides a window on the regulatory process. Confidence is built when the public views a 20 process that includes a deliberate evaluation of the 21 issues, due consideration of all the stakeholders, 22 23 practical application of problem solving and timely 24 decision-making. Rule-making must be conducted in a 25 timely and orderly fashion. Public confidence will be

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improved by reducing the duration of this process. Confidence is also improved when the public sees the commission appropriately balance the risk and the benefit of any action. Small uncertainties should not be allowed to obstruct opportunities to quickly capitalize on regulatory improvements that are readily evident.

8 Last, balance. Balance. We have many 9 publics. All have a right to be included. The NRC has 10 a leadership role to ensure that changes are based on need and do not have unintended consequences. We have 11 12 a system today that works and it works well. Changes 13 -- and surely they will come -- should only be made 14 where they improve our current system. The public 15 expects this. The public demands this. Thank you. 16 CHAIRMAN MESERVE: Mr. Denton. 17 MR. DENTON: I appreciate the opportunity

to participate today and this is an excellent forum 18 19 where diverse stakeholders can participate in public to discuss all facets of nuclear regulation. Today I 20 will concentrate my remarks on the issues associated 21 22 with attracting, maintaining and managing a skilled 23 nuclear workforce. This workforce is a critical 24 resource companion, the well-designed hardware which 25 constitutes the plant.

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In my recent experience, the single event 1 2 which has enabled the industry to attract and maintain 3 a workforce that has improved the ability of the industry to attract and maintain a workforce is 4 5 This is a regulatory and industry license renewal. 6 success as far as providing avenues of career path 7 opportunity for many talented engineers and skilled craft which prior to this event were leaving some of 8 9 our older plants. Certainly, the extension of plant 10 lifetime for up to 20 years has changed the picture dramatically for those plants who have taken advantage 11 12 of the process. I personally have seen and expect to 13 continue to see renewed interest by young engineers 14 and skilled craft in a career in the nuclear power 15 field. The leadership provided by the NRC in 16 establishing a thorough, predictable process for 17 license renewal has not only renewed the life of the hardware industry, but also the life of the credible 18 19 resource of the workforce in the industry. 20 There are some challenges also to managing

that workforce. Managing the workforce requires recognition of the roles of the regulator and the roles of licensing management. Licensing management is accountable to the NRC for regulatory compliance. And in turn, the NRC has enforcement options available

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1	to ensure this accountability. Likewise, plant
2	employees are accountable to licensees for compliance.
3	Management must be able to enforce accountability when
4	needed. Occasionally such enforcements will lead to
5	allegations by employees. In these situations, I
6	encourage the NRC to be mindful of the need for
7	consistent accountability to licensing management and
8	not accord protection too readily such that employees
9	may be tempted to inappropriately use the provisions
10	for protection merely to shield accountability.
11	Other aspects of performance that are
12	currently being discussed, I believe such as measuring
13	employee performance, I believe employee performance
14	can best be measured by the safety performance on the
15	whole of the plant. Overly prescriptive rules get in
16	the way. Cause discourse that is unnecessary, such as
17	current discussions on permissible work errors. Rules
18	or guidelines we had in place for 20 years that served
19	the industry well. Further discussions I don't
20	believe will lead to any incremental improvement in
21	the safety of the plant. Again, I thank you for
22	inviting me here today. Thank you very much.
23	CHAIRMAN MESERVE: Mr. Gipson.
24	MR. GIPSON: Thank you, Mr. Chairman. I
25	would like to, if I could, just say a few words about

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nuclear security and the industry's efforts in our 1 2 security force and our security plants. Since 3 September 11, the security plants in this country have been on a heightened level of alert. The industry and 4 the regulator made that decision on September 11 and 5 6 we have remained there. Communications between the regulator at the regional level has been excellent 7 between the region administrators. And communications 8 9 between the staff and the nuclear industry has been 10 excellent as well.

Some of the lessons learned or questions 11 12 to be answered from September 11 is the role of plant 13 security in support of our national defense; how that 14 will be delineated and how that will be defined. 15 Clearly, we have to decide at what point our civilian 16 security forces meet their objectives in the national 17 government and the defense of the country takes over. That dialog is ongoing at the congressional level as 18 19 well as the industry level and, of course, with the regulators. We feel that our plants are probably the 20 most hardened facilities in the country. 21 They are industrial security forces and they are not military 22 23 forces. They have functioned well in the past and we 24 continue to work on improving our security process. 25 We need clear and comprehensive rule-making from our

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regulator to ensure that our security programs remain not only robust as they are at this present time, but that we continue to improve them.

The industry has been working with the 4 5 regulators and we have a security working group. Many 6 of the stakeholders in this room have attended meetings where we have openly discussed these plans 7 and our idea about rule-making and how to go forward 8 9 with rule-making. One of the industry's endeavors is 10 to ensure that that rule-making is clear, measurable and realistic security requirements. Inspection and 11 12 evaluations must be consistent with the rule and 13 performance should be measured against the 14 requirements. And there should be continuous learning. 15 There should be a disciplined management process to 16 resolve issues and ensure that the learning is 17 incorporated not only in the facilities that are practicing and participating in our 18 safequards programs, but that information is also shared with the 19 other licensees and owners of nuclear facilities 20 21 across the country.

The industry will remain focused on security requirements. We live around these plants. We work in these plants. And it is our obligation to

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ensure that these plants are not only operated safely, but that they are protected as well.

So we look forward working with the industry going forward on rule-making. And we will continue to do our part to communicate with the regulators.

7 Just one area that I would like to just the sharing of information. 8 mention is Since 9 September 11 and this heightened level of security 10 that we are at, sharing of information is not necessarily in the best interest of the public with 11 12 respect to what the response actions of the plants are 13 and the response action of the regulator. So to that 14 end, we, as an industry, are asking that everybody act 15 responsibly with respect to sharing of information and 16 how information is delineated. And I think the 17 commission did a good job and their staff did a good job of immediately recognizing this and moving to a 18 safeguards mode with security information. 19 That 20 concludes my remarks.

CHAIRMAN MESERVE: Thank you. Dr. Lyman.
DR. LYMAN: I would like to thank the
Commissioner for the invitation to participate here.
Security, obviously, is at the forefront of our
concerns at the Nuclear Control Institute. And it has

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1	had a pretty direct impact on my ability to
2	participate in today's meeting. And I refer to, of
3	course, the absence of most of the material on the web
4	site. Ordinarily, I may have in preparing for a
5	meeting like this, there are certain issues that I
6	track. I would have tried to get the most recent
7	information. It wasn't possible. So if it sounds
8	outdated, there is a reason. I mean, I think I would
9	like to stress the availability of information at this
10	point is a very important issue. But this information
11	largely is already out there. And I think the
12	response of trying to compartmentalize and protect as
13	much information which has which can arguably have
14	safety or security significance, but also arguably
15	doesn't, will really impair the ability of the public
16	to participate and maintain a level of confidence.
17	So I would urge the process of bringing up
18	the web site to be done as soon as possible and a
19	defensible boundary be drawn between what is being
20	made available to the public.
21	Other aspects of security, I think, is
22	crosscutting every realm of safety. And one is the
23	issue of the current vulnerabilities of nuclear power
24	plants. And I do appreciate the Chairman's comments
25	on focusing the commission on this issue, but we are

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not convinced. And I think there is still a great 1 2 deal of concern among the media and the public that 3 response has not been adequate, at least what is visible, leading to inconsistencies that vary from 4 state to state. Some states have now called out the 5 6 National Guard. Others nearby have not. And that leads to, I think, an overall confusion of what the 7 actual threat is and the actual response. 8

9 Security also impacts a whole variety of 10 including construction of other issues, new facilities, some of which are now in progress. And I 11 12 refer particular to the mixed oxide fuel fabrication 13 It seems to me that any new licensing plants. 14 procedure really has to be postponed until review of 15 the regulatory commission takes place. And that is 16 why we have signed on to a petition with a Georgian 17 public interest group to that effect.

Other issues, mixed oxide fuel programs, I think, really have to be looked at in a secured environment. Various initiatives -- for instance, the downgrading of security requirements for storage of fresh plutonium fuel reactors seem to be on the way things were going before September 11. I hope issues like that also be given a hard look.

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1	Now the relationship between security and
2	risk information which Dave Lochbaum previously
3	discussed is a very good one. There is no way to
4	assign a defensible risk number to a sabotage attack.
5	Any kind of informed risk initiative now has a
6	variable in it. And one has to think hard about
7	issues about whether we can reduce conservativism in
8	regulations without having a disproportionate risk of
9	a terrorist threat. I really hope that is going to be
10	looked at.
11	Moving on, I would like to site a number
12	of risk information issues that in the overall context
13	that I am concerned about. One is risk informing
14	combustible gas regulation particularly with
15	relationship to (inaudible)
16	VOICE: Could you please use the
17	microphone.
18	DR. LYMAN: I am concerned that parts of
19	the Rule 5044 which are cited to be too onerous be
20	thrown out. That is going on a fast track, while
21	addressing the issues about potential vulnerabilities
22	like ice condenser plants and additional requirements.
23	Another issue, extended power upgrades.
24	These are in the works. Some of them were very large.
25	Fractional percentage power increases, I haven't seen

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1	any risk analysis of those particular applications,
2	and which I think are highly significant. So this is
3	just a scattering, but my own opinion. Thank you.
4	CHAIRMAN MESERVE: Dr. Wilds.
5	DR. WILDS: Good morning, Mr. Chairman,
6	and thank you for inviting Connecticut to be here. I
7	am just going to focus on one topic. I think that in
8	going forward with risk informed regulations and
9	security both, NRC is going to have to develop a more
10	effective relationship with the states. The states are
11	clearly involved at the nuclear power plants, not
12	directly in nuclear safety issues, but on other
13	issues. And if that partnership isn't formed, there
14	may be, you know, conflicts or disconnects in what the
15	licensee needs to do to meet both the state
16	requirement or an NRC requirement.
17	I think since September 11, everybody is
18	noticing that the states do have a role down at the
19	power plants. We have probably been at more meetings
20	with various state agencies and the licensees in our
21	states in the last month than we have had in the last
22	year. So that is where I think, you know, I am going
23	to keep my comments on is that we do need that
24	effective partnership with the states and the

25 recognition that what is done by the NRC or the states

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1	both impact the licensee and that we have to make sure
2	that there is no conflicts. Thank you.
3	CHAIRMAN MESERVE: Mr. Tollison.
4	MR. TOLLISON: Thank you, Mr. Chairman,
5	commissioners, ladies and gentlemen. At INPO, our
6	charter is to promote safety and reliability in the
7	commercial industry and to promote excellence. And I
8	have a few comments today on two topics. First is the
9	current performance of the industry as we see it from
10	INPO's point of view. And second, a few words about
11	our activities to help improve the self-assessment and
12	corrective action activities of our membership.
13	First the industry performance:
14	Performance indicators, which are one indicator of our
15	performance in the industry, at the end of the year
16	2000, reflect the industry's continued improvement and
17	safety and reliability. The first time in history at
18	the end of the year 2000, all 1010 performance
19	indicators were met or exceeded by the industry. I
20	will mention just a couple. First unit capability
21	factor, the industry median value reached an all time
22	high of 91 percent. For unplanned capability loss
23	factor, the industry median value was a new low of 1.7
24	percent. And for unplanned reactor scrams, the median

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value continued to be zero for the fourth consecutive year.

