2	NUCLEAR REGULATORY COMMISSION
3	OFFICE OF THE SECRETARY
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5	BRIEFING ON RISK-INFORMED REGULATION
6	IMPLEMENTATION PLAN
7	* * *
8	PUBLIC MEETING
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10	Nuclear Regulatory Commission
11	One White Flint North
12	Commissioners Hearing Room
13	11555 Rockville Pike
14	Rockville, Maryland
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16	Friday, March 31, 2000
17	The Commission met in open session, pursuant to
18	notice, at 9:30 a.m., the Honorable RICHARD A. MESERVE,
19	Chairman of the Commission, presiding.
20	COMMISSIONERS PRESENT:
21	RICHARD A. MESERVE, CHAIRMAN
22	GRETA J. DICUS, Member of the Commission
23	NILS J. DIAZ, Member of the Commission
24	EDWARD McGAFFIGAN, JR., Member of the Commission
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1	STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE:
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2	WILLIAM TRAVERS, Executive Director for Operations
3	DAVID LOCHBAUM, Reactor Engineer, Union of
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1	P R O C E E D I N G S
2	[8:30 a.m.]
3	CHAIRMAN MESERVE: Good morning. On behalf of the
4	Commission, I would like to welcome everyone to today's
5	briefing on the Risk Informed Regulation Implementation
6	Plan.
7	We will be hearing from two panels; first from the
8	staff, and then from a variety of outside stakeholders.
9	This is a meeting that reflects an initiative
10	which is one that has perhaps more than any other, permeated
11	all of the work of the Commission, namely, our efforts to
12	risk-inform our regulations.
13	This has been a constant them on the specifics of
14	a variety of Commission meetings over the time that I have
15	been here, perhaps more meetings on various issues related
16	to our efforts to risk-inform the regulations than on any
17	other subject.
18	The focus of today's effort is to try to discuss
19	basically a plan that will envision the entirety and
20	encompass the entirety of that effort.
21	The notion that we would have a plan is something
22	that first surfaced, as I understand it, in June, 1999, as a
23	result of a response to a recommendation with which we
24	concurred from the General Accounting Office.
25	So I recognize that this is really the first early
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1	stage in the development of the plan, but getting your early
2	guidance on something that is so fundamental to our
3	activities is very important to us.
4	With that, let me turn to my colleagues, and see
5	if they have any statements. Let me make one other comment:
6	As I think you have already observed, Commissioner
7	Merrifield is not able to be with us this morning.
8	He has indicated to me that he regrets not being
9	able to participate, given the importance of the issues
10	being discussed, but there is some illness in his family.
11	His staff is in attendance and will be briefing him on our
12 13	discussions today. He has indicated to me that if there are any
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14 15	questions that were not addressed at the meeting, that he will pursue them with the individual panelists in the
15	future, and he asked me to express his apology, both to this
10	panel and to the following one, on his inability to join us.
18	Mr. Travers, why don't you proceed?
10	DR. TRAVERS: Thank you, Mr. Chairman, and good
±-/	Dr. Harvinos Hank Jou, H. Charlinan, and good

20 morning.

We are pleased to be here with you to discuss with 21 22 you, the plans, key issues, and status of our efforts to 23 risk-inform our regulatory processes. 24 We believe significant accomplishments have been 25 made over the past six months, and they were recently 5 described in the SECY Paper 0062 that was submitted to the 1 2 Commission. Today we plan to discuss these accomplishments 3 4 briefly, and recognizing the strong stakeholder interest 5 that has been expressed on many of these issues, we have focused our presentation on the key issues -- on many of the 6 7 key issues raised by stakeholders. 8 One of those issues is the need for a strategy to 9 guide the full spectrum of our risk-informed activities. 10 As you will hear this morning, we have begun 11 development of such a strategy, which we are documenting in 12 the new Risk-Informed Regulation Implementation Plan. 13 It replaces and also incorporates what was 14 previously in the PRA Implementation Plan, however, the 15 objectives of risk-informed regulation have not changed; 16 that is, we believe risk-informed regulation will lead to 17 better safety decisions by focusing on what is important, while at the same time eliminating requirements that do not 18 19 have safety importance. 20 With me at the table today are Ashok Thadani and 21 Tom King from the Office of Research; John Flack, 22 representing the Office of Nuclear Materials Safety and Safeguards; and Roy Zimmerman and Rich Barrett of the Office 23 24 of Nuclear Reactor Regulation. 25 Ashok is going to begin the presentation. 6 1 MR. THADANI: Thank you, Bill. Good morning. May 2 I have Viewgraph Number 2, please? 3 The NRC's strategic plan provides direction for 4 initiatives to support the Agency's transition to 5 risk-informed, and where appropriate, performance-based applications. 6 7 While the strategic plan strategies provide 8 general guidance for using risk information to improve 9 regulation and other activities, more detailed and specific information is needed to describe the overall Agency plan 10 for deciding what, how, and when to risk-inform regulations 11 as well as other activities. 12 13 As Bill noted and the Chairman noted in the opening remarks as well, this is our first cut, basically, 14

15 at pulling this information together. We recognize there

16 are some areas that need to be filled in further, and Tom is 17 going to get into some details of this. 18 But in addition to that, of course, the last 19 report also includes our accomplishments over the last six 20 months. 21 The focus of the briefing today is going to be on 22 what we believe are the key issues of concern, and what are we doing about those, as well to briefly give you some sense 23 of the accomplishments over the last six months. 24 25 May I have the next viewgraph, please? Now, this 7 chart shows a list of major issues that have been raised by 1 various stakeholders, as noted on this chart. 2 3 I do want to make a note that while stakeholders 4 have shown particular interest in these issues, the Staff 5 has also had these concerns over quite some time, and that we have, in fact, been working on many of the activities to 6 7 address these issues. 8 What we've done here is to divide the concerns in three categories: The first one relates to the strategy 9 10 issues of how we will go forward, what are some of the goals 11 and objectives; to also emphasize that the focus of this 12 program is both safety enhancement and burden reduction, 13 where appropriate. 14 That we are going to go forward with full 15 communication with various internal and external 16 stakeholders, and that the process of this strategy about 17 how and when. As I said, we'll discuss some more of that. 18 The second category of issues and concerns had to 19 do with implementation; how many licensees would utilize 20 these techniques; the issues of resources; the sort of 21 reviews that the Agency would be conducting of this 22 material; and can the licensees go part of the way with partial implementation versus full implementation in 23 24 specific areas? Again, we'll say a little bit about that later on. 25 8 1 The third area has to do with the technical issue; that is, there needs to be a very clear understanding and 2 3 recognition of the strengths and limitations of these 4 techniques, to what extent we'll apply these techniques. 5 Are there areas in terms of methods, data, guidance tools, 6 criteria, goals, that we would apply that need special work? 7 Now, I don't want to dwell on specific issues, 8 individual issues, because we will be discussing each of 9 these issues as we go forward. 10 Next, Tom King is going to get into the strategy itself and where we are and where we're going. 11 12 MR. KING: Thank you, Ashok. If I could have

13 Slide 4, please? I'm going to talk about Slides 4 through 14 7, which are really our activities to develop what we call 15 the strategy document, which is officially, Risk-Informed 16 Regulation Implementation Plan.

Mr. Chairman, you noted the origin of the recommendations to develop this from GAO and our commitment to do that. We had also provided a memorandum to the Commission on January 13th, that provided an outline of what we had in mind in this document.

And also in the SECY 0062 Paper, there was some example sections provided as an attachment to that paper. The main reason we think that this is a good idea to embark upon this is that we think that this will be a document that

will link the Agency performance goals on risk-informed
 regulation which are in our draft strategic plan. They are
 high-level general statements that we want to pursue
 risk-informed initiatives.

5 It will link those to the implementation efforts. 6 We call it a road map. In effect, what we believe this 7 document will do will describe our overall plans and 8 approach for deciding what are we going to risk-inform, when 9 are we going to do it, and what needs to be done to do that?

10 In effect, it's going to be a systematic review of 11 our activities and identify those that are candidates and 12 where we believe we should proceed in risk-informing.

13 It will also integrate the activities, recognizing 14 that there are common issues across the various arenas, 15 things like training, communications, and goals development. 16 This will be a good way to integrate what we're doing in all 17 those arenas.

18 It will also be a document that can provide a 19 periodic updated report on the plans and progress, and it 20 will replace, as Mr. Travers said, the PRA Implementation 21 Plan, which in the past had been our periodic document that 22 updated these activities, but, in my view, had been more of 23 a catalog of what we were doing, not a strategy of what we 24 should be doing.

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So, in effect, I believe that this will certainly 10

improve our coordination, our efficiency, and our
 communication in the risk-informed area.

3 If I could have Slide 5, please, we envision the 4 document having two basis parts: Part 1 will define the 5 systematic process for identifying what it is we believe 6 should be risk-informed; and then Part 2, the details of how 7 you go about doing that.

8

This is work in progress; it's not complete.

9 There's a lot to be done, to be filled before it really 10 presents a comprehensive picture of where we believe we 11 should go and how we plan to get there.

12 We have received some feedback along the way. 13 You'll hear from GAO this morning about some of their views 14 on some of the things that still need attention in the 15 document. We're going to be working on those. A lot of 16 those, we recognized ourselves.

17 In Part 1, the systematic process, we've proposed some criteria that can be applied to describe or define how 18 we would make the decision as to do we proceed with the 19 20 risk-informed or not proceed with the risk-informed. Those 21 criteria basically parallel the Agency's performance goals, 22 in that they address safety enhancement, necessary burden 23 reduction, improving effectiveness and efficiency, the 24 practicality of doing this, other methods, other data, 25 capability or expertise available to be able to actually 11

1 implement such a risk-informed process, and stakeholder 2 interests.

3 Clearly, safety enhancement is our primary
4 criteria. We certainly want to get that message across.
5 The other criteria are going to be considered, but
6 we believe risk-informing will lead to enhanced safety, as
7 well as unnecessary burden reduction.

8 These criteria could also help us in determining 9 the priority of the activity, which will then lead to 10 whatever resource needs in the schedule. We also believe 11 that development of such a document will lead to improved 12 public confidence, in that it will improve the clarity and 13 consistency of what we're trying to do in risk-informing our 14 activities.

15 If I could have Slide 6, please, Part 2 of the 16 document will describe the details under each of the major 17 arenas, rector materials and waste, as to what we're doing 18 or what needs to be done to risk-inform our activities. In 19 effect, it will define the scope and schedule of what we 20 need to do.

The level of detail we envision will include major milestones, major products, major actions that need to be done. It won't get into details of, for example, specifics of how we would change the Hydrogen Combustion Rule, for example.

1 There would be separate papers on major issues 2 like safety goals, policy issues, and so forth. We'd 3 envision each arena would have a summary table in the front 4 that would provide a very easy way to look at what's being 5 done in the arena. It would point you to the right section

6 of the document if you wanted more details.

7 It would provide key information dealing with 8 things like schedule, training priority, and so forth.

9 And then the details in each section would deal 10 with what kinds of guidance documents need to be developed, 11 methods, tools, data, what's the communication plan and the 12 training plan for each of the activities, and what's the 13 schedule. Could I have Slide 7?

How do we plan to complete this document, fill in all the holes, address the issues? As I said, this represents work in progress. It focuses right now on the reactor arena, what we hope to do over the next six months is fill in the rest of it and come back to you in September with a complete draft.

This will complete the reactor safety arena portion as well develop the portions for the materials in the waste arenas. In doing that we are planning to solicit stakeholder input. You will hear about NMSS, which has a workshop scheduled already that is going to get into looking at the criteria and trying to make some decisions on what

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1 they want to risk inform. We would intend to the do the 2 same thing in the reactor arena.

3 Our plan would be to update the document 4 semi-annually. It is going to be a living document. Things 5 will change as time goes on, so it will be provided to the 6 Commission semi-annually as a way to document what we are 7 doing and where we are going.

8 With that, I will turn it over to Roy Zimmerman,9 who will talk a little bit about the reactor area.

10 MR. ZIMMERMAN: Thank you, Tom. Slide 8, please. My plan is to briefly discuss some of the progress 11 12 to date that has been made in the reactor arena and then 13 Rich Barrett will talk about some of the challenges that 14 have been alluded to that remain that we are working on. 15 With regard to the licensing area, as expected, we 16 are seeing more risk informed licensing actions being 17 submitted. Right now we have seen over half of the facilities submit risk informed licensing action amendments 18 19 to us and we have approved over 30 amendments to date. We have also made good progress with the pilots in 20 21 both the inservice inspection and inservice testing programs. Again, when we continue that there will be 22 23 significant efforts expended in this areas in the near term. 24 With regard to the oversight process, we have 25 clearly taken actions to risk-inform the inspection program 14

1 as well as the assessment program through the significance

3 have risk insights brought to bear there, so we think we 4 have made some substantial improvements in our new oversight 5 program. As we begin initial implementation, we will be looking for continuing ways to bring risk insights to bear. 6 7 In the rulemaking area one of the centerpieces is 8 clearly our efforts to risk inform Part 50. There are several initiatives associates with that effort. One of the 9 10 initiatives would vary the treatment of systems, structures 11 and components on the basis of their safety significance 12 using a risk informed categorization method. This is known 13 as the Option 2 approach and also looking at the Part 50 14 regulations themselves, the Option 3 approach. Both of 15 these efforts are in their formative stages and there will 16 be continuing interactions with the Commission as we 17 proceed. Slide 9, please.

determination process. Performance indicators, likewise,

18 In the area of decommissioning, the Staff has 19 completed a final draft of its assessment on the risk from 20 the spent fuel pools at decommissioned reactors. That final 21 draft is up for public comment now. That period ends on 22 April 7th. We will then be looking to issue our final draft 23 at the end of May and submitting a rulemaking plan to the 24 Commission at the end of June.

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15 area would be what I would call the next step after the improved standard tech specs. The next level is to go through and risk inform the tech specs when they are raised to that common level. There's work and initiatives that are underway between the Staff and stakeholders with regard to that process. There's also efforts that are underway with

With regard to special studies, an example in that

7 regard to risk informing efforts in steam generator tube
8 degradation as well.
9 The last one that I will mention is in the area of
10 events assessment. When significant operational events

10 events assessment. When significant operational events 11 occur, we are assessing qualitatively their risk 12 significance and using that information to assist us in 13 determining whether augmented inspection teams should be 14 sent to the site. In the longer term, the significant 15 events are being fully reviewed as part of our accident 16 sequence precursor program, which we'll report on annually 17 to Congress.

18 With that, I will pass the discussion to Rich19 Barrett.

20 DR. BARRETT: Thank you, Roy. As you can see from 21 Slide 9, the Staff is deeply concerned and is working very 22 hard on a lot of the issues that Ashok mentioned earlier 23 that have been raised by our stakeholders, and I plan to 24 touch briefly on all of them this morning.

last bullets, namely PRA quality and the implementation 1 2 issues, because they are related to each other and because they all relate very strongly to Option 2 of risk informing 3 4 Part 50, which is on the forefront of our efforts right now. I would like to say that this briefing comes at a 5 6 time of rapid change in risk informing the regulatory 7 process, particularly in the area of Option 2 of Part 50. We have the advance notice of proposed rulemaking 8

9 out for public comment. The comment period closes in May 10 and we expect to get a lot of feedback from all of our 11 stakeholders.

12 Early thinking on Option 2 related to the 13 possibility of very, very comprehensive changes to the rules 14 and all at once, it also envisioned a small number of large 15 scope pilot efforts and it talked about referencing the ASME 16 and ANS standards as the road to PRA quality. Finally, it 17 was predicated on no prior Staff review of licensee methods.

18 Recent statements by some members of the industry 19 have raised the possibility of alternative approaches, approaches which would involved a phased approach to the 20 21 rulemaking with perhaps doing a few rules at a time and phasing them in, an alternative view of the pilots, perhaps 22 more pilots of more limited scope, also a different view of 23 24 PRA quality, the possibility of relying heavily on the 25 industry recertification process.

All of these have an implication for the question of prior review of the Staff. The industry participants have said that this view is a more pragmatic view. It is one that gives interim results from incremental investment of effort. It is a view that would engage a wider community of licensees, and I think you will be hearing a little bit about this view from Steve Floyd in the second panel.

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8 The Staff is open to alternative directions. We 9 have held discussions internally about these possibilities 10 and we will be discussing these in the future with the 11 Commission.

12 We see a major issue regarding prior Staff review 13 as being an important issue with important resource 14 implications, and we believe it is linked to the questions 15 of quality of PRA and to the scope of the pilots, and so the 16 Staff would like to avoid or at least minimize prior Staff 17 review of licensee programs.