3 Every five years since 1985, the industry has set more aggressive goals for itself. And today, 4 5 median performance has reached the point to where, in 6 our view, there is reduced value in setting more 7 aggressive performance goals for most indicators. Instead, we believe it is now more appropriate to 8 9 shift focus toward helping more plants achieve these 10 goals to achieve the current high level of industry So this shift in approach brings 11 performance. 12 attention to the outlier plants, as we call them, to 13 help us channel our resources to better help the 14 plants have the greatest room for improvement. For 15 example, the new 2005 goal just set for unit 16 capability factor is 91 percent. And that figure is 17 a very high one. And it is precisely the median level that the industry achieved at the end of 2000. But 18 19 only half the plants, those at the median or above, are achieving that level of performance. 20

So our job at INPO in part is to help the outlier plants improve their performance and safety and reliability standards while ensuring that the better performers continue to maintain their current high level.

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To accomplish these goals, the industry 1 2 needs a strong capability and self-assessment and 3 corrective action. And this is equivalent, Mr. Chairman, to the problem identification and resolution 4 element of the revised oversight process. We believe 5 6 INPO has an important role to play in helping the 7 industry improve in this area. The concept of self-assessment and corrective action underscores 8 INPO's mission of promoting excellence. In fact, any 9 10 organization that seeks to achieve excellence must first instill a culture that values self-improvement. 11 12 This area has become more important over the last few 13 We have continued to build it into our years. 14 evaluation and assistance activities with our 15 membership. During the past 15 months, we have been 16 evaluating the industry's self-assessment and 17 corrective action programs against a set of principles we first published in 1999. 18 We are seeing many 19 programs that are working well and frankly, some that 20 need improvement to fully support long-term, high 21 performance of the station. These programs can be 22 improved in part through more aggressive benchmarking 23 against best practices in the industry. Facilitating this benchmarking process is one of INPO's core 24 25 competencies.

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1 We encourage the NRC to recognize the 2 value and effectiveness of the input in this area. 3 And we hope that NRC will accept as it did with the training issue many years ago that these efforts 4 reduce the need for NRC oversight and self-corrective 5 6 action. INPO and the NRC have worked to minimize unnecessary overlap between our activities and to 7 8 focus our respective resources in ways that best 9 support our missions. The issue of self-assessment 10 and corrective action is another example where this approach can benefit the NRC, INPO, the utilities and 11 12 general public. We are confident of the the 13 industry's ability to make progress in this area --14 further progress. And we will work hard -- we will 15 work hard to make sure this happens. 16 Thank you for this opportunity to 17 participate today. I would like to thank 18 CHAIRMAN MESERVE: 19 all of you for your comments. You have raised a 20 number of issues that are really central to the things 21 that the NRC has been engaged over the past year and 22 which I am sure are going to be matters that will 23 consume us over the next several. Let me turn now to my colleagues and give 24 25 them an opportunity to comment or ask questions or

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1	probe further on the issues that have been raised this
2	morning.
3	First Commissioner Dicus.
4	COMMISSIONER DICUS: Thank you, Mr.
5	Chairman. I will make a couple of rather brief
6	comments based upon some of the things that we have
7	heard this morning. I know the Union of Concerned
8	Scientists, in your submitted in the letter
9	submitted, expressed among other things some very
10	positive statements. And thank you. We do appreciate
11	those.
12	Also, you expressed some concern that you
13	think that in our regulatory reform, we concentrate a
14	lot on the economic viability and maybe less so on
15	some of the safety issues, license renewal, grant in
16	work in progress and resolution of safety issues,
17	etcetera. And we need to be very mindful that we do
18	have this balance. And the term balance has certainly
19	been used more than once this morning. But I think in
20	all fairness, it clearly in our monthly reports to
21	Congress, which we are still providing, we do, I
22	think, balance. The most recent month's letter did
23	inform Congress of the CRDM cracks and what we are
24	doing about that. And certainly right now, we have the
25	security-related issues. So I think there is a

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balance. You feel concerned about it. So obviously that is something that we will watch very closely.

3 I want to address the issue also that was brought up by Mr. Denton on the need for a good 4 5 workforce, a qualified workforce and the availability 6 of a workforce. And I think us and the industry are 7 sharing some concerns. And clearly, we have addressed 8 this with Congress. We are very much aware of it. 9 And we are working within our agency to try to address 10 some of the issues that we see that could impact us. like point this is 11 Ι would to out also an 12 international issue. So it's not particularly the 13 product of the United States.

14 Ι conversations last week with had counterparts in Mexico and also with the industry in 15 16 Mexico. And they expressed the same sort of concern 17 to me. I also visited a medical facility there and was struck by the limited number of people that they 18 19 had available for a very, very busy oncology practice 20 that they had there. So we have this issue to deal 21 with. And I think we are quite aware of it and we are 22 trying to deal with it to the best extent we can. 23 And then finally have to address the issue

of working with the states. As you well know, I hold that concept quite dear to me. And I think you

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1	brought out a very important point, that in the crisis
2	that we have been dealing with since September 11,
3	certainly become even acutely aware and I think we
4	have always been aware what the state capabilities
5	were, but even became more acutely aware, even with
6	the communication in working together. And I would
7	suggest also that the industry be very aware of the
8	capabilities you have in your own back yard and be
9	able to utilize those to the extent possible. Thank
10	you, Mr. Chairman.
11	CHAIRMAN MESERVE: Commissioner
12	McGaffigan.
13	COMMISSIONER McGAFFIGAN: Well, I would
14	agree with the chairman. There is a large number of
15	issues that have been brought up. A lot of them are
16	issues that all of them are issues that we have
17	been working on.
18	I guess I will just briefly talk about
19	risk informed regulation because my colleague to my
20	left, Mr. Lochbaum, raised it. And I think that what
21	we have been doing has been appropriate. I don't
22	think that the you know, that there has been a
23	tremendous success in recent years in risk informed
24	regulation. That does not mean that we have perfect
25	PRAs for all of the plants for all phases of

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operation. But it means we have had PRA results good enough to make the decisions that we needed to make. And I think we have been documenting those decisions as we have made them.

I remember when we did the revised source term. We had a very comprehensive rule-making. And we went throught why we thought that rule would not only improve safety, reduce the unnecessary burden. We thought that was a win all the way around.

10 Dr. Lyman mentioned the combustible gas regulation that we are likely to change very shortly. 11 12 It is a comprehensive paper that we put out last 13 September by the staff as to why they thought that 14 regulation was appropriate. And they raised some issues with regard to ice condenser and the BWR Mark 15 16 III containments, but they were different issues. 17 They were issues that we needed to -- that we needed to address as we went forward. 18 And the staff is 19 currently suggesting we deal with those issues as a 20 generic safety issue rather than rule-making itself. 21 We have been very transparent as we went through that 22 process.

I think Mr. Lochbaum's comments that we don't necessarily go through the same rigorous analysis as we do for a new regulatory requirement.

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1	But I think it is incumbent on people we do these
2	things in the open. We have very voluminous
3	rule-making packages. If people want to comment that
4	they don't think we are justified in reducing the
5	burden and quantifying the costs, I think those are
6	fair comments. But our rule-making process requires
7	regulatory analysis whether it is a new requirement or
8	a reduction in a requirement. The major difference
9	for the new requirements, as I understand it, is not
10	just that there has to be a cost benefit analysis
11	that it shows the benefits exceeds the costs but
12	that there has to be a substantial increase. So and
13	people probably have read my votes. I am not wild
14	about the substantial increase test. But I am very
15	supportive of the cost benefit criterion and that that
16	needs to be part of our process. As I say, I think it
17	is. It has been in the rule-makings that I can recall
18	recently that we have done that have been so-called
19	risk informed rule-makings. It is intended to be in
20	the ones we intend to do in the future. And I think
21	we need to have comments on specific rules if people
22	believe that we are reducing burden without justifying
23	why we think that reduced burden will maintain safety.
24	CHAIRMAN MESERVE: Thank you, Commissioner
25	McGaffigan. Commissioner Merrifield.

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COMMISSIONER MERRIFIELD: Thank you, Mr. Chairman. I agree there is a lot of things on the table. There's a couple of issues that I would like to have people focus on and respond to some of the things that were said this morning.

6 The first one I would direct to Drew 7 Colvin. I would be interested as a followup in your thoughts of going forward on risk informing our 8 9 regulations; where we ought to be putting our 10 One of the things we recognize now is priorities. that risk informing our regulations is not easy and 11 12 requires a fair amount of staff and other resources, 13 resources which your members are picking up 96 percent 14 of the bill at this point. And given all of the other 15 things that we have going forward, the possibility for 16 new reactor orders, license renewals, license 17 transfers, grappling with the safety issues subsequent to September 11, from a resource standpoint, is there 18 19 sufficient interest within NEI to pursue these 20 activities? So that would be something I'm interested 21 in from your perspective in going forward.

To Mr. Lochbaum, I appreciate the kind comments about the NRC and our staff. And I agree with you. I think it is a lot better than it was before I became a commissioner three years ago. I was

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-- I had my interest peaked by some of the comments you made about our looking at some of our regulations in our efforts to reduce unnecessary burden; have we cut the margins on safety. You said perhaps we hadn't met our goal of maintaining safety but, in fact, we reduced safety.

7 I am reminded of an analogy -- and I know you make them very often. Our Nation has many, many 8 9 fewer nuclear missiles than we did 10 years ago. Is 10 that because we got rid of a whole bunch? Does that make us any less safe? And I think the clear answer 11 12 in that case is no. I think an analogy could be made 13 Just because we have gotten rid of to the plants. 14 some unnecessary regulation, doesn't mean we are any 15 less safe. But I would be interested in specific 16 examples you have where you believe rather than maintaining safety, we have, in fact, eroded it. 17

To Dr. Lyman, I appreciate the comments on 18 19 security. I think we are all grappling with that 20 around here. One of the issues for me as а commissioner in dealing with our licensees is how do 21 22 we go about drawing the line. We are a nation of laws. 23 And we have as an expectation, that as citizens, 24 either as industry people or as private citizens, that 25 we are going to be protected by our local and state

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police and by our Federal Government and our military. 1 2 We have as our regulations, required our licensees to 3 reply to a design basis event. And I think in comparison, having seen 87 units in the last three 4 5 think our licensees have very robust years, Ι 6 structures in order to do that. We need to reassess 7 in going forward what else we think we need to impose. But there is a quandary of how much do you impose on 8 9 a private citizen to defend themselves. Certainly, as 10 residents in our own homes, it is reasonable to expect we lock the doors and keep the keys out of our cars 11 12 and button up to the extent that we can. But in an 13 increase to rising crime in our neighborhoods, the 14 Government doesn't expect us to arm ourselves and buy 15 shotguns and handguns. We expect the police to respond when we call. So I am interested in hearing 16 17 a little bit more from you how we, as a commission, 18 may go about defining that line. What is appropriate 19 for us to impose on our licensees given our Nation's desire not to have a lot of armed militias around and 20 21 is appropriate for the federal state what and 22 government to assume that we have the robust security 23 at these plants. Thank you, Mr. Chairman. 24 MESERVE: CHAIRMAN Thank you, Mr.

25 Merrifield. Commissioner Merrifield has raised a few

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issues in which he would like to get a response. 2 Before we return to those, let me just add d two more 3 and we will get the people he has directed the questions to a minute to think about the responses. 4 And I will lay out a few more for evaluation.