18 To accomplish that, we need confidence in the 19 quality of PRA. Industry emphasis on the certification 20 process raises the question of the need for the Staff to

21 understand the standards to which the certifications are 22 conducted, and we have heard indications from the industry 23 that they plan to submit the certification process for 24 scrutiny by the Staff, and that is a very positive thing. 25 We also view the continued effort to complete the 18 1 ASME and ANS standards as being important to future progress 2 in risk informing the regulations. 3 If I could briefly touch on the point of selective implementation, this is still an open question. It is an 4 important one. We think one of the important considerations 5 there is the relationships between rule changes. Some rule 6 7 changes could be selectively implemented. However, some 8 rule changes might be coupled. For instance, one proposal 9 is to look at (a)(4) of the maintenance rule and the 10 technical specification rule in tandem because they both 11 control configuration. If they are looked at in tandem, we would want them to be implemented in tandem, so this is a 12 13 consideration that has yet to be decided and we will be 14 getting back to the Commission on that in the future. 15 As you can see, there are a number of 16 implementation issues that are still open. 17 If I could touch briefly on the middle bullet, 18 which is issues related to guidance and tools, we are 19 confident that we have the basic tools to go forward with 20 initial implementation of the revised oversight process. 21 Many of these tools are approximate. Some of them require 22 considerable effort by risk analysts to use, and this has 23 resource implications. 24 We intend to refine and improve these tools 25 through application, through experience and through a 19 1 focused research program in areas such as the risk-based 2 performance indicators, improvements to the SPAR model, and 3 plant-specific Phase 2 worksheets for the significance 4 determination process. These are all efforts that we have 5 requested from the Office of Research and they are working 6 on them. 7 We have also proposed research on methods in areas 8 such as fire risk, where we think we have a great deal to 9 learn. 10 In addition, we continue to work with the ACRS to 11 resolve questions related to the application of such 12 concepts as defense-in-depth and to resolve questions related to importance measures. None of these issues, we 13 14 believe, represent roadblocks to further progress to our

15 risk-informed regulation including the oversight process.
16 I would mention in closing that the Staff will
17 soon be forwarding a Commission paper proposing modest

18 changes to the safety goal policy, so in summary we do see a 19 number of issues regarding implementation of risk informed 20 regulation. We share these with our stakeholders and we are 21 working to deal with them in an integrated fashion.

22 MR. FLACK: Slide 10, please. There are two 23 viewgraphs I would like to present to the Commission in the 24 nuclear material and waste arena. The first addresses the 25 implementation process to risk inform activities within the 20

office, and the second is to address those activities that
 support that process.

3 That is not to say that we are not using risk 4 within the process itself today. There are a number of 5 areas in which we have and ongoing projects that use risk, 6 and I will mention those below, but generally there's really 7 five areas or elements to implementing a risk informed 8 process within the office, and the first two, development of 9 material safety goals and identification of candidate issues or applications, are basically running in parallel. 10

11 The first is probably the most challenging, and 12 that is to provide a means to broadly define a radiological 13 risk across the areas. There is a great deal of diversity 14 and complexity within the field and the scope, which will 15 make this a very challenging undertaking.

16 There is a workshop coming up in this area 17 soliciting input from stakeholders, and I will briefly talk 18 about that on the next slide.

19 The next area, identification of candidate 20 applications, we expect would run somewhat similar to the 21 reactor arena, and that would be to develop pilot programs, 22 identify the issues, develop pilot programs and exercise 23 those and gain insights from doing that, and so we are also 24 soliciting that input from stakeholders at the workshop next 25 month.

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1 The next three are more process type of areas. It 2 is clearly the need to understand the link of these changes 3 to the regulatory process, the use of risk in making those 4 changes, and then what would it take to develop tools to 5 make those changes happen and how much will that cost and 6 what benefit we would get from that.

7 Finally, the stakeholders' support -- are they 8 supporting it, willing to support it, especially in the 9 pilot areas where we would be looking for them to volunteer 10 areas for us.

11 That in a nutshell is really the process that we 12 are using to risk inform activities, regulatory activities 13 within the office of NMSS, but there are a number of areas

14 where we are also using risk today as I speak, and these 15 have come up to the Commission in various SECYs -- and the 16 byproduct, the completion of a recent NUREG 6642 that looked 17 at 40 different areas within that area and the risk from 18 those systems. There is a medical pilot program underway. 19 There is the transportation studies that have been done that 20 take into account changes in the population, source terms 21 from transporting nuclear materials, and in the future fuel 22 cycle. We are in the process on that with the High Level 23 Waste Program, and the fuel cycle facilities where we are using risk in that arena as well. 24 25 That pretty much lays out where we are as far as 2.2 the implementation process is concerned, and on the next 1 2 slide, the next viewgraph are really the areas which we are 3 using to support that process. 4 And again, that involves really five pieces. The first 5 piece is the group, the Risk Assessment and Management Task 6 Group, which has now been formed and is reporting at the 7 Office level, which will allow greater flexibility of 8 movements across the different disciplines. 9 This group will act as the focal point for 10 risk-informing activities and performance-based activities 11 within the Office. There is also the creation of a steering 12 group which involves the Office directors, as well as 13 representatives from other Offices, the Office of Research 14 and NRR. 15 And we're looking to have them as an alignment for 16 management to assess the progress in this area and 17 accomplishments, and to provide direction to the group as 18 well as the Office. 19 We have and will continue to interact with the 20 Joint Subcommittee, the ACRS/ACNW Subcommittee that has been 21 formed, and we will receive peer reviews of our products 22 through that mechanism. 23 The workshop I have mentioned will be next month, 24 April, April 25th and 26th, and that is not only gain input from the stakeholders, but also inform them of our 25 23 initiative to risk-inform this area. 1 2 Finally, we're putting together a training program, developing a pilot. It will be a three-tiered 3 4 program: 5 The first tier will target senior management, and 6 that will be a rollup from the second tier, which targets 7 the technical staff across the Offices; and then finally a 8 third tier that will target those that use risk on a 9 day-to-day basis, the specialists. 10 So, that's basically the approach we're using for

Office. And at this point, I'm conclude my presentation. 12 DR. TRAVERS: Mr. Chairman, that completes the 13 Staff's presentation. 14 CHAIRMAN MESERVE: Good. Thank you very much. 15 16 That was very helpful. 17 It's clear to me, as I sort of contemplate what 18 you submitted, that we have a huge number of activities that 19 are underway that are intended to risk-inform the various aspects of the regulations, but are only in the formative 20 21 stages of developing the strategy for doing all this work. 22 That is not necessarily wrong, because your 23 experience on a few of the early efforts is something that 24 gives you guidance as to the problems you need to confront 25 in this strategy. So this is not a criticism; it's an 24 1 observation that we're much more into the work, actually 2 doing the work that will be covered by this strategy than the strategy itself. 3 4 But it does seem to me that one of the things that 5 we learned from our efforts in implementing the oversight 6 program is that a very significant element of this is making 7 sure that we have made the cultural changes within our own institution; that we have fully involved the Staff at all 8 9 levels in the process, so that there is understanding of what we're up to, obviously some insights that can be 10 11 incorporated into the program as well. 12 Now, I wonder if you've -- whether you share that view, first of all, and then, secondly, what things you 13 14 would contemplate that this plan would encompass that would 15 deal with really the overarching problem of the cultural 16 change that we're going to need to accomplish to make this 17 real? 18 DR. TRAVERS: I'm going to turn it over to Ashok 19 in just a moment, but I want to first say that I do agree, and in some measure, this is also a work in progress, the 20 21 expansion of the involvement of NRC Staff, just as we need 22 to and have been doing in the oversight process. But let me turn to Ashok to talk about some of the 23 details. 24 25 MR. THADANI: This is a very important part of 25 what we call the communications plan, as a matter of fact, 1 2 which is very briefly discussed on the strategy portion. It does include issues of the need for workshops, workshops 3 4 where not only do we get external stakeholders, but internal 5 stakeholders as well; trying to make increased use of the 6 website.

the risk-informed, performance-based initiative within the

7 We have a number of internal meetings plan to lay 8 the whole process out. Once we have actually integrated 9 these ideas further, as part of the activity that I think 10 Tom described, then it is, in fact, our intention -- and 11 it's briefly touched upon in the paper -- is to develop 12 training plans as well. 13 And you heard John Flack talk about it from the top-down approach. It is our intention to have this 14 15 communication plan to be fairly complete, and use that plan 16 as a vehicle to achieve the objective the Chairman described. 17 18 It's very clear to us, and we have learned from 19 some of the recent surveys and so on that it is a very important central issue, and we are planning to address it 20 21 through those mechanisms. 22 CHAIRMAN MESERVE: Will that be encompassed in the next version of the plan? 23 MR. THADANI: Yes, it will be. Currently the 24 25 plant says these are the elements, but we will fill in for 26 1 the September version. Training is part of that, yes. 2 DR. TRAVERS: It's identified in the paper. CHAIRMAN MESERVE: As you have indicated, one of 3 4 the underpinnings on, particularly the reactor side for this 5 activity as well is the basically the progress on assuring PRA quality. 6 7 And for that effort, you are looking toward the 8 ASME efforts, activities, and I guess ANS activities for low-power and shutdown situations. 9 10 We had an earlier briefing that suggested that the 11 ASME effort is taking longer than anticipated, and we're not exactly sure when we're going to be seeing that product. 12 How is that going to affect our capacity to move 13 14 forward? 15 DR. BARRETT: You're absolutely right. The 16 question of PRA quality has been a recurring question since 17 we started risk-informed regulation. 18 We have used varying strategies as we've gone 19 into, for instance, the license amendment reviews. We've 20 used certain strategies, but as we get into risk-informing 21 Part 50, Option 2, the standard becomes more rigorous, 22 especially if you want to have a system that does not 23 involve prior Staff review. 24 We have been discussing internally, what kind of 25 options we have, given the fact that we have this schedule 27 1 or question regarding ASME and ANS. And there is -- it and many other issues will have some impact on the schedule, and 2 3 the Staff is looking at the schedule.

5 discuss the schedule issues. But one of the options that the industry has proposed is reliance on the industry 6 7 certification and peer review process. 8 CHAIRMAN MESERVE: It would be independent of ASME 9 and coming to closure? DR. BARRETT: Yes. The industry has indicated 10 11 that we've discussed this many times in the past with the 12 industry, and we've always said that before we can go forward with this in the regulatory process, we need to 13 14 understand the standards to which the peer reviews are 15 conducted. 16 The industry has at least verbally indicated the 17 possibility of submitting that now for Staff review, so 18 that's a possible alternative avenue. 19 CHAIRMAN MESERVE: Tom? 20 DR. TRAVERS: If I can add to that, the ASME 21 standard effort is probably about a year behind schedule, from what we had envisioned originally. We continue to work 22 23 with them to try and hold to the current schedule, get the 24 issues resolved. There are a lot of technical issues that 25 need to be resolved. 28 1 But we still think the standards effort is a very 2 important effort, and we still intend to continue to pursue that, both with ASME and the ANS Standards Committees. 3 So, you know, Rich is right; there are some 4 fallback positions being considered because of the schedule 5 slip, but we still think the standard is very important to 6 7 public confidence, and very important to the issue of 8 effectiveness and efficiency, in that will help reduce the need for Staff review and approval. 9 10 MR. THADANI: If I may also add to this, it seems 11 to me that particularly as we go forward towards 12 risk-informing several regulations, that we need to have a 13 clearly understood view between various stakeholders as to 14 the quality, scope and so on. Part of that is very, very 15 essentially as we go forward. 16 Not only is that piece in terms of quality 17 important, but we also need to -- this is just touched upon, 18 but I just want to emphasize the importance of the role that 19 the safety goals would play in this effort. And that as we use the safety goals -- and we have 20 a paper coming up on proposed modifications to the safety 21 22 goal, as well, I think it will become clearer to all the stakeholders that there may also be opportunities for safety 23 24 enhancement as part of that. 25 So, the quality, I think, is a central issue, and

There is a Commission memorandum headed up to

1 the boundary conditions have to be clearly stated and 2 understood, if we are, indeed, going to go to risk-inform 3 various parts and various regulations and Part 50. CHAIRMAN MESERVE: Commissioner Diaz? 4 5 COMMISSIONER DIAZ: Thank you, Mr. Chairman. I would like to congratulate the Staff for presenting an 6 7 enormous amount of information in the smallest amount of time that I can remember. 8 9 [Laughter.] 10 COMMISSIONER DIAZ: I don't know whether that's a 11 criticism or actually a congratulations. 12 I think that one important thing that I got from the paper and the briefing is that order is coming to the 13 14 house. I think we have multiple activities that I want to 15 express my appreciation for the Division between strategy, 16 implementation, and technical issues. 17 I think that's a very important thing. It will 18 allow you to map what you're doing in an area. It would 19 allow the Commission to be informed of how the progress or 20 problems are in one of those areas. I think that's very, 21 very, very critical. 22 Before I go at you, let me just make one favorite 23 comment. I think we need to continue to separate in this 24 process, what is risk-informed, what is performance-based, 25 and what is risk-informed/performance-based. 30 1 I think that we get our language tangled up, and I 2 think we owe it to the stakeholders to be clear on what 3 aspect of it we're going at. 4 My next comment is the fact of the need to do the 5 planning and bring these activities into a comprehensive, holistic plan, with some urgency. I think we all know that 6 7 some trains have left the station. They are probably powered by their own, but I still believe that some of the 8 9 chips that provide control to this trains are still back in the station, and this is what we're trying to achieve. 10 11 I think it's an important issue. We have both 12 oversight, maintenance rules, multiple activities out there, and still the framework is not there. So I see this work as 13 14 indispensable to provide the foundation in which, you know, 15 clear movements can be made. And there is no doubt that 16 they are taking place. 17 I'm going to go on the limb here and say that I believe that an enabling part of this program is 18 19 establishing the quality of the PRA. I don't think we can

20 overemphasize that. 21 I think we hear too many paths and too many ways 22

on this. I think we need to grab the bull by the horns, and

I would encourage the Staff to clearly come to the Commission and say what is your preferred options in this case?

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1 Then we need to hear from you without -- you have 2 been interacting with the stakeholders, but I do not believe that we can proceed, you know, any further without some 3 4 definition of what the quality of the PRA is. 5 And I don't have any preferred options. If the industry wants to have a certification process that is 6 7 peer-reviewed and that is good and they want to submit it to 8 us, I think that's fine. 9 But I don't think we can keep delaying this issue, 10 because it impacts on the multiple pathways. It actually is 11 kind of a little deterrent that keeps coming over and over again. I think we need to face it. 12 If we're going to go this way, we need to 13 14 determine, you know, clearly, and spell out what the quality 15 of the PRA is. 16 I think the issue of the quality, you know, 17 impacts on which way we are going to deal with this process. The prior Staff review is an important issue, and it needs 18 19 to be tied to it, and it needs to be determined. 20 And sometimes, you know, I'd rather we risk something and maybe go a little bit beyond and then, you 21 22 know, go back and do it, than not doing it. We have been talking about this issue for years 23 now. I think it needs to be resolved, and I think the 24 Commission needs to be thinking of the staff clear on this 25 32 1 issue. 2 I have probably about two hours and thirty minutes 3 of questions on this issue, which I would have to hold on to 4 for some better time, but fundamentally, I'd like to go back 5 to the issue of do we do a little bit, do we do more, how do we do it, and the fact that you're interacting on these 6 7 things. I have always held the view, and I still do, that 8 9 the handling of risk-informing structures, systems, and 10 components, should be as much as possible, you know, a

11 wholesome undertaking.

Would you please provide us with your views, your views, your views, the Staff views, on how much can we do and what are the advantages of taking a section of, I'll say, ECCS or what are the areas and structures, systems, and components that should be done together?
MR. KING: Yes, maybe I'll start off -- we

18 certainly agree in risk informing Part 50 in the technical

19 study we are doing in Research that we want to look at the 20 full set of regulations and we recognize that you can't do 21 everything all at the same time, so we are trying to 22 prioritize those and take bite-size chunks where we can get 23 some progress under our belt to find a method and approach 24 for proceeding into the next set of regulations. We have 25 started with 50.44, combustible gas control, and 50.46,

ECCS, that we may come forward with some recommendations that would deal with a portion of 50.46. We don't want to be held hostage by trying to get everything resolved before we come forward with a full revision to 50.46. We believe it is important if we make some progress in a certain area to come forward and try and implement that progress.

7 We are planning to take a comprehensive look at8 the set of regulations, so in that sense I agree with you.

9 MR. THADANI: Yes. I wanted to again add that the 10 two regulations Tom talked about, combustible control and 11 emergency core cooling systems, once we have the goals and 12 criteria laid out we would also be looking to see if there 13 are areas in fact where we think safety enhancement ought to 14 be made. That is part of the program as well.

15 I think that is certainly dependent on making sure 16 that we have a very clear understanding of how safe is safe 17 enough. That is the floor in terms of how far would we push 18 certain issues, the role of cost benefit analysis and so on 19 in that process.

20 I think those elements are also what we are 21 looking at, in addition to specific regulations that are on 22 the books today.