6 Several of you have mentioned the 7 importance of openness and about our processes as being an important vehicle for us to have informed 8 9 decision-making and to establish public confidence. 10 One of the things that we have learned as a result of the September 11 event is that there are concerns by 11 12 many about some of the information that we have made 13 available as part of that process. And it is a very 14 painful kind of decision we make in that I think in trying to address this issue in that I have thought 15 16 that it critically important for the NRC's capacity to 17 achieve public confidence is to make sure we reach our decisions in the open, that we explain why we made our 18 decisions, have the information that is the foundation 19 for the decisions be publicly accessible so that all 20 can understand how we have reached our decision. They 21 22 may not always be happy with them, but at least they 23 can understand the thought process that we have gone 24 through, and the concern being that things that are 25 done in secret would be presumed to have been made for

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1 improper motives. So openness has been a critical 2 thing for this agency to -- as a means by which we can 3 do our work. We get the benefit of input we get from all stakeholders. I think we make better decisions as 4 5 September 11 has brought home the reality a result. 6 that there may be some types of information that we 7 cannot disclose. So I would be quite interested in peoples' suggestions as to how we can draw this 8 9 boundary in an appropriate way.

10 Second question I would like to raise is one with Dr. Wilds. You indicated that you think 11 12 there are improved ways in which the NRC can interact 13 with the states. And I would like to come back to you 14 and get some more concrete suggestions from you as to 15 things that we are not doing that we should be doing. 16 We see the states as important partners with us in the 17 regulation of nuclear matters. And if you have some concrete suggestions as to how we should improve what 18 19 we are doing, I think it would be valuable for us to hear them. 20

Let me turn now to the first question that Commissioner Merrifield has raised to Mr. Colvin, which was the question of given the range of activities that we have before us, how should we set our priorities.

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44 1 MR. COLVIN: Mr. Chairman, thank you. Let 2 me try to respond briefly to Commissioner Merrifield's 3 question. I think the real issue is how we look to the priorities in working with the commission and 4 staff and the industry to set those. 5 I think, first 6 of all, the question of priorities is working really 7 well, the setting process, the discussion kind of coming to a common agreement what is more important, 8 9 which has the highest priority, so on and so forth. 10 And the industry's proposals and petitions to the commission have really fit within that framework, 11 12 which I think is working pretty well. 13 I think the area that we really need to focus on is really how to, as I mentioned in my brief 14 15 comments, improve the processes. For example, the 16 commission has SECY 0113 which relates to ECCS and so 17 on. We think there are some real opportunities to extract the key issues where there is a great benefit 18 19 without a long delay in the process and bring those to bear while in parallel, working on some of the more 20 fundamental or foundation work. 21 22 If we go to the question of hydrogen 23 recombiners as an example, I think that question was 24 raised here. And the staff and the commission -- as

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1	Commissioner McGaffigan has indicated, has really
2	taken a thorough look at that.
3	There are issues related to ice condensers
4	and Mark III containers that need to be dealt with,
5	which are referable to hydrogen control. So that is
6	an example of what is really working properly.
7	There are some issues I think we can move
8	quickly on. For example, I think you could go to a
9	direct final rule to adopt the American Nuclear
10	Society height standards while we are in parallel
11	doing some of the other foundational work on issues
12	which in many ways is an analogous example to the
13	issue of hydrogen control. So if you go to large
14	break locust issues (phonetic) and the type of studies
15	that probably are appropriate to be done in the
16	meantime, there are a lot of analyses and interim
17	steps that can be taken. We can come up with
18	methodologies that look at appropriate different
19	sizes. And perhaps through that process, eliminate

20 that.

I guess the last thing is we really need to focus on what's important to overall safety. You know, we are spending a lot of time, I say, on the issues which we all agree are high safety importance. And where we can really gain the risk in sites, we are

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1 spending -- we are all in agreement for the most part 2 on those. It is the issues of where we are spending 3 the most time and dragging out the discussions or on the issues which have almost no or 4 low safety 5 significance. We have a workshop -- the NRC is 6 sponsoring coming up in November, an all-day workshop 7 on low safety significance; how we treat these low safety significant systems. Now it is an important 8 9 issue, but that is a question of where we are 10 providing the appropriate balance. And I think we can move in a more effective process to move more quickly 11 12 to deal with what's appropriate and not go through the 13 back and forths on these issues. And that is where we 14 have the biggest gain. The process issues and how we 15 deal with them provides us the benefits. It is not 16 that we want to circumvent that, but to figure out a 17 way to move it forward quickly and use the agencies and comments and fiscal responsibility and user fees. 18 19 But I think it's really how we provide collective 20 resources. And I will be happy to talk about that 21 perhaps in more detail. And certainly we can entertain any other discussions with the commission, 22 23 with staff, on those issues. MR. COLLINS: Joe, just to be sure we are 24

24 MR. COLLINS: Joe, just to be sure we are 25 aligned on one of your comments, the purpose of the

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meeting in November is for option 2. Option 2 is not 1 2 just low safety or risk significant issues. It covers 3 all four areas of the spectrum, which includes high safety, high risk and treatment applies to all four of 4 5 those areas. We are moving forward, I think, rapidly 6 with that. The reason we are having the meeting in 7 November is because NEI was not prepared to have the 8 meeting in October. So I want to be sure we are 9 aligned. with you on that.

10 COMMISSIONER McGAFFIGAN: I might pile on I know the staff gave -- the commission 11 here, too. 12 gave the staff the authority to go out before the 13 rule-making started with every member of the public to 14 have a chance to see the options they were considering 15 with this so-called open 2 rule-making. There are 16 three options out there. And the paper discussed --17 and I think -- I don't think we have a fixed position going into that discussion with our stakeholders as to 18 19 which of those three options we are going to put forward. I think there is honest disagreement within 20 21 the staff. But that process of putting the rule out 22 even before we have proposed it, we have used in other 23 cases, primarily in the materials area. It has served 24 us well. As somebody suggested, we needed to do, but 25 that doesn't mean we are necessarily going to agree in

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1	the end. We are going through on a formal process and
2	will make a final decision. But I think option 2 is
3	shouldn't be an area where there's a problem at the
4	moment. I think the idea we finished the south
5	Texas exemption was it early August, Sam? And we
6	had three options for rule-making options in
7	September. I suggest you guys go deal with EPA. If
8	they get a rule-making in '91 and finish by 2001, that
9	is pretty good. Sure in much better shape with us.
10	MR. COLVIN: Mr. Chairman, let me comment
11	on this. This is not meant as a criticism. I think
12	there is lots of improvement in the process and I
13	won't get into who is ready and who's not. We really
14	want to move forward. I think the question
15	Commissioner Merrifield asked how do we, in fact,
16	bring together the right priorities and, in fact, make
17	the appropriate judgments on what we want to work on
18	and what we ought to allow those resources to be used
19	in different areas. And that is really the purpose of
20	where I think all of our collective discussions should
21	go.
22	COMMISSIONER MERRIFIELD: I think this was
23	brought to a head by some of the efforts related by
24	National Fire Protection Association 805. We are
25	trying to risk inform the fire requirements of part

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And we came up with a proposal for which there 1 50. 2 was zero industry interest in moving forward on that. 3 I know our staff and NEI credits -- and we are engaging with other stakeholders to come up with 4 5 something that makes sense and something positive out 6 of that effort. It is clear to me to the extent that we are communicating what we think it is going to cost 7 us to do these various efforts. And if at the end of 8 9 the day only a small number of utilities ultimately 10 want to take advantage of some of the things we are coming up with despite what may be some significant 11 12 regulatory costs from those, from a budgetary 13 standpoint, the five of us have to make the decisions 14 Is this the right place to spend the everywhere. 15 money? And that was the genesis I was trying to come 16 from with the questions. 17 MR. COLVIN: I appreciate that. On each of these issues that are either paid for through 18 19 specific licensing fees paid by an individual licensee 20 or paid through by the generic funds which comes out of the whole industry's pockets, I have the same 21 obligation with NEI and the board of directors to make 22 23 sure we are focusing the resources appropriately also.

24 So I appreciate that comment.

50 1 CHAIRMAN MESERVE: Before we move on to 2 Commissioner Merrifield's second issue, let me ask if 3 there is anyone else who has comments on this priority setting issue. 4 Ashok. 5 Thank you, Chairman. MR. THADANI: Ι 6 think in principle I believe we are in complete 7 agreement. And I think we have had some successes, 5044 in terms of looking at recombiners up front and 8 9 then taking time to study better the issues with the 10 ice containments and Mark III containments. That is the path, as you know, we are on. 11 12 Similarly, you refer to rule 5044, the 13 ECCS requirements. Again, in the proposal paper that 14 we sent to the commission, the thought process is really similar to what you are talking about, meaning 15 16 there are things we can do in the nearer term and then 17 there are others that would take some more time. In fact, that is what we are doing now. In fact, we have 18 19 two options which we expect to complete on a technical 20 evaluation in the next few months, as a matter of fact. 21 22 We do have to, also, it seems to me, not 23 ignore the issue of making sure we have a sound 24 technical basis for making changes. There are a 25 number of issues about risk analysis that need to be

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looked at fairly carefully. So I think there are some fundamental areas if we do make changes to those, such as a definition of size or break and so on. We do need to make sure that we fully understand the implications of those changes in terms of safety. And I think broadly our goal is the same as yours.

7 You raise the issue of the ANS decay heat I can tell you, yes, indeed, on surface, 8 standards. 9 it looks like it should be a fairly easy thing to do. 10 But there are some issues with the models. And so one has to consider all factors that are going to impact 11 12 safety in an important way. And I am not talking about 13 an issue of small uncertainties. We should not let 14 small uncertainties hold us back. Some of these 15 issues go well beyond that.

16 CHAIRMAN MESERVE: Let's turn to the 17 second subject that Commissioner Merrifield raised, 18 which is directed at Mr. Lochbaum, about whether there 19 are some specifics where there's concern whether there 20 is an appropriate slashing of the safety margin.

21 MR. LOCHBAUM: In the letter we provided 22 for today's meeting dated October 18, we listed three 23 examples of requirements that had recently been what 24 we felt were lessened without proper justification. 25 The first being the notice of enforcement discretion

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1	that was granted by region 3 to the Firmey (phonetic)
2	reactor when they broke their diesel generator and
3	allowing them to continue running an extra week. That
4	was a close call for us because Jim Dyer (phonetic)
5	and all the people making that decision I have the
6	utmost respect for. But I just think that that
7	decision wasn't fully supported and wasn't consistent
8	with the guidance. And it wasn't the conclusion
9	may have been right, but it wasn't justified on the
10	right grounds. So you could come to any conclusion
11	that you wanted basically on that one. So I don't
12	think that was the right way to proceed, to assume
13	that an unknown risk is greater than a known risk.
14	The other example we cited in the report
15	and I am not trying to defend EPA even though it
16	was raised to the agency in '91 and hasn't been
17	resolved yet, is the issue of steam generator that Dr.
18	Hopenfeld (phonetic) raised a year ago. The staff has
19	made a number of recommendations to steam generator
20	the number of related changes without proper
21	justification, without the right knowledge that that
22	is the safe thing to do based on the ECCS that was
23	released in February of 2001. We felt that those
24	safety issues that were raised and confirmed by ECCS

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has to be bona fide and understood before allowing longer periods of time between inspections.

Third example I would like to cite -- it 3 wasn't in the paper -- I believe the number is 01-100 4 that went to the commission in June, 2001, which 5 6 included the security levels at permanently shutdown The paper that was released in October of 7 plants. 2000 by the technical working group identified some 8 9 safety threats associated with spent fuel storage and 10 discussed that there were exemptions at plants that have been permanently shut down that may not be 11 12 consistent with that safety hazard. So we felt there 13 is an indication that safety margins have been 14 compromised without an appropriate knowledge and 15 understanding in advance. And also, there haven't 16 been any shortfalls that hadn't been corrected yet. 17 If I could also address the Chairman's 18 question, if this is the right moment, about

19 availability of information.

20 CHAIRMAN MESERVE: Why don't we defer that 21 one as a separate issue and people can focus on this 22 set of issues that you have raised now. Any comment 23 on -- you would like to make on the issues raised by 24 Mr. Lochbaum?

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1	COMMISSIONER McGAFFIGAN: I am going to
2	take a try. I think Dr. Hopenfeld's concerns were
3	dealt with. It was a little bit of a self we
4	should have terminated the DPO on numerous occasions.
5	I think the staff recognizes that, but he kept
6	changing it. But the DPO was put out for public
7	comment as we were trying to deal with steam generator
8	issues as we were heading towards a generic letter of
9	some sort. And in the end, I read the February
10	document from the ACRS totally different from you.
11	And I think Dana Powers (phonetic) has confirmed to
12	the chairman in writing and orally at a commission
13	briefing that our reading is correct, that there was
14	nothing alarmist by the ACRS report. They said there
15	are some things that the staff could do to improve.
16	And they felt that all the staff actions taken thus
17	far and prioritization of those actions in Dr.
18	Travers' (phonetic) updated action plan were exactly
19	on the mark. So, I mean, it may be, you know, that we
20	can all treat any ACRS as a Rorhshach block to project
21	any views we carry deep in our innards, but at least
22	the author of the report believes that we and the
23	staff and Dr. Travers in particular is correctly
24	reading it.

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With regard to the spent fuel pool study 1 2 and SECY 01-100, I think what we did based on -- and 3 previously in dealing with shutdown plants, the staff felt that there was close to or absolute 4 zero 5 probability that after a certain period of time there 6 would be much of a danger at those plants from 7 external events. Now as a result of that study last 8 year, there is some minute -- still very, very, very 9 low probability that things could go wrong; that the 10 spent fuel pool could be drained and you would have a zirconium fire. And the staff correctly said to us in 11 12 that paper, "We have looked at the exemptions based on 13 this study and we do not at this point see any reason 14 to terminate the exemptions although we are going to 15 look at it." And I think they still owe us -- having 16 looked at those exemptions -- whether they recommend 17 we try to roll any of them back. So I don't know. Is the glass half full or half empty? I think it is half 18 19 full, although my colleague to my left obviously 20 disagrees.

21 CHAIRMAN MESERVE: Let me just note 22 Commissioner McGaffiqan's comment of the ACRS 23 recommendation is correct. When the report came in, we 24 did ask them specifically about the adequacy of the 25 action plan. And I think we have an ACRS response on

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that point to the pace we are proceeding with regard to steam generation issues. There are issues that are outstanding, but the pace we are addressing those questions is reflected in the action plan is an acceptable way to proceed. And we specifically asked them for that guidance with regard to that report, which you are mentioning, the earlier 2001. Sam, do you have a comment?

MR. COLLINS: I think Mr. Lochbaum raised 9 10 The firm, NOED, and David some important points. raising that issue, put some inconsistencies in the 11 12 process that we are applying. There were words that 13 would indicate that we are actually doing these 14 reviews of no increase in risk. Those words were 15 pretty clear in the instruction. And really what we 16 are looking at is an aggravated risk, a balance of the 17 considerations. And we have been working internally with our staff and the Office of General Counsel and 18 19 the regional stakeholders who have to implement this 20 process to clarify those words. And I know David has raised this issue in formal correspondence, and we 21 22 have responded. Reasonable people can disagree on 23 that point. The steam generator issue is an important 24 And it is a challenge for the Office of issue. 25 Nuclear Reactor Regulation in partners with our

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research. We are looking at the concerns that were 1 2 raised internally. And the Office of Research is 3 pursuing those that have been raised by ACRS. ACRS, in indicating the criteria is needed and that criteria 4 5 can adequately protect the public health and safety. 6 And they went on to say that there is more work needed 7 in the severe accident area. That is not why we are the threshold of 8 it to а significant raising 9 management challenge and reasonable assurance 10 statements that we are providing to the EDO. The Office of Nuclear Reactor information is an area that 11 12 does need to be tracked. And there is a commission 13 meeting coming up in the short-term to discuss the 14 status of that.

15 Spent fuel pool safety, I think that has 16 been adequately addressed. There was an ongoing study 17 at the time of the 9/11 events, David, to look at and recalibrate ourselves on some of those potential 18 19 issues. And of course, that has been altered. But 20 clearly, that issue is in front of us also. And spent 21 fuel pools licensees have been engaged at the 22 direction of Mr. Kane. We have sent out advisories to 23 those licensees and interim actions are appropriate. 24 MR. KANE: David, I wanted to add to what 25 Sam said. Certainly read very carefully what you

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1	provided. And I think that is very important in terms
2	of giving us some insight that we took seriously.
3	Certainly the documentation issue you raised I think
4	was a very important one that we have looked at in
5	terms of making improvements there. And I will admit
6	to to some surprise the risk issue. And I think that
7	is (inaudible) look at our regulatory that is not
8	quite (inaudible). I think Sam has talked about the
9	additional guidance that we put out to the staff. But
10	I think you have raised some clearly important
11	insights. And we appreciate that contribution. You
12	will see changes as we go forward.
13	CHAIRMAN MESERVE: Let me say I would like
14	to move on, but I think it important that we have an
15	open discussion of these issues. And they are
16	legitimate questions that you have raised, Mr.
17	Lochbaum. And we do want to be able to address them
18	in the open and address them in a way that we can
19	explain how we have reached the decisions we have.
20	Let me turn now to the third question that
21	Commissioner Merrifield raised, which is the question
22	of how you balance the obligation dealing with
23	security between the private sector and the
24	Government. I think that the events of September 11
25	have really brought that issue very much to the

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forefront, something that we are going to have to address, not just at the NRC, but across the Government as a result of activities that are underway with regard to the response to that event. We would appreciate your insights.

6 DR. LYMAN: Well, I have a very simple 7 answer to that given our ignorance about particular details about security measures. 8 But I think the 9 bottom line is there has to be an objective defense 10 for nuclear power plants that is determined based upon a credible basis which fully takes into account the 11 12 events of September 11 with respect to attacks from 13 ground, sea, river or air. And it also has to address 14 all potential operating modes of the plant. It has to 15 address the spent fuel pool vulnerabilities and has to 16 involve a credible means of performance testing to 17 ensure that the level of security is adequate. Given that, I think it is possible for the organization that 18 19 it may not be reasonable for the industry to assume 20 the full costs of such a program. And therefore we 21 are receptive to the idea that the line defined by the 22 state regulation would allow for the Federal 23 Government to provide resources with financial and 24 potential manpower, equipment to deal with that threat 25 adequately. But what we are not happy about is any

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industry in using economic arguments 1 role of to 2 determine what they think is the appropriate level of 3 defense of the plant. And in this view, I am pretty troubled by the comment that Mr. Gipson said on 4 5 September 11, "Industry and regulators together made the decision to go to the highest state of alert," 6 7 emphasizing the fact that it is а voluntary 8 recommendation. I don't think it is appropriate for And that makes me 9 the industry to have any say. 10 wonder if the mindset we are proposing, the commission is ready to hear it. 11 12 COMMISSIONER McGAFFIGAN: Mr. Chairman, I am offended by what was said. That decision -- I was

13 14 not acting chairman that day. The chairman was. That 15 decision was made consistent without consultation with 16 the industry, but consistent with the previous 17 protocol. I think what Mr. Gipson was probably trying to say, in many cases, they beat us to the punch. 18 We 19 acted within an hour. They acted even faster, making independent decisions and decisions that were entirely 20 consistent with the guidance we had in place. We sent 21 out an information notice in 1998 that would describe 22 23 -- not this circumstance, but in general how we would 24 upgrade security at the sites. We acted consistent 25 with the protocol we had in place, which was the

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fastest way we can act. If you want to draw up orders and get all the lawyers involved and that makes you feel better, we would act a lot slower. And so, you know, this sort of probing at peoples' motives in trying to, you know, go at us all the time, I don't appreciate at all.

I am sorry if I offended you. 7 DR. LYMAN: That wasn't the intention, but I guess my concern is 8 9 still there. Why doesn't the commission have the power 10 to issue an immediately enforceable order under the circumstances that doesn't involve long negotiation or 11 12 involvement? And I don't know why that has to be the case in a national crisis. But you know -- and I have 13 14 to say that even after September 11 -- and I don't want to go into details, but we received some 15 16 anecdotal reports about inconsistencies about what the 17 state of alert meant from security regulators. And maybe a lot of those loopholes have been closed by 18 19 now, especially since the U.S. retaliatory strike started. But at least in the first couple of weeks, 20 21 we were not getting the message that that order had 22 led to a consistent response. And I think the public 23 needs the benefit of a consistent response to 24 compensate for what we don't know about a situation.

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1 CHAIRMAN MESERVE: Let me put this in a 2 somewhat different context. Of course, this is an 3 awkward area for us to discuss in an open forum because a large measure of the activities that has 4 5 taken place and why and how it has happened and things 6 that are covered by safeguard issues and ones that are 7 ensured to ensure the adequacy of defenses, the legal framework we work is one in you which our regulations 8 9 design a -- with the details of that design basis 10 being defined on safeguards basis. Licensees have to have the capacity to be able to react to that. 11 The 12 information notice is not one that augments that legal 13 obligation. It reflects the context in which if we 14 become aware of a circumstance where there is a 15 prospect that the ordinary obligation that they have 16 at all times to assure adequate protection is one that 17 needs to be especially vigilant because of information we know, we tell our licensees. And that they have, 18 19 with that additional information, have the -- can take 20 the steps to augment their -- the capacities that they 21 normally have. Our whole purpose of having information 22 notice in place was to enable the NRC to act very 23 quickly upon the time we get threat information and 24 that we can immediately notify our licensees. And we 25 have issued a whole series of threat advisories since

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September 11 to reflect the somewhat changing circumstances that have arisen, including actions that we believe the licensees should take on all of that subject to examination.

5 Let me say that although this is something 6 that goes out in order to do it quickly in the way of 7 an information type notice, licensees have all recognized the enhanced threat environment. This has 8 9 been a cooperative activity in which since all the 10 licensees have significantly augmented the capacities they have at the plants. And we have also, of course, 11 12 been cooperating with a variety of other federal 13 agencies to assure that there are other capabilities 14 that would become available or are available as the 15 circumstances warrant.

16 I would like to come back, though, to I 17 think the main thrust of the issue that was -- that you raised, which I think is a very serious one -- is 18 19 a question of what is the limits of the obligations 20 that should be imposed on the private sector with 21 regard to defense obligation. Design set a certain 22 boundary that was believed to be one, realistic. It 23 was not set by us alone, but in consultation with 24 intelligence agencies and others. The September 11 25 event raises the prospect that we should reexamine

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that which we are going to do, but there is still the 2 fundamental question that underlies all of this and 3 that is how far should we go in imposing obligations on a private -- basically what is a civilian guard 4 force. And that is a question that is independent of the nature of the threat. And the threat could be at 7 such a level that it is just unrealistic or 8 inappropriate to rely on an appropriate guard force to defend.