23 COMMISSIONER DIAZ: Has the work been completed in 24 what I will call the first task of looking at a complex set 25 of regulation, what I will call "search and destroy" --

which is you look and you say, yeah, has that work been
done?

3 MR. KING: I has been completed in the sense we 4 have gone through Part 50 and we have identified about 23 5 areas that we think are candidates to be risk informed. It 6 includes 50.44 and 50.46, but you will see there is a status 7 report coming up very shortly that has that list in it, so 8 you can see where we stand when identifying those things.

9 DR. BARRETT: If I could add, Commissioner, a word 10 about Option 2, I think one grouping of regulations that 11 could go together are those regulations that control 12 configuration. The industry has talked about looking at 13 (a)(4) and the technical specification requirements.

14 Their experience has been in implementation or 15 preliminary implementation that sometimes (a)(4) is

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16 controlling, sometimes the technical specifications are controlling. They are quite often inconsistent. There is 17 18 an opportunity there to take a single issue, configuration control, one that is very important to risk and deal with it 19 20 in a risk informed way. 21 I think that is an example of how you can pick off 22 a --23 COMMISSIONER DIAZ: I think that is definitely a 24 very worthwhile area. I get concerned as we get these 25 trains out that we have the controls in place and there will 35 1 be a consistent set of rules that would allow us to follow 2 them. 3 There's almost two things. There's a series of 4 activities and then there is what supports those activities 5 and I am for having a complete set being developed at the same time, even if like in the oversight process the 6 7 activity goes before the rules and might drive the rule, but we need to have things that enable the progress that will 8 9 not come back and haunt us. I think that is the framework that we need. 10 MR. THADANI: Yes. The only comment I would make, 11 Commissioner Diaz, would be that in some cases it is going 12 to take time, because there may be areas where we just don't 13 14 have methods and capability that would have to be part of 15 the process as well. 16 CHAIRMAN MESERVE: Commissioner McGaffigan.

17 COMMISSIONER McGAFFIGAN: The impression I have -18 I will start off with is that things in this area are still
19 not exactly stable.

If I look back at what was presented us in 99-256, we didn't know that the standard was going to be delayed. We didn't know the industry reaction to 256, which came in after the sort of things that Rich Barrett talked about, and so there's been a lot of changes in just four months and most of them in terms of planning, trying to plan something, 36

1 in the negative direction.

2 I say this in part just for the GAO folks who are 3 going to come next. In my vote on 256 I pleaded with GAO and others to understand that this is not a straightforward 4 5 exercise in which we know all the answers from the outset and not to expect that we can lay out a detailed plan with 6 7 precise resource loads, so I am a little bit of a broken record on that, but I think I have been proven right over 8 the last four months that detailed planning with exact -- in 9 10 October we are going to be doing "x" -- are sort of futile 11 in this exercise.

12 I do want to associate myself with Commissioner 13 Diaz, that I think the PRA standard is critical and we have 14 to get it right in order to have broad stakeholder 15 confidence. I think Mr. Ortcigar is going to say that later 16 and others will echo that. 17 Mr. Barrett, you said that you were going to soon 18 get a safety goal policy statement paper, and Ashok mentioned it as well. It is going to make, I think you 19 said, modest changes supposedly. 20 21 Is CDF -- are there going to be goals for CDF and 22 large release frequency? Is that a modest change or is 23 that --DR. BARRETT: Let me let the Office of Research --24 25 MR. THADANI: Let me address this --37 1 DR. TRAVERS: Let me just say one thing. MR. THADANI: Sorry. 2 3 DR. TRAVERS: Just as an administrative matter, I signed that paper yesterday, so you will have it today if 4 5 you didn't get it yesterday. 6 MR. THADANI: Yes. 7 DR. TRAVERS: And then I will let Ashok tell you what is in it. 8 9 [Laughter.] 10 MR. THADANI: It has got some recommendations in it, but it does not propose elevating the 10 to the minus 4 11 12 core damage frequency up to the level of a goal. 13 COMMISSIONER McGAFFIGAN: It does not? 14 MR. THADANI: Does not. 15 COMMISSIONER McGAFFIGAN: So you don't need -- I 16 mean the connection to the PRA quality issue and raising 17 these to goals, we always talk about not believing the absolute numbers in these PRAs, maybe believing the 18 differential numbers when we make a change, so if you had 19 20 been proposing CDF and LERF a PRA quality issue would have 21 played into this. 22 MR. THADANI: No, I think the PRA quality issue is 23 going to be there regardless, because the current goal has 10 to the minus 4 as a subsidiary objective rather than at 24 25 the core level. 38 COMMISSIONER McGAFFIGAN: A LERF goal. 1 2 MR. THADANI: And what we are proposing of course 3 is also to have LERF as a subsidiary objective as well and 4 addition to core damage frequency, which is what we are 5 doing today and to indicate that that is probably what ought to be in the policy statement. 6 7 Commissioner, I think the issue of quality is quite separate, and if we are going to use these techniques, 8

9 then we have to have high confidence in the quality of 10 analysis. 11 These are in the end safety analyses. COMMISSIONER McGAFFIGAN: Right. 12 MR. THADANI: Decisions are made and the quality 13 14 is essential. 15 COMMISSIONER McGAFFIGAN: In order not to use too 16 much time on this, since there is paper soon going to be 17 before us, I will get off of that. The issue of NMSS, I don't want to leave NMSS out 18 19 of this, Seth Copeland just before he retired had what I 20 guess was considered a DPO, although he questioned whether 21 it should have been a DPO, and I have read the report of the 22 panel that looked at it, but the basic criticism he had was 23 that this -- you know, we sort of put a lot of infrastructure first, created a bureaucracy for the sake of 24 25 risk informing the materials regulations without thinking 39 whether there was much opportunity there, and he postulated 1 2 we had things, you know, safety goals essentially -- they 3 are Part 20 -- and he postulated that not all of what we do in NMSS space is going to be able to be risk informed 4 because there are statutes that drive us in risk space to 5 very, very, very low risks. 6 7 Where does all this stand? He predicted there 8 wouldn't be a lot of stakeholder interest. You're going to have these meetings, but I got from reading the panel's 9 10 report some sense that they agreed with a lot of his criticisms in sort of muted ways and so rather than PIRT 11 12 charts and all, whatever you guys do down there, are we 13 thinking about this from first principles? 14 MR. FLACK: Yes, I think the areas that I have 15 outlined on the viewgraph indicated some of the things that 16 came out of that report. 17 The development of a steering group within the 18 Office would certainly provide direction to what needs to be 19 done and how we are going to do it. The risk group now reporting to the Office 20 21 Director directly, being able to understand the different 22 disciplines being able to move across disciplines again from a top-down view, and I think this workshop will lay a lot to 23 24 where we go from here. I think this is going to be a key milestone in the 25 40 process and to see how or what stakeholders come in with, 1 2 and what are the areas and how we might develop them 3 further, so I think we are very sensitive to those comments

and we are working on a direction to address them.

5 COMMISSIONER McGAFFIGAN: I hope Seth comes out of 6 retirement and attends that workshop. 7 MR. FLACK: Yes. COMMISSIONER McGAFFIGAN: The last -- or at least 8 9 as a retiree -- the last question. NEI has adopted 10 different words. You know, they don't call it risk informing Part 50 anymore. They call it safety focusing our 11 activities or safety focusing Part 50. I think they are 12 13 trying to deal with a public -- I will make a bet if you 14 went out and did one of these things that people running for 15 office pay lots of money for polls on, you would find that 16 the public reacts better to the word "safety focusing" than 17 to the word "risk informing" so is there -- but we have been 18 using two different vocabularies for about the last year and 19 I just would ask if you have any reaction to what I think 20 may be clever -- and I think it has some substance to it. 21 I think it goes to some of the issues that Mr. 22 Lochbaum is going to raise later, because the goal of risk 23 informing these regulations is to allow our limited 24 resources to be focused on safety important measures, and so 25 we are safety focusing our activities when we risk inform, 41 1 so if you have any reaction to whether we should think about 2 our words differently --3 DR. TRAVERS: We should always think about them. 4 I haven't thought about that in particular, but I think you 5 are right in what we are trying to convey as a point of emphasis, and that is what we are trying to do a better job 6 7 at is focusing on safety and get the safety payoff that 8 comes along with risk informing our processes. 9 To the extent we can do that with some better 10 terminology, I think it is always worthy of some 11 consideration. 12 MR. THADANI: I might just note, Commissioner, 13 that that is why it was risk informing, but of course I 14 think we do need to rethink this, but there was this debate where in this country we used to call probabilistic risk 15 16 analyses and the Europeans in general didn't like that very 17 much, and the terms that Europeans use is probabilistic 18 safety analysis, and we do need to rethink that issue. 19 COMMISSIONER McGAFFIGAN: Okay. 20 CHAIRMAN MESERVE: Commissioner Dicus. 21 COMMISSIONER DICUS: Thank you. I likewise want 22 to associate myself with the importance of the PRA, the 23 importance of the quality of the PRAs and the importance of 24 some consistency in a standard for the PRAs, and it is 25 important that this be done very early on in the process, so 42

1 this needs our attention and it needs it now, and so I want

2 to emphasize that.