10 COMMISSIONER MERRIFIELD: I think the chairman does get to the heart of the question. 11 And 12 let me add one background to that. One of the things 13 think everyone around here tries to do is Ι 14 benchmarking. Benchmarking is a good thing. And I 15 and the other commissioners have gone abroad and 16 benchmarked with many of counterparts our 17 internationally. The requirements we have for fencing, limited access, background checks, passive 18 19 detection systems, cameras, heavily armed guards, 20 including M16s and shotguns, defensive shooting 21 positions at the plant, these are not things that you 22 are finding at plants around the world. In the 30 23 units in 13 countries that I have seen, there are only 24 two exceptions that I have seen that have requirements 25 greater than what we have. One of those is in South

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1	Korea. They do have antiaircraft facilities at those
2	sites, principally because they are in a cold war.
3	They have a neighbor to the north with lots and lots
4	of jets. And they perceive those nuclear power plants
5	as a direct target. In the United States here,
6	obviously, we need to deal with passenger jets and
7	need to deal with that in the cockpits. And having
8	anti-aircrafts at our sites is not the place to do it.
9	We have to defend the skies and that is partially
10	through a partnership with the FAA.
11	The other place that I saw something
12	different was in Lithuania. They have an armored
13	personnel carrier sitting in the middle of their area.
14	It was cheaper for them to get a personnel carrier
15	than it was to build fortified structures around the
16	plant. And given the fact that the gross national
17	income in Lithuania is about \$2,500 per person, that
18	is tremendous. Those are the two exceptions.
19	Virtually every other case, the defenses
20	at these plants is significantly higher than that of
21	our counterparts. And many other countries, not having
22	an active defense system as we do, it is holding the
23	intruders long enough for the local and state police
24	to get there and deal with it.

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Getting to the heart of it as we move forward -- and we are going to have to make decisions on this and work with our federal and state counterparts -- but where do we draw that line? How much more do we impose on our licensees and how much of that is appropriately borne by local, state and Federal Government?

MR. COLVIN: Mr. Chairman, let me try to 8 9 offer a couple comments. I think the comments made 10 are really appropriate and I think they are going to take a lot more consideration and need to be given a 11 12 lot more consideration than we can do here today. But 13 I think if we look at what has been done in the United 14 States today, we spent a number of years leading up to the Y2K issue, analyzing and evaluating the issues 15 16 when we talk about our critical infrastructure, not 17 only power plants, dams, chemical plants, so on and so forth, including our information systems. And there 18 19 are a lot of steps that have been taken. And to do 20 that, I think that with the office -- the new Office 21 of Homeland Security. And there is a lot of 22 discussion ongoing now to try to, in fact, refine this 23 and I quess try to look at what are the assets 24 available between the private sector, between the 25 local, state and Federal Government that can be

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brought to bear and what circumstances those would be 1 2 brought to bear to protect this critical 3 infrastructure. I think the issue that we really need to deal with on the more immediate basis is how to 4 5 ensure that we have a seamless understanding of 6 responsibilities in the near term on these issues and 7 not have an expectation that is either unrealistic on behalf of what an individual company can or cannot 8 9 protect against or what the state, local and Federal 10 Government can or cannot protect against. Certainly in this area, the responsibility for the safety of 11 12 these plants and for the investment in these plants 13 really rests with the licensee. And there needs to be 14 a clear cut -- in my view, a clear cut discussion and relationship 15 that exists between the Nuclear 16 Regulatory Commission that brings in, as Dr. Wilds has 17 said, all the state involvement in particular, because that is where a lot of that response and support would 18 19 come in the immediate nature. I think this is an 20 issue which our Nation is going to have to grapple 21 with that is much more complex. And we need to incorporate -- I think as you indicated in 22 the 23 commission's letter back to Chairman Tauzin that needs 24 to be done, needs to be done within the context of 25 what is done to protect the Nation's critical

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I do think there are a lot of steps 1 infrastructure. 2 that have been taken. Your letters to the governors 3 and state and local agencies has worked very well to build a better understanding and relationship about 4 5 where the responsibilities lie. We have seen a lot of 6 that activity result in very important steps being 7 taken and we think that is appropriate. We have had discussions with the Department of Defense, with other 8 9 intelligence agencies. And I have a great deal of 10 confidence that these issues are being dealt with at the highest levels of our Government. I think that 11 12 the commission's involvement in those issues in 13 fitting the nuclear power plant security issues within 14 the context is very important.

15 MR. GIPSON: Can I just put some focus 16 around a couple of comments that were made? The 17 decision-making that was made after the September --September 18 unprecedented 11 events were quick, 19 conscientious and deliberate. And reflecting back 20 about a quote that I keep in my mind, that managers 21 and supervisors do things right, but leaders do the right thing. On that date, I feel the commission and 22 23 the regulators did the right thing. And with respect 24 to consistency in my region, Region 3, Jim Dyer 25 (phonetic), the regional administrator conducted two

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1 telephone calls a day with all the licensing 2 leadership to make sure everybody was consistent in 3 their approach and to make sure we had a continuous learning process going. All the other regions were 4 doing the same thing with the regional administrator 5 6 and they were feeding back to the staff. And we were 7 actually in a learning mode from each other from different regions. And I will tell you that, you 8 9 know, too often, we inappropriately refer to 10 bureaucracy in our Government organizations. September 11, we had leadership. And it was demonstrated not 11 12 only here at this organization staff level, but it was 13 demonstrated in the field as well. And I think the 14 unprecedented industry's response was and was 15 appropriate as well. 16 So I would take issue with the way those

17 events were handled, especially in the light that there was no specific -- that I know of no specific 18 19 threats against nuclear plants. The response that was made and the decision-making that were made well can 20 be questioned. But for those of us who were on a real 21 time basis, I thought it was exceptionally well done. 22 23 CHAIRMAN MESERVE: Other comments on this 24 issue? Mr. Lochbaum.

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1 MR. LOCHBAUM: I just got to support Dr. 2 Lyman not only because he's right, but because the 3 fact that the inconsistency -- he didn't want to go into a lot of detail, but what the inconsistencies are 4 for the reasons this is a public debate, but as of 5 6 last Friday or this weekend, this place had better 7 protection than Maine Yankee. It's absurd. I was interviewed by Fox Channel 61 out of Hartford, 8 9 Connecticut, who drove their van passed the gate at 10 Connecticut Yankee last Friday looking for somebody to interview and didn't find anybody. We have heard 11 12 accounts where a former worker on September 11 wanted 13 to see how his plant was protected and went through 14 the gate and wasn't stopped by anybody. Research 15 reactors across the country are protected by the design basis threat rule in theory but not 16 in 17 practice. So, you know, I understand that a lot of 18 19 things were done and those are all commendable, but the consistency issues that Dr. Lyman raises are 20 21 exactly right. And it took a long time after September 11. And we still don't think that they are 22

-- not beyond that, just up to where the law is; not

all at the level they should be what the law requires

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going beyond that, just up to where people should be protected today. And I don't think we are there yet. CHAIRMAN MESERVE: A lot of effort has been made to ensure that all of the facilities mentioned, that we have adequate protection. Dr. Marston.

7 DR. MARSTON: As a member of the public as well and concerned equally about the health and safety 8 9 of the public in general in my opening remarks, I 10 mentioned that I had done risk assessments for a number of industries. And I think when we talk about 11 12 protection and health and safety of the public, you 13 have to look at a realistic perspective on how we 14 should deploy assets in protecting the health and 15 safety of the public in general. There are a number 16 of industrial facilities, not nuclear, that contain a 17 number of hazardous and toxic materials that we need to be concerned about those as well. 18 Security 19 requirements of those are much, much lower than what 20 we see at our facilities. The accessibility by the 21 public is almost seamless.

So I think we have to be realistic on how -- if we are to look at it from a national perspective, how we need to deploy the assets we have. So I would caution, if we are really talking about

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risk assessment, we need to look at it from a societal perspective and not from a nuclear perspective assessment. And that is spoken as a member of the public. Thank you. CHAIRMAN MESERVE: Commissioner

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 CHAIRMAN MESERVE:
 Commissioner

 6
 McGaffigan.

7 COMMISSIONER McGAFFIGAN: I don't think 8 Dr. the question Commissioner Lyman answered 9 Merrifield asked about what belongs in the design 10 basis threat. And he rattled off a bunch of things. One of them was air. And I'd be very interested in 11 12 his view as to whether he believes -- design basis threat is what we expect the licensees to be able to 13 14 defend against. Does he he believe we should be 15 defending these plants from either fighter aircraft or 16 commercial airliners diving into them? And does he 17 believe these guys should have their own private air missles and air forces to deal with that? If he does, 18 19 I suggest he go talk to the Congress. But I am just 20 interested, just to follow up on one credible DBT, 21 including air attack. What do you have in mind of an 22 air attack these guys are supposed to defend against 23 in the way of private forces? 24 DR. LYMAN: I didn't say that that is a

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25 || responsibility that the licensees --

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1	COMMISSIONER McGAFFIGAN: The DBT is what
2	the licensees with high assurance is supposed to be
3	taking on. Enemy of the state is what the Government
4	is supposed beyond design basis threat is what the
5	Government is going to deal with. When we built
6	Turkey Point, there was concern about the Cuban Air
7	Force. The United States Air Force is going to
8	protect Turkey Point as it protects Miami. And
9	presumably we went through that in that licensing
10	case. And we decided Turkey Point did not need its
11	own air force and Turkey Point could be built. What
12	is it you think belongs in a design basis threat?
13	DR. LYMAN: I'm sorry. It was a
14	terminology problem on my part. I was simply thinking
15	of a definition of the threat, whether or not it is a
16	design basis threat or not.
17	COMMISSIONER McGAFFIGAN: That is a
18	tremendous point. If you think we have to defend
19	these plants from the air, then I think obviously Mr.
20	Ridge, the Pentagon and others are going to think
21	about it and they have been. And we have been working
22	with them since September 11. The whole heart of
23	September 11 and thereafter has been been beyond
24	design basis threats. All these people have some
25	capability, because they can defend against the design

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1	basis threat. They have some capability to defend
2	against the beyond design basis threat. We
3	obviouslyly have to augment. Mr. Leventhal (phonetic)
4	is in the audience. You were calling for air defense
5	guns to be deployed around the plants. We don't have
6	air defense. We have Hawks, missiles, Stingers and
7	the Pentagon. We get our military advice from the
8	joint Chiefs of Staff. The Pentagon did not make that
9	choice. To this day, I don't think we have air
10	defense guns around any of the plants. And it was
11	nonsensical, the comment, in all honesty. It gets you
12	a press release and gets you in the public domain, but
13	it is not something that was very useful to the policy
14	debate.
15	CHAIRMAN MESERVE: Let me suggest I
16	understood the context or the comment.
17	VOICE: I would like the opportunity to
18	respond.
19	CHAIRMAN MESERVE: Let me suggest, we have
20	a number of invited guests that have had an
21	opportunity to interact with us. And this was not
22	intended to be a free-flowing exchange and focus on
23	the security issues which are awkward to discuss in
24	this setting, in a public setting in any event.

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1	We have been going for about an hour and
2	45 minutes. Let me suggest we take a very short break
3	and give everyone a chance to stretch their legs and
4	we'll come back and resume.
5	(RECESS)
6	CHAIRMAN MESERVE: Why don't we get
7	underway. In order to take us off the security issue
8	for just a moment, I would like to turn to the
9	question that I raised with Dr. Wilds, which is he had
10	made a point in his opening comments that he has seen
11	a lot of interaction among the Federal Government,
12	states and the licensees in the context of responding
13	to the September 11 event. NRC would like to be
14	helpful in that in a letter we sent out to the
15	governors, to try to make sure that there was a
16	connection made between assets that the governors have
17	the capacity to deploy and the individual licensees.
18	And that has worked very well. The point, however, is
19	that there may be lessons learned there as to how the
20	NRC might interact better with you with regard to
21	other issues. And we would like to get your
22	suggestions.
23	DR. WILDS: With regard to the letter that
24	went out to the governors, they are still I mean,
25	I think the mechanism for contacting us is there and

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keeping us in the loop is there. 1 But after that 2 letter went out, other advisories were sent to 3 licensees. As a state liaison officer, I was notified that they went to the licensees. But as far as what 4 5 you were requesting the licensees to look at and 6 consider, that was not transmitted to the state. So 7 it makes it very difficult for us in, you know, providing assistance; evaluating what we can respond 8 9 with; how we can respond without that knowledge and 10 One of my specific that information, you know. questions when I was notified was, will 11 these 12 recommendations involve any type of state response to 13 augment what is needed? The original response back to 14 This will not involve anything for the me was no. And then the next -- oh, probably within an 15 states. 16 hour, I was getting a phone call and we were having 17 meetings with regard to what the state needed to provide. And it became very difficult for the state 18 19 to evaluate this situation without the knowledge of 20 what you had transmitted to the licensees, because, 21 you know, I know people have talked about different 22 security issues, you know. We are looking at 23 security, not just at nuclear power plants. We are 24 looking at our whole infrastructure within the state. 25 And we have to prioritize how we deploy our resources.