3 What I want to do is make a couple of comments and perhaps a question on the SECY paper before us, 62. You 4 5 call it an initial draft and I appreciate that, which 6 obviously I guess we are going to get a secondary draft 7 coming to us before too long, but one of the things I want to emphasize is that it truly, that we truly have an 8 9 implementation plan and I think sometimes our PRA 10 implementation plan became basically a listing of activities and not truly a plan. 11

12 A plan needs goals, endpoints, a roadmap to get 13 there, so I would caution that when we continue to work on 14 this paper that we see this coming together. Let me go to 15 Slide 4.

16 I am going in with the purpose of what you're 17 trying to accomplish, and go down to the third bullet under 18 Purpose to integrate activities and programs to accomplish 19 the plan.

20 And you have noted that there are cross-cutting 21 arenas. There are things that are going to have to be done 22 in some organized fashion.

23 I'm assuming that when you continue to work on 24 this plan, we will see how you're going to integrate that. 25 I didn't really notice it from the paper.

1 MR. KING: Yes, the paper does not have anything 2 in that regard, but you're right, we do plan to talk about 3 integration of those cross-cutting issues.

4 COMMISSIONER DICUS: All right. That's going to 5 be important. Let's go to Slide 5.

6 You have listed criteria that will be applied and 7 what they're going to be based on. At what point will these 8 criteria be sufficiently developed to be used in our PBPM 9 process. It does have resource implications or could quite 10 possibly have resource implications where we're going to 11 have start switching resources, perhaps, or perhaps not. So 12 at what point are we going to see this to be a useful tool 13 for the resource implementation?

MR. THADANI: Certainly the plan was to provide -develop all of this information and make it part of the
paper that we owe the Commission.

17 The idea here was to make sure that we had done 18 initial technical evaluation to have some confidence that, 19 in fact, those are the areas that we should be pursuing 20 further. And we owe the Commission all of this information 21 in December. 22 That would then become part of the process of

23 planning and budgeting.

24 MR. KING: Yes, the draft criteria that are in the 25 0062 paper right now basically -- we started with the 44 criteria that are in the Agency's strategic plan, the four 1 2 performance goals, and tried to expand upon them a little 3 bit. 4 So, we're trying to keep it consistent from the 5 top down, and apply the same considerations. Now, when we get into some of the details, for example, like practicality 6 7 of risk-informing a certain area, then that adds some extra detail that you won't find in the strategic plan. 8 9 But basically we're trying to take the same 10 elements and the same basic criteria and apply them in this 11 process. 12 COMMISSIONER DICUS: Okay, in the December timeframe of 2000. 13 14 One final question, very quickly: What's going to be the role of the Agency's PRA Steering Committee? Is that 15 16 going to go away? Is it going to change, or is it going to 17 be the same? 18 MR. THADANI: No. The PRA Steering Committee is 19 going to remain the same as we go through. In fact, I think 20 we are considering more frequent meetings than we have had 21 as a committee. We have been meeting approximately every 22 two months. 23 We're rethinking, things are moving. Some of the 24 issues need prompt attention. 25 I have also talked to Dave Helwig, who is Chairman 45 of the industry steering group, that we are going to meet in 1 2 an open, public meeting, every two months, with them. 3 And it is our intention to have an internal 4 steering committee meeting every month, and we're going to stay engaged on these issues. 5 6 COMMISSIONER DICUS: Thank you. 7 CHAIRMAN MESERVE: Thank you very much. We very 8 much appreciate the Staff's assistance this morning. And let me call our second panel to the table. We 9 10 have been joined by Steven Floyd, who is the Director for 11 Regulatory Reform and Strategy in Nuclear Generation for the 12 Nuclear Energy Institute; by Maryann Kruslicky, who is the 13 Assistant Director for Resources, Communication, and 14 Economic Division of the General Accounting Office; and 15 joined by Mr. Tom Ortciger, who is the Director of the Illinois Department of Nuclear Safety. I'm very pleased to 16 17 see him here. I've had the opportunity for extensive 18 interactions with his Agency in the past; and we've been 19 joined by Mr. David Lochbaum, who is a Nuclear Safety 20 Engineer with the Union of Concerned Scientists.

21 Why don't we get underway. Let me suggest to you 22 that one of the most valuable aspects of our interaction 23 with the panels is the question and answer time that we 24 have, so I'd ask that you all try to limit your opening remarks as best you can to the allotted time, so that we'll 25 46 1 have ample time to ask questions of you. 2 Why don't we call on Ms. Kruslicky to start. MS. KRUSLICKY: Good morning, Chairman Meserve. 3 Please call me Maryann. Ms. Kruslicky is a mouthful. Other 4 5 Commissioners, thank you for inviting us today to 6 participate in this briefing on NRC's proposed Risk-Informed 7 Regulation Implementation Plan. Can I have Slide 2, please? Thank you. As you 8 9 know, in March of 1999, we recommended that NRC develop a 10 comprehensive strategy to guide your move to risk-informed 11 regulation. We made this recommendation, believing that 12 you, as well as NRC managers and Staff and other 13 stakeholders, would be better informed about and better able 14 to plan for various activities that would affect them as you 15 move to become a risk-informed, performance-based 16 organization. 17 The plan includes many of the issues that we

raised. It has goals, objectives, performance measures, and milestones. It also demonstrates NRC's commitment to integrate the Government Performance and Results Act with your activities and processes.

22 Next slide, please. However, the proposed plan is 23 not the road map that we envisioned, and does not provide a 24 clear and complete picture about where NRC is going and how 25 it will get there.

1 This week at the Regulatory Information 2 Conference, Sam Collins and Roy Zimmerman said that 3 effectiveness is defined as NRC doing the right work, and 4 efficiency is defined as doing the work right. 5 We do not believe that the plan as currently proposed allows the Commission and other stakeholders to 6 7 know whether NRC is doing the right work. Next slide, 8 please. 9 The plan also does not include resource estimates, 10 and it does not allow all stakeholders to see the overall short- and long-term activities that the Agency has ongoing 11

12 or expects to undertake. Next slide, please.

13 We would suggest that the plan should include as 14 many activities as NRC can reasonably anticipate. For 15 example, NRC Staff say that they cannot plan for 16 risk-informing Part 50 until the Commission gives them their

17 direction, possibly in the Spring of 2001. 18 However, at least a year ago, and possibly longer, 19 the industry provided NRC a suggested list of regulations, 20 and in SECY 99-264, NRC Staff identified some tentative 21 regulations that could be risk-informed. 22 Therefore, we believe that the Staff can develop a 23 plan for either individual regulations or blocks of regulations that would include at least information dealing 24 25 with the estimated date for providing information to the 48 Commission, publishing the proposed regulations for public 1 comment, having a final proposal to the Commission, and an 2 implementation or completion date. 3 4 We believe that the Staff can answer these 5 questions, set milestones, and modify them as circumstances 6 warrant. This is supposed to be a living document. 7 We also believe that the plan should include 8 resource estimates. Now the plan refers the reader to the Planning, Budgeting, and Performance Measures process. 9 10 Why should the Commission and other stakeholders 11 have to go to different documents to obtain information? 12 The Implementation Plan should be a stand-alone document. 13 An example of this is Mr. Barrett this morning in 14 his comments, several times said that this activity is going 15 to be very resource-intensive or time-consuming. The plan, 16 as currently structured, does not let you know which of 17 those activities that comment applies to. 18 Taken together, identification of the full range 19 of possible activities, estimated timeframes, and resource 20 estimates, would not only allow you and the NRC managers to 21 determine whether the Agency is doing the right work, but it 22 would also allow the Agency to make tradeoffs among the activities that it conducts. 23 For example, with a full range of information, you 24 could decide to direct the Staff to take a number of 25 49 1 short-term activities with minimal cost, but possibly 2 minimal impact; or you might want to direct the Staff to 3 undertake fewer long-term, more resource-intensive 4 activities that ultimately will have a significant impact on 5 maintaining safety, reducing unnecessary regulatory burden, 6 and enhancing effectiveness and efficiency. 7 Mr. Chairman and Commissioners, with the plan as 8 proposed, you do not have the information to make these tradeoffs. Next slide, please. 9 10 We also believe that a one- or a two-page summary 11 or timeline could assist the busy manager to plan for the

12 near- and long-term and that NRC should have identified

13 those activities that are critical to achieving its

14 objective. PRA quality might be one of those critical path 15 items. Next slide, please. In summary, NRC cannot wait 16 17 until the next iteration of the plan to address these missing elements. As Commissioner Diaz remarked this 18 morning, the train has left the station, and do you want to 19 20 be left at the station? We do not believe so. 21 NRC has set an aggressive course for itself, and a 22 complete implementation plan should help you achieve that course and continue your train trip to a successful 23 24 conclusion. 25 Finally, NRC says that it will develop an 50 1 integrated communication plan. We believe that an effective 2 implementation plan, including resource estimates and at 3 least estimated completion dates or implementation dates, 4 could serve as your communication vehicle, thereby saving 5 NRC Staff time and resources. Thank you for your attention. 6 7 CHAIRMAN MESERVE: Thank you. Mr. Ortciger? 8 MR. ORTCIGER: Good morning. This is a relatively 9 new position for the Department to be taking. Over the years, we have probably disagreed on more issues than not. 10 Some contentious public policy issues such as one millirem 11 12 comes to mind, and KI. 13 CHAIRMAN MESERVE: Occasionally you've disagreed 14 with me, too, Mr. Ortciger. MR. ORTCIGER: Yes, we have. 15 16 [Laughter.] 17 COMMISSIONER DIAZ: I thought the Chairman was 18 going to say welcome to the club. 19 [Laughter.] 20 MR. ORTCIGER: Our divergent opinions on low-level 21 waste performance assessments are probably well known to everybody at the NRC. But what we do see is a very clear 22 23 and positive opportunity to work as an agreement state with 24 the NRC on this package that is now being put together. 25 We are extremely excited about looking at this 51 materials portion of the program. We believe that both the 1 2 states and the NRC can move together, and as I have done in 3 my written comments, that we can work together on this issue in a very compatible manner. 4 5 However, I'd like to spend just a few moments on 6 some areas of concern to the state of Illinois, and that 7 being the nuclear waste issue, and specifically the spent 8 fuel transportation and the low-level waste issue. 9 Spent fuel, I believe, will become an issue very

shortly of privatization and regionalization. I believe 10 11 that several states will be actively targeted and become 12 involved in development of interim storage facilities. 13 No single issue could be more divisive than this, 14 and I believe it will take on the same characteristics that 15 we have been seeing develop over the last few years in terms 16 of the compact system in the lo-level waste area. 17 Secondly, I would just admonish everyone that we 18 must be very careful when we delve into the issues of 19 transportation. I think the MOX fiasco of two months ago is a perfect example of how we must be extremely careful how we 20 21 address this. 22 As unimportant as it may be to us, at the local 23 level, we can expend an incredible amount of time dealing 24 with these issues, and become involved in issues that 25 certainly, you know, need to be addressed more rationally 52 1 than they were. I use the MOX as the primary issue at this 2 point. 3 Finally, low-level waste is moving away from the 4 issue of developing disposal facilities, towards the arena 5 where storage is going to become the facility of concern. 6 However, the duck that calls itself a short-term 7 storage is one issue that will have to be addressed, because 8 I believe it is taking us down a road that could be very 9 dangerous and misleading to the public. 10 Facility storage will also become very contentious 11 as part of the risk-informing process, so that what we are 12 saying as the state agencies, is that I think we need to readdress ourselves. We need to jointly look at these 13 14 issues and see how we are going to approach them, because as 15 South Carolina moves towards their decreasing capacity and whether or not we have a positive outcome in Utah, the 16 17 storage will become the issue, and I think we need to 18 address that sooner than later. 19 Having said that, I would like to thank you for this opportunity, and it is certainly a pleasure to be back 20 21 working with the NRC on these issues. 22 CHAIRMAN MESERVE: Good. Thank you very much. 23 Mr. Lochbaum? 24 MR. LOCHBAUM: Thank you. Good morning. Slide 3, 25 please? 53 1 I guess we'd like to offer a third set of vocabulary here. We would call it outlet regulation instead 2 3 of risk informed regulation or safety focused regulation,

4 but I think no matter what you call it, or what vocabulary5 you want to use, we are all talking about the same thing and

6 I have a full appreciation for that because at least as far

7 as the two panels that were represented here, I have the 8 smallest staff, and it is very important for UCS what we 9 focus on the right issues or what we think are the right 10 safety issues, because we don't have a lot of excess Staff 11 to devote things on, so I think I have an appreciation for 12 the concept involved. It is the implementation that I don't 13 appreciate.

14 I think the best way to do that would be look at 15 Slide 8 and look on the areas where we focused most of our 16 time in the past year and in fact the past 22 years. I 17 would like to group those into three big categories. One is 18 allegations, which are safety issues raised either by plant workers or by members of the public, and examples of where 19 20 those have actually led to safety improvements in the recent 21 past are the Thermo-lag problems which were first identified 22 in 1992 by a plant worker; Maine Yankee's RELAP flap, which 23 I am using that term from a bumper sticker or a tee-shirt 24 that plant workers had. That is not our characterization of 25 it. Finally there was the ice condenser problems that were 54

1 identified again by a plant worker.

2 These things have led to real, tangible safety improvements at nuclear power plants in this country. 3 4 The second category, although it is labelled number one, is 2.206 petition process, which in recent years 5 has led to the identification and correction of spent fuel 6 7 pool and safety culture problems at Millstone, the 8 identification of raising the issues of potassium iodide, 9 again the problems at D.C. Cook with its ice condenser, Catawba's harassment of QC inspectors over a period of time, 10 11 and reactor operation with failed fuel, if we could get the 12 actual issues addressed.

Slide 9 talks about the third category, which is differing professional opinions, which are safety issues raised by the NRC's own staff. Two examples are the OSRE program and steam generator tube rupture issues.

UCS in the past three years I have been with UCS and in Bob Pollard's time before that expended considerable resources in these areas because they had what we felt were a direct tie to safety improvements, safety enhancements.

We think under the current risk informed implementation plan these areas are not being considered or given the same consideration that we think they should be. We think the biggest oversight is how the NRC is not really dealing with nuclear whistleblowers. Slide 10, please.

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Unfortunately, I have a correction to Slide 10.
 George Sutton moves from victim at Perry to formerly at

3 Perry or will in the near future. These are a list of 4 people we have dealt with over the years who have raised 5 safety issues and have paid for that with their careers, and 6 we think that is too high a standard for nuclear workers to 7 be faced with.

8 We think in all of these cases and others the 9 Nuclear Regulatory Commission Staff did not serve these 10 conscientious workers well, and in a larger sense they 11 didn't serve the people living around the plants, the way 12 these issues were raised.

13 We think the risk informed implementation program 14 basically doesn't consider enhancements to make it easier 15 for nuclear workers to raise safety issues. Slide 11. 16 What we think the risk informed plan omits is 17 these three area, is there should be more emphasis placed on 18 fixing the OI/OE/OGC problems that prevent the agency from 19 properly protecting whistleblowers, and by protecting I am 20 not saying step in there and prevent them from suffering

21 harassment and intimidation but they need to be afforded the 22 rights that are given them under the laws.

23 We also think the agency needs to improve the 24 timeliness and quality of both DPO and allegation responses. 25 That has been a problem and continues to be a problem in our 56

1 view.

Finally, the NRC needs to fix the 2.206 petition process. That issue was raised not first but most recently by UCS in 1992 with a report. There were workshops, the NRC conducted workshops in 1993, and here we are seven years later and the program still isn't workable.

7 The Calvert Cliffs license renewal could go
8 through in 24 months and the 2.206 protection process is
9 eight years running. That seems to me to be a focus in the
10 wrong areas. Slide 12, please.

11 What we think is rather than focusing on areas 12 where at best safety is maintained we would prefer to see 13 more attention and resources spent on areas where safety could actually be improved. We think with the current plan 14 15 the economic interests of the industry are being placed 16 ahead of public and worker safety and Slide 13, which would 17 probably be provocative, but I think in the last year former NRC Commissioner Peter Bradford, who is on the UCS board, 18 19 has stated that at no time since the Three Mile Island 20 accident has the NRC been retreating at a faster pace from 21 regulation, from its regulatory obligations.