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77 And we need to look at resources in comparison to other facilities. And we have to take into account the security capabilities of that power plant. In saying that there is not a consistent response across the states, I somewhat probably disagree with that,

the states, I somewhat probably disagree with that, because, you know, those considerations are taken into our decisions.

I think one of the best ways that in the 8 9 present situation, the NRC could just partner with us 10 is as information is transmitted to the licensees, that it also be transmitted to the states so we get a 11 12 heads up what you are telling the licensees; how, you 13 start evaluating, you know, know, we can our 14 priorities and making things move a little smoother. I think it would be good to -- I know there are 15 16 meetings with the regional administrator and the 17 licensees on a regular basis. I think it would be good to include the states in those conversations --18 19 in those meetings, you know, because whatever you decide -- a lot of situations, requirements that you 20 21 give the licensees do impact state resources. And the 22 quicker that we can communicate back how that impact 23 affects both of us, I think the more effective we will 24 be in ensuring public health and safety.

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1	COMMISSIONER McGAFFIGAN: Mr. Chairman,
2	could I ask a question on this point? We have been
3	talking a lot internally about how to improve our
4	ability to talk to the sites about safeguards, law
5	enforcement and if necessary, classified information
6	and rule suggesting in doing that in real time as
7	opposed to ways we have been doing it recently. Is
8	that something that if we are thinking about spending
9	money in the future, do you all need to be able to
10	have cleared people who can deal with that
11	information?
12	DR. WILDS: In Connecticut
13	COMMISSIONER McGAFFIGAN: And do it in
14	real time?
15	DR. WILDS: In Connecticut, we do have
16	some of those discussions with the Department of
17	Defense. We have a lot of Department of Defense
18	facilities, Department of Energy facilities. So from
19	Connecticut
20	CHAIRMAN MESERVE: Do you have resources?
21	DR. WILDS: We do not have at this point
22	in time.
23	COMMISSIONER McGAFFIGAN: Is that
24	something you are going to get in any case?

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1	DR. WILDS: It's something I think we are
2	looking at with regard to what happened in recent
3	events.
4	COMMISSIONER McGAFFIGAN: It would be nice
5	for our budgetary purposes if Mr. Ridge if there is
6	need for real time communication with the governors
7	and their bureaucracies about information that
8	includes sensitive, you know, law enforcement or
9	safeguards or even classified information, that's a
10	capability you all need we need to think the
11	Government needs to think about.
12	DR. WILDS: Right. And we need to be in
13	that loop, because if you are going to be requesting
14	resources from the state, you know, we need to have
15	some knowledge that those resources are going to be
16	requested and how we can provide those resources as
17	opposed to going into a meeting I mean I was just
18	at a meeting. We went in. I did not have any
19	information with regard to what the NRC had
20	transmitted to the licensees and they were asking us
21	for resources based upon that information. And so,
22	you know, we have to prioritize for the whole
23	infrastructure, response and knowing
24	CHAIRMAN MESERVE: Let me say, Dr. Wilds,
25	it is possible that the ball got dropped.

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1	DR. WILDS: There was an advisory that was
2	sent.
3	CHAIRMAN MESERVE: But you were supposed
4	to get it as well.
5	DR. WILDS: And we didn't.
6	CHAIRMAN MESERVE: That was just the
7	problem with Connecticut, I hope. But I appreciate
8	the comment.
9	MR. COLLINS: We will make sure that we
10	are linked. But clearly, the intent was three-fold.
11	One was to call the states initially and let them know
12	what was being issued and provide the option of
13	receiving it over the weekend or providing for
14	delivery the first day after the holiday. And we
15	actually checked back through the process to be sure
16	that was taking place. So we need to look
17	specifically, Dr. Wilds, to find out what happened in
18	that case. Appreciate the comment.
19	Let me turn to one of the other subjects
20	that was several of you mentioned, which is this
21	difficult balance that particularly for an agency like
22	the NRC of achieving this balance between openness and
23	having as open a process as possible while
24	simultaneously ly meeting the security concern. And
25	I think all of you are aware that because of some

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security concerns, our web was down for several days and has been down. We have been trying to bring it up in a piecemeal basis and has gone up yesterday with portions of it. So we are trying to bring back information that had previously been available.

6 But there's a generic issue that we are 7 going to have to be dealing with more broadly in that there is a lot of information that we have customarily 8 9 provided and have to consider whether we can provide 10 And this is an issue that is much much broader it. than the NRC. I would -- several of you raised this 11 12 as an issue. And I'd be interested in comments as to 13 how we can -- how you think we should approach this 14 issue. Mr. Lochbaum.

LOCHBAUM: 15 MR. In our experience in 16 dealing with safeguards information prior to September 17 11, we noted there seemed to be a problem between what the criteria was for classifying safeguards and 18 19 nonsafeguards information. And it seemed to be more 20 subjective and contextual rather than, you know, a well-defined line, if such a thing exists. 21

In, I think it was May of this year, I downloaded a document from Adams that I felt I shouldn't have been able to get that had to deal with some information at Waterford that I don't think I

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Soon after that, I called up the NRC to 1 should have. 2 question whether I should have been able to do that. 3 The NRC looked at it for a week and determined that it didn't contain safeguards information and there was no 4 5 problem. When I asked if it was okay to put it on my 6 web site, then it became a safeguards information and 7 it shortly thereafter, it is not or was _ _ reclassified as not publicly available, which is what 8 9 I thought it should have been in the first place. So 10 I think there is a contextual issue. Since September 11, I heard a lot of 11 12 discussions that that is part of the problem in 13 determining what is on or what isn't publicly 14 available. So I think it is important you develop an 15 objective standard as much as possible and make sure 16 all the people that are making the determination are 17 trained and familiar and have an understanding of what that criterion is. 18 19 Related to that, you know, once the 20 determination of what's not and what is complete, we sent a letter into the staff last week asking that 21 22 once that's done, any time a document or class of 23 documents used to be publicly available and is now 24 not, we would like to know about that, because until 25 we hear that something is no longer available, we are

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1	going to continue to assume that it is. And we may
2	have legitimately downloaded or obtained documents
3	prior to September 11 that the agency doesn't want
4	distributed anymore. And unless we know about that,
5	we are not going to be able to comply.
6	So once this process is done, there needs
7	to be some way to communicate with people who obtained
8	documents so they can act responsibly as well. I know
9	it's a tough issue.
10	One of our concerns at least not in the
11	interim period, but once the interim period is over,
12	is that balance that's been discussed several times
13	today. We don't want to UCS has not
14	undercomplained too much about the web site being shut
15	down and the problems going on, because one of the
16	ways to deal with that is no longer allow public
17	participation in the safeguards meetings that we have
18	been participating in the last year or two with Mr.
19	Tracey and his staff. We felt those have been helpful
20	to us to understand the issues and haven't crossed the
21	line and provided too much information. We want that
22	to continue. So although the interim period makes our
23	job a little harder, we understand the reason for it
24	and the need for it. So I guess that's our views on
25	the issue of public availability and particularly what

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1	we need back once that determination is done. Thank
2	you.
3	CHAIRMAN MESERVE: Comments? Mr.
4	Hairston.
5	MR. HAIRSTON: Mr. Chairman, I
6	intentionally did not deal with this issue when I was
7	talking about public confidence. I would like to make
8	a couple of comments really as a utility executive and
9	then I would like to close with a comment as just
10	being a citizen.
11	If we don't learn from the past, we will
12	be doomed to the past. And you know, when we look
13	back at other events that have traumatized and changed
14	our industry, you look back and you look at Three Mile
15	Island square in the face. And certainly, many of the
16	things that we did have taken us to great levels of
17	performance. Some of what we did we have had to undo
18	because the benefit and the risk were not at all
19	commensurate. Matter of fact, today, we still try to
20	undo things. I think the message there is we go
21	through these trying times we're in. We need to be
22	vigilant that what we do adds value to what we are
23	trying to accomplish. Openness and from a nuclear
24	executive point of view, I think the success of the
25	recent years has to do with the openness that we have

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1	had in this process. It may not be as open as
2	everybody wants it, but it's certainly more open than
3	it was five years ago. And I think we are all better
4	off. Five years ago, this man sitting here on my right
5	was just somebody that was quoted in the paper. And
6	now I sit in meetings and hear what his issues are and
7	we can deal with them. And he hears what my issues
8	are and we can deal with them.
9	So I would just encourage this process to
10	stay open in two ways. One, the process itself needs
11	to be understood. And two, what information is in the
12	process needs to be understood by the public. So I
13	support that.
14	Now let me take off my utility executive
15	hard hat and talk as a citizen. I don't think anybody
16	in this room believes that we are not at war with an
17	enemy of the state. We have troops in foreign nations
18	this morning at war and we don't know what this enemy
19	looks like. We don't know the uniform they may wear.
20	We don't know what kind of U-boats they may have or
21	tanks or other things, but we know there's an enemy
22	out there that is after us. It is declared. And so
23	I, as a citizen, think we need to go back to World War
24	II when people walked out of factories., do you
25	remember the sign that was over the door? Loose lips

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1	sink ships. Times are not normal. And I as a citizen
2	think when you come to security matters not
3	security process, but security matters, we have to put
4	our trust in the Government. I mean, there are things
5	the NRC knows that we don't need to know that I trust
6	them to have as a utility executive. As a citizen,
7	somehow we have to build confidence, public
8	confidence, that our Government is going to do the
9	right thing in this narrow area, but very important
10	area of security. And as I sat around here today, we
11	were talking about process. But occasionally, it
12	would get into threat versus what we're able to
13	protect against. I am very uncomfortable with that as
14	a citizen. So I think as we look at openness on this
15	issue of security, let common sense prevail. And if
16	we are going to err, let's err on being a little bit
17	more closed on that area. Thank you, Mr. Chairman.
18	CHAIRMAN MESERVE: Thank you. Other
19	comments? Commissioner Merrifield.
20	COMMISSIONER MERRIFIELD: Mr. Chairman, if
21	I could jump in. This is a sort of an interesting
22	story. I remember about six weeks ago, I had Mr.
23	Lochbaum in my office and we had Fran Goldberg
24	(phonetic) and Stu Ryder (phonetic) there. And we were
25	going over the demonstration of a new prototype of our

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1 web site. And a common theme in that meeting was a 2 concern by Mr. Lochbaum. We have such a great volume 3 of documents available and we do such a good job to make sure that whatever we do in this web site, we 4 5 don't limit access to that. And all the comments we 6 heard prior to September 11 were regarding the quality 7 of -- the quantity -- the quantity and quality of information available on our web site. And if you 8 9 look at how we compare relative to other federal 10 agencies, I think we are, if not more, open than anybody else. 11 12 with that, think So Ι there's а

13 recognition that we are a victim of our success in 14 this regard. We have done a very good job in the past in providing this information. There are other members 15 16 of our federal family who we have to deal with from a 17 defense and security standpoint who are not used to having such a degree of openness. When they went to 18 19 our web site, saw things they are not typically used 20 to seeing. And that made us the decision to shut down 21 our web site for the time being.