In the last week Paul Leventhal, Paul Gunther, Jim Riccio, myself and others have indicated in various forms and levels of stridency that the NRC's focus isn't in the right area. I don't think we are all wrong. Perhaps in the 1 levels of stridency perhaps we are wrong, but as far as the 2 issues, I think we do have a comment.

3 I think the focus is not in the right areas, which is not to say that any of the issues in the risk informed 4 5 implementation program are wrong. It is just not complete. There are areas that need to be added to that where safety 6 7 has actually been improved in the past and would be improved 8 in the future if these processes were fixed. Thank you. 9 CHAIRMAN MESERVE: Mr. Floyd? 10 MR. FLOYD: Thank you. Good morning, Chairman, 11 Commissioners. It is a pleasure to be here this morning and 12 talk to you about a topic that is of great interest to the 13 industry. Dave Helwig, Senior Vice President of 14 Commonwealth Edison and Chairman of the Risk Informed Regulation Working Group, was originally scheduled to make 15 16 this presentation. He sends his apologies and regrets that 17 he was called out of the country on business just in the 18 last few days and is unable to do that, but he wanted me to 19 assure you that he is personally dedicated to this effort. 20 If I could have Slide 2, please.

I won't dwell on this list at all in the interests of time. The purpose of this slide really to point out that the use of risk insights both on the part of the plants and on the part of the regulator is not a new process at all, that there is a tremendous foundation that has already been 58

laid for the application of future risk insights both in the
 regulations and continuing within the utilities themselves.
 If I could have Slide 3, please.

4 We see great potential for risk informed regulation. First and foremost, we think it does provide a 5 6 consistent basis for plant activities. The agency we think 7 has done an excellent job of communicating to the public 8 under the new oversight process a framework that is very 9 clear and easily understood by the public for what the 10 agency believes is the important focus in oversight, and we 11 are hopeful that this effort to risk inform the regulations 12 will result in great consistence between where the agency 13 applies their inspection resources and what the regulation 14 says it is important to inspect and to look at.

Without dwelling on all of these bullets, I will move down to the fourth bullet -- support the evolution of tools and technologies.

18 From our perspective we really see the application 19 of risk insights is a market-driven process, and it really 20 builds off successes. As we see more success in this area 21 there is more willingness on the part of the industry to

develop additional technologies to improvement the 22 23 capabilities in this area and success just begets further 24 success. 25 The bottom line of what we are after in this is to 59 1 optimize the plant operation. This is the endpoint that we 2 believe would provide a consistent basis for plant operations. Slide 4, please. 3 4 There are some challenges for regulatory reform, 5 however. First and foremost, how do we translate some of the incremental successes that we have had in risk informing 6 7 the regulations into large scale reform? 8 Option 2, as originally framed, has over 30 9 regulations identified in the initial scope. This 10 represents a fairly quantum leap over the present regulatory 11 applications that have been undertaken. This is not a 12 criticism. This is the same list that we came up with and 13 we think developing that broad scope list was very important 14 in being able to get a good understanding of what are all 15 the implementation issues that are going to have to be 16 addressed and just how difficult and complex is it. 17 We think now it may be time to stand back and look at a more phased approach, which I will talk about just a 18 19 little bit in a few minutes. 20 Achieving adequate definition of the process and 21 outcome for the pilots to succeed -- right now, because of 22 the state as to where the project is, it is difficult to 23 estimate either the implementation costs or the benefits 24 that will be realized from going down this path and 25 therefore it is difficult to make it a business decision on 60 the part of the plants to engage in the pilot activity. 1 2 The process is proceeding however. We have had 3 several meetings with the Staff that we think have been very 4 productive. Yesterday we gave them a draft guideline that 5 is not a complete guideline. We hope to have the remaining 6 sections complete by the third week in April and be able to 7 present that to the Staff, so there is a lot of work going 8 on that is providing more certainty to the process as we 9 proceed. 10 The bottom line is we think we need to develop a 11 pragmatic approach. The fear that is out there on the part 12 of many licensees is that this effort may involve a 13 relicensing of the plant, and, after all, the plants are 14 already built and licensed, and if we dramatically change 15 the regulations things will be just too complex and too 16 confusing and therefore there will be disincentives to

17 proceed down this pathway.

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We believe that what we really need to do is build

on the previous successes and the framework. For example, the maintenance rule and the risk categorization that was conducted under the maintenance rule certainly puts utilities in good stead to do this on a broader scale. We believe that the value of the PRA is in the insights that are gleaned from the PRA, not in the bottom line numbers themselves.

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1 I know there is a lot of concern about the quality 2 of the PRA and how much confidence can I have in the 3 numbers. The guideline that we provided to the Staff 4 yesterday, the very first step in the decision process is 5 the particular component, structure or system adequately 6 modeled in the PRA such that you have confidence for it, and 7 if not, it kicks you out of that process into another 8 process, which relies upon a blended approach looking at 9 deterministic insights, operating experience, and other 10 insights from the plant staff as to what the risk importance 11 of those components are, so there is a way we believe to 12 take a pragmatic approach without having a very complete and 13 robust PRA in all aspects. If I could have the next slide.

14 This is really what we are talking about now is 15 PSA quality. We think the blended approach in Reg Guide 1.74 is the appropriate approach. Again we recognize that 16 17 the PRAs do not cover everything. The state of the 18 technology is not capable of covering everything, and even 19 when we try to in certain area, the uncertainty bands get 20 fairly large in the areas where we don't have complete knowledge, and it makes it difficult to use the tool in a 21 22 very metrics-specific application.

23 The industry certification or consensus 24 standards -- all of the NSSS Owners Groups now have a 25 process whereby they will complete the certification of all 62

1 the plants, a peer certification process, by the end of 2 2001. NEI has just recently compiled a document called 3 NEI-00-02 that is a composite of the various approaches used 4 by the four NSSS Owners Groups in the peer certification 5 process. We are certainly willing to and will in the very 6 near future submit this document to the NRC for Staff review 7 and we would encourage the Staff to participate in some of 8 the remaining peer review processes that are out there so 9 that they can better understand how this document is being implemented by the individual plants and just how effective 10 11 the peer review process is.

12 Despite the limitations of the PRA tool, and there 13 are limitations of it and you have to be careful how you use 14 it, we think it is the best tool that is out there for

reflecting the reality of what it is important to pay 15 16 attention to. 17 We think that the maintenance rule (a)(4)18 provision and the oversight process both will spur 19 additional interest in improving the risk tools that are out 20 there. Slide 6, please. 21 Option 2 observations -- as I said, the number of candidate regulations we think is ambitious and we would 22 23 suggest a smaller subset of regulations. The external 24 events, fire, seismic and shutdown, are categorization challenges for some of the reasons that I mentioned. Most 25 63 1 of the plants have not conducted detailed PRA models for 2 these and when you get into some of these areas the uncertainty is quite large, which makes it difficult to 3 4 develop component-specific importance measures. The other issue that is going to be very paramount 5 6 to the overall success of this endeavor is what is the 7 ultimate treatment. Categorization is one issue. Treatment 8 is the next. What is the ultimate treatment for the items 9 that will fall into the RISC-II category, which are those 10 items today that are not perhaps fully covered by the 11 regulations but which nonetheless risk important, as well as 12 the items in RISC-III, which are items that are fully 13 covered by the regulations which risk insights are telling 14 us are not as important as we thought they might have been. 15 South Texas Project has an exemption right now 16 before the agency which would provide a proof of concept of 17 what is the proper blend between RISC-II and RISC-III and 18 what are the overall benefits that can be achieved from that 19 approach. I think the industry is anxiously awaiting the outcome of that proof of concept from South Texas. 20 Top industry priorities for Option 2 on Slide 7 --21 this is a possible mix or reduced set of regulations that we 22 23 would think would be very effective in pursuing under Option 24 2. We think each one of these regulations represents a very 25 clear set of benefits that most utilities can understand and 64 see. We think they have the best chance of success because 1 2 they are most amenable to the state of where the PRA 3 technology is today and the risk metrics that are envisioned 4 to be used. 5 We think success in these areas would build 6 support for expansion into the other areas and expansion of 7 the technology to support it. 8 Slide 8 -- Option 3 Priorities -- we would also

9 propose a phased approach for this area as well. We think 10 the immediate focus ought to be on the existing efforts to 11 risk inform fire protection and to move forward with the 12 hydrogen combustible gas control rule, 10 CFR 50.44,

13 following the San Onofre exemption.

14 Beyond that, we have conducted an industry survey 15 of which the results we provided to the Commission, and the 16 top priority we received from the industry for a technical 17 regulation is the ECCS regulation 50.46. We see a wide range of benefits to that regulation. It affects