I think Mr. Lochbaum makes a good point. We need to have a disciplined process that we use to try to make information available to the extent that we can although it's difficult. Anytime -- and anyone

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1	who has ever gotten a security clearance as I have, a
2	lot of these issues are judgment calls. And it's not
3	always easy to have a checklist of what you are going
4	to keep in and keep out. And no matter what we do, it
5	is very clear to me that there will be some documents
6	that we may end up releasing and down the road, may
7	decide we didn't want to or we may have some things to
8	hold back that perhaps people feel that we shouldn't.
9	I think Mr. Hairston's comments are valid.
10	We do in this difficult time, we are going to have
11	to err on the side of caution and hopefully peel that
12	back the best we can to be as open as possible.
13	The one last thing I would like to say
14	and Pat Norry is probably better to go into detail on
15	this because I know she had some folks looking at this
16	given the breadth of our web site and the volume of
17	materials that we had available, determining what
18	should and shouldn't be released has a potential to be
19	a monumental effort on the part of this agency. It's
20	got to be done carefully. And it's going to take
21	staff. It's going to take time. Going to take money.
22	And despite and we received a flurry of letters
23	from people this week, you know, about making a lot
24	of disparaging comments about our having taken down
25	the web site. It is in the best interest of the

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American people to do this carefully but do it in an expectation that we remain open.

CHAIRMAN MESERVE: Pat, you may want to say something about the process we have been following.

6 MS. NORRY: The process we are using is --7 even before having been requested by the Defense Department, which represented a group looking at all 8 9 agency web sites, we had already decided that some 10 material in the light of the current environment that we had out there was -- should be withdrawn. 11 So we 12 did that. And then the decision was made to shut down 13 the entire site. What we're doing now is trying to 14 focus first on those areas where it is obvious that we need a site back up in order to conduct business and 15 16 it does not represent any kind of a threat. That 17 takes time. And the process of getting material back on the web, it's not as easy as getting it on in the 18 19 first place. Once you've shut down the operation, 20 getting stuff back on is just procedurally more difficult. 21

Yesterday we were able to get back the public meeting site, press releases, employment opportunities, those kinds of things, which obviously present no difficulties. We are now working to get

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1 the rule-making site back up as fast as we can, 2 because that is an area that needs priority. 3 Electronic exchange, which we are able to exchange information with the industry, other sites, we have 4 5 teams working very hard -- the focus is on, let's get 6 as much back out there as quickly as we can, but we 7 have to do it in a way so we end up with a category that we're not going to put back up. We have to have 8 9 a clearly defensible reason for that and that's the objective. 10 Mr. Chairman. 11 CHAIRMAN MESERVE: 12 COMMISSIONER MERRIFIELD: Mr. Chairman, if 13 I may. There may be some necessity for engaging with 14 our stakeholders in identifying areas of our web site 15 that they have particular interest in using and focus 16 our limited resources that have the greater user need. 17 And there may be some areas which are going to take us a little bit more time and effort. 18 But if they are 19 not as in demand, they may go in the back of the key 20 rather than in the front. 21 I think we can do that. MS. NORRY: 22 CHAIRMAN MESERVE: Any comments? 23 Just a general comment. DR. LYMAN: Ι 24 would like to point out, of course, you have to assume 25 that a good deal of the information that you have

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1	already provided over the last several years is out
2	there and can't really be brought back. So there's an
3	analogy to nuclear weapons information. It's commonly
4	thought there's enough information that if the weapon
5	is designed now that can't be effectively controlled
6	and the focus has to be on physical protection
7	material. I think the analogy holds here. I mean,
8	your primary focus has to be on physical protection at
9	the plants. And doesn't give me much confidence if you
10	end up being afraid of providing information to the
11	public because it makes me wonder how much confidence
12	you have in those measures. So again, I would urge
13	you to draw that line rather carefully, Commissioner.
14	CHAIRMAN MESERVE: Let me just say I think
15	we do appreciate the importance of the physical
16	protection of the plants as the primary goal. The
17	idea of the web site is not to facilitate its capacity
18	of someone being able to make an attack on the basis
19	that they have information to make it an easier
20	task than it otherwise would be.
21	MR. LOCHBAUM: I hate to go for twofers
22	(sic). I don't know why access to Adams is being
23	invited back, because there's a lot more information
24	in Adams of a more sensitive nature than there was on
25	the web site. I stopped by the PDR and asked for

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92 1 quidance to get in. I was told I would be e-mailed. 2 And he sent an e-mail and I still haven't gotten it. 3 So I heard access to Adams has been provided to some people at least. 4 But in context of this slow, deliberative 5 6 process for the stuff that's on the web site posted 7 versus stuff you can get through Adams, I guess I am 8 confused by that. MS. NORRY: We made a decision to focus on 9 10 the web first. We have taken some things from Adams when we realized obvious discrepancy. But we had to 11 12 focus the energies first on the web site and that's 13 what we are doing. If you have any particular 14 suggestions about things we ought to get out of Adams, 15 I'd appreciate it. 16 COMMISSIONER McGAFFIGAN: Mr. Chairman, I 17 may have misperceived something. I think David just endorsed Adams or something. 18 19 CHAIRMAN MESERVE: I was prepared to make 20 a flip comment. We didn't have to take Adams down. 21 It was so confusing that we didn't have to worry about 22 it. Other comments on this subject? 23 MR. TOLLISON: I have one, just on the 24 general subject of security. INPO is not involved in 25 security, which I view as a very good thing, not

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necessarily for the reason you might expect. 1 The 2 reason I think that is a good thing is it allows us to 3 focus on traditional safety and reliability as a result of internal events or the possibility of 4 internal events at a station. So I know the NRC and 5 6 many of the staff are consumed with this right now, and that's well justified. But at INPO, we are not. 7 And as a matter of fact, we didn't really miss a beat 8 in our evaluation and assistance activities on 9 10 September 11. When the event happened, we had 117 of 200 technical employees in the field, 11 our 101 12 nationally and 16 internationally. And almost without 13 exception, those employees stayed in the field during 14 that week and subsequent weeks and continued their safety and reliability 15 work in evaluating and providing assistance towards reaching excellence 16 17 throughout the period. We had some inconveniences as 18 everyone did.

For example, one evaluation team drove from Atlanta to Davis Bessie (phonetic) for their evaluation, but it took place. So I just wanted to say from INPO's point of view, we are continuing to really look hard, as we always do, at safety and reliability from the internal issues at the plant. And

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we have the luxury of not being, let's say, distracted from that by the events of the last month. Thanks.

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3 CHAIRMAN MESERVE: Thank you. Before September 11, one of the issues that I and my 4 5 colleagues have spent a great deal of time worrying 6 about that we've touched on only in passing was the 7 human capital issue that I think all of you know we have a situation at the NRC where we have many more 8 9 people over 60 than under 30. We have a large 10 percentage of people who are eligible to retire now. And there's a danger of a lot of skilled people 11 12 walking out the door at a time when there's a whole 13 flurry of very important activities that are in front 14 of us that we need to bring all the skills to bear to 15 address those issues. And -- this was really before 16 September 11. And it was a paramount concern to us 17 and remains a paramount concern. And I'd be interested in comments from those in the room on this 18 19 issue. This is a common problem for all of us. We 20 all draw from а pipeline of people from our educational system, that is, diminished resources as 21 22 time has gone on. And I'd be interested in your sense 23 of whether we are seeing a turnaround in that issue 24 and how all of you are addressing that issue as ones

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that you confront in your own businesses or your own organizations. Mr. Colvin.

3 MR. COLVIN: Mr. Chairman, let me start on this. I think you have correctly identified an issue 4 5 which we have all given a lot of thinking to. And it 6 is something as a Nation and I think as Commissioner 7 Dicus indicated that is not only facing our country, 8 but facing other countries as well. From our 9 standpoint, we are trying to focus the initiatives 10 within the industry really in several areas. First is looking at the -- ensuring that we have the adequate 11 12 of appropriately trained and qualified numbers 13 educated people to fill the needs within the various 14 companies. And when you look at that, that becomes a 15 huge issue just from the standpoint of both looking at 16 the technicians and worker level as well as the people 17 that we need that have engineering and math and science and other types of degrees. There's a lot of 18 19 work that's ongoing between the universities and the 20 individual companies. And many of the companies and 21 I would say most of the utility companies have 22 dedicated programs and resources and cooperative 23 programs with the various universities and with 24 colleges in their area. And they work very closely 25 with those. We held for the first time this year in

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March a utility recruiter college advisory workshop. 1 2 We held it down in Florida in March. So it was fairly 3 well attended, but it was very well attended even without -- taking away the location. 4 But for the 5 first time, we really got at a number of the key 6 issues between what the advisers at the colleges and 7 universities were telling the students what the opportunities were in our industry and what 8 the 9 recruiters from the companies were telling the 10 students. In particular, we did a lot of work with the recruiters to look at what the opportunities -- what 11 12 the companies are looking at it in a much broader 13 sense.

14 Since that time, we have underway and 15 nearly completed a manpower survey of needs within the 16 industry that is broader than just the utility 17 industry, but looks to craft and technician positions and engineering positions, operators and so on and so 18 19 forth throughout the country. And we are about completed with that and we will -- we are going to 20 analyze that and look at that hopefully by the end of 21 this month and that will lay a foundation of what our 22 23 needs are now and what they are in the next five years 24 and base a lot of initiatives on.

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97 I will tell you there is a lot of work 1 2 going on in the educational system and even down at 3 primary school level. We run 15 web sites. I know Patricia has a lot larger job, but the -- we track 4 where the web site has come from and we have on an 5 6 annual -- on a monthly basis, some 20 plus thousand entries into the public web site at NEI. And most of 7 that comes from secondary school and university level 8 9 people. So we see that growing. 10 And to answer your question where the trends -- we actually have seen that grow as people 11 12 look at the importance of energy. 13 And I guess I would digress for a second. 14 The generation coming up has done a lot of work on the 15 generational -- what they call the new millenia 16 generation that is more interested in technology, 17 comfortable with it, and looks at these issues. So they are more open, in fact, to considering these. 18 19 Bob Denton's comments on license renewal and the 20 opportunity to provide a future for many, many years 21 have given us a new opening into people in the job 22 market that have a degree of comfort. There is a lot 23 of effort going on and I am just scratching the 24 surface on it. 25

CHAIRMAN MESERVE: Mr. Denton.

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98 1 MR. DENTON: Yes. In addition to the 2 professionals that Joe has personally discussed, we 3 have greater difficulty attracting young people to skilled craft apprentice programs, 4 specifically 5 instrument controlled technicians, welders and 6 machinists. So the industry -- opening of this window 7 for license renewal, we also have to renew our acquaintance with the secondary schools and with the 8 9 programs they provide to get that kind of skilled 10 craft started. Recently, I guess the competition from the 11 12 computer industry has been very apparent, especially 13 in the instrument controls area where young people 14 would rather work in an air conditioned office than in 15 100 degree boiler room. It is a difficult а 16 competition right now. 17 CHAIRMAN MESERVE: Mr. Thadani. MR. THADANI: Thank you, Mr. Chairman. 18 I 19 was very pleased to hear what Mr. Colvin had to say about some of the initiatives. Sort of looking ahead 20 21 indicated, Joe, the industry still as you is 22 interested in your designs and moving forward. And 23 utilizing risk informed thinking upfront was an 24 important element in that. And I think there are 25 three _ _ couple issues, one having to do with

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1 competent people. How do you get highly skilled 2 scientists and engineers? A number of studies have 3 been done. IOCD or NEOT, Nuclear Regulatory Research to do a study and so on, which pointed to a couple of 4 5 areas that one needs to pay attention to and that is 6 access to facilities -- experimental facilities and research reactors at universities. The trend has been 7 obviously in linking in terms of availability of 8 9 experimental facilities and research reactors. And 10 that is the nuclear engineering programs have been declining in a very significant way. 11

12 It seems to me that to really move forward 13 and have highly accomplished staff, one has to look at 14 all three aspects together. Looking at one without 15 the other two, I think, is going to lead to some 16 incomplete answers, I suspect. One needs key people. 17 Highly talented people would like to have the best analytical tools they can get their hands on. How do 18 19 you get those analytical tools without appropriate facilities and research reactors? 20 So I would hope 21 focus would be on all three aspects which make up the 22 infrastructure issue. 23 CHAIRMAN MESERVE: Dr. Marston.

24 DR. MARSTON: From our perspective, at 25 EPR, we did a current assessment of our current and

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future needs. The perspective today is different than 1 2 it was a year-and-a-half ago. Job security has now 3 become a very important thing for young people. Ι think also the recognition that we do have 4 an 5 impending if not now an electricity crisis in the 6 west, has stimulated interest, certainly, by new 7 college graduates. We are also seeing more women and minorities coming out, which is a very encouraging 8 9 sign.

10 So I don't want to paint too bright a picture, but I think it is an effort that we as an 11 12 industry exploit the positive side of our business. 13 And I think we found if we introduce this to people 14 who are not familiar with our business, they are quite impressed with the ideals, the standards and ethics 15 16 and everything else that is involved with that. We 17 just have to continue with that.

And I would like to close by saying I think the interest in new plants has stimulated certainly interest in the universities as well. I am encouraged by that.

CHAIRMAN MESERVE: Mr. Hairston.
MR. HAIRSTON: Mr. Chairman, you might be
surprised and I think you may know this, but I spent
about half my time recruiting people or taken back by

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101 that -- and I am taken back by the fact that they are 1 2 taken by that because I am working on the most 3 important thing in my company, the people. A couple of points. We are not having any 4 trouble getting the best people in the technical 5 6 ranks. This problem with the crafts is a real problem 7 and it's not getting any better. As an aside to what Ted said, we actually go out and recruit the best 8 9 people. And it's really gratifying to me that well 10 over half of them just happen to be females. We don't recruit females, we recruit the best people. 11 And a 12 large percentage are females and minorities. So we 13 don't have trouble getting them. 14 But I want to raise another issue that's 15 right alongside that. Just because I get 3.8 chemmie, 16 it doesn't mean I am ready to replace a 50-year-old 17 manager that is going to walk out the door. I built 18 Farley (phonetic). I started Farley. Many of my 19 managers were there. We know where the leak off from 20 valve 122 goes into the floor. The same is going to 21 be true in the NRC here. When you take 30-year, 40-year career employees and they walk out the door 22 23 and you bring in the brightest young person, it's not 24 going to do it. And one of the issues we're looking

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shortchange them. And I think that's an issue you all 1 2 are going to have to deal with, because over the 3 years, there's a lot of institutional knowledge both up here and at the plant -- the staff -- and I'm not 4 5 sure we all have got our arms around it. My view is 6 that may be the biggest issue we've got. We are a 7 very well educated experienced industry today. That's where we need to end up 10 years from now. 8 9 CHAIRMAN MESERVE: Pat, do you want to say 10 something about the things we are trying to do to deal with that problem? 11 12 I would endorse everything MS. NORRY: 13 that has been said. 14 Mr. Colvin, we have been working with your 15 group and find out we share exactly the same problems 16 and challenges. We, too, are working closely with 17 universities. Our recruitment efforts have been quite 18 successful lately. We have a very active intern 19 program. 20 And I agree with your comments, Mr. 21 Hairston, that we are looking at ways we can transfer 22 knowledge. We are bringing in some people at a stage 23 about a year before hopefully some of these people 24 walk out the door so we can have a better knowledge 25 transfer. We are engaged in a fairly major study of

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our workforce and how we can make sure that all of our core competencies are there when we need them. And that's quite a challenge. It's very complicated, but we are sharing with the industry those strategies that are common to both of us. So it's a problem for all of us.

CHAIRMAN MESERVE: Mr. Merrifield.

8 COMMISSIONER MERRIFIELD: Despite some 9 fiscal conservatism I exhibited earlier, I want to 10 take something the other way. One of the problems that we have with our staff is wage compression. 11 We 12 have a band of people at the very top who are leveled 13 out in terms of what they can make and this is in part 14 because of requirements imposed by us on Congress. 15 What that results in two things. One, we have people 16 who are 14s and 15s who are at the verge of going go 17 up and could become members of the senior executive service. The amount of money they are going to make by 18 19 making that change is virtually nothing. Many of them 20 make no increase in salary despite а larger 21 commensurate amount of work put in their plate. We 22 are finding people who are very highly qualified, who 23 seeing those factors say, "Why should I take that 24 added responsibility if I am not going to get 25 compensated any further?"

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1 The second issue is changes made in the 2 federal pay requirements we used to have. Under the 3 old retirement system, we were able to lock our people up with golden handcuffs. Once you stay here with a 4 5 certain amount of time, there is a disincentive to 6 leave and we take a huge cut. With the newer system 7 that was implemented in part 15 years ago, the first system, these retirement benefits are portable. 8 And 9 so down the line, we are going to have people who are 10 in their mid-40s or early 50s who will have worked here a good amount of time and walk away. And we are 11 12 going to lose that level of knowledge. 13 And so one of the things we need some help 14 on, I think -- and we have been trying to explain this 15 folks in Congress -- and Senator Croinivich to 16 (phonetic) and Senator Lieberman have been very 17 responsive -- but we've got some pay issues to deal with. We have to be able to provide more compensation 18 19 and incentives to our employees across the board to 20 make sure that that level of quality that George 21 Hairston talks about stays here. And those are 22 serious issues that we need to grapple with. 23 MR. HAIRSTON: You know, just to tag on, 24 I am not exactly sure this is analogous, but the VA 25

had a very similar issue. And they have done some

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things relative to their people that have not made the problem go away, but made it a little easier. So you may just want to talk with them and get some ideas, because they are within the framework -- a little different, but still within the framework. And I would think that may resonate on the Hill a little bit.

CHAIRMAN MESERVE: Mr. Colvin.

9 MR. COLVIN: Chairman, just to add another 10 dimension to this perhaps. Cal picks up on a number of the comments. There is a lot ongoing, as you all 11 12 know, in the legislative arena to do that. You know, 13 Mr. Bingaman -- Senator Bingaman (phonetic) introduced 14 a bill that deals with the pipeline issue; provides moneys for R and D; training for refueling of reactors 15 16 for scholarship fellowship programs. And that is a 17 bipartisan -- bipartisan support. It's in the House 18 energy bill. I mean, there's a lot of work that's 19 been done in those areanas.

I think that in the short-term -- and I know you all are working on some of those issues -and we will be happy to support picking up on Commissioner Merrifield's comments in these issues in the congressional arena -- there are things which the NRC can do to bring back that expertise on a temporary

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Other agencies have had exemptions and been 1 basis. 2 allowed to do that, to bring back some person who has 3 retired from Government service without penalty. And you know, so I think those things are really important 4 5 interim steps. And they don't solve the larger longer 6 term issue we have to deal with, but I think some 7 discussion of those types of issues in making sure 8 that we have that consistent support within Congress 9 is very important.

10 COMMISSIONER MERRIFIELD: I think the 11 commission has sent up a package to the Congress. And 12 one of them is you mentioned where we would have an 13 allowance to bring some people back and not have their 14 retirements impacted, but allow us to give them some 15 additional moneys as contractors and consultants. And 16 hopefully, Congress will react favorably.

MR. COLVIN: That helps with the issue that Pat talked about, about this transfer of knowledge.

20 CHAIRMAN **MESERVE:** We have limited 21 authority to do that now on an emergency basis, but it's restricted in numbers and the nature in which we 22 23 can do that. And we would like to have a broader 24 authority than we have to be able to bring back former 25 employees who have retired with special skills when

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something arises that we need to be able to call on them. And under the current scheme, they have to work for us for free to do that. In an emergency capacity to be able to respond to that, we do have it as part of our legislative package. Other comments on this? Sam.

7 Chairman, I would like to MR. COLLINS: acknowledge the commission's support and Pat's staff 8 9 support for the efforts we have had in hiring, 10 specifically in the intern and entry level area. We have been able to attract very high quality and very 11 12 enthusiastic, very diverse workforce into the intern 13 And not only is that good for our future program. 14 acknowledging that there is effort involved in the recruiting and the retention and the training, but to 15 16 be around these high quality, very energetic 17 individuals stimulates the staff. It forces new thinking into the organization and it challenges the 18 19 status quo in many ways, as I think we all realize who 20 have children perhaps of a close age. So we are 21 making progress in that area. Clearly, there are 22 challenges -- I think some of those have been well 23 articulated today.

24 But I would like to step off from this 25 discussion on a positive note, that we are achieving

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some of those goals and we are seeing the impacts. And I would want the interns who are currently with us have the advantage of this type of forum to know that we have that type of confidence in them and we are seeing their performance at a very high level.

6 MR. KANE: Can I make another comment? 7 That I know if Hub was here today from Region 1, I 8 know he'd speak to this. But in the agency, one of 9 the significant challenges with bringing new people on 10 board is with the regions. And with that comes the it 11 training component and is very important. 12 Obviously, as you all know, to bring skilled people 13 in, but without being trained in how to do the job 14 from the standpoint of a regulator is very important 15 that you do that before they go out. So there's a 16 tremendous impact on being able to get skilled people 17 in and get them trained and moved out into to 18 positions.

Also, obviously, once you have done that with the resident inspectors, for example, they become very attractive within the rest of the agency. So there's a through-put from the regions which makes this an even more challenging job there.

24CHAIRMAN MESERVE: Thank you. I promised25our guests that we would adjourn by noon because they

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1	have many other obligations in town here. Before I
2	bring this to a close, let me give opportunity for
3	anyone around the table if they want to say some
4	make some closing remarks or raise some parting
5	issues, we will welcome that. Sam.
6	MR. COLLINS: Very quickly. I would have
7	as a take away from this meeting the need to engage in
8	some of these issues outside of this forum.
9	CHAIRMAN MESERVE: Definitely.
10	MR. COLLINS: Dr. Lyman has expressed an
11	interest in risk informed applications. I think we
12	can provide information on that. We do consider risk
13	and power operates as part of our standard review plan
14	and we will be doing that. I know the commission is
15	sensitive to that because they have taken the staff
16	issue of asking for more information in the risk sense
17	of power operates and that was an appropriate point.
18	Additionally, I know David and I have had
19	conversation that I would like to engage in these
20	issues to the extent we can informally before they are
21	written down and cast in concrete and they are issues
22	that are responded to at a much higher level, perhaps
23	at a higher tone in volume. We can agree to disagree.
24	And that is going to exist as part of the
25	stakeholders' initiatives and roles. But we need to

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1	ensure that the information is accurate and that the
2	understanding of the programs and the rules is as
3	aligned to the extent it can be before we can launch,
4	sort to speak. So I am receptive to those forums and
5	they can be done constructively. And I would like
6	participation in that by all stakeholders. I
7	appreciate that, Sam. Obviously, we get great value
8	from our interactions from our stakeholders. And that
9	is reflected by the substance that we have been able
10	to cover in the session that we have had this morning.
11	I would like to thank you all for participating. This
12	has been very helpful. And with that, we are
13	adjourned.
14	(Adjourned at 12:00 p.m.)
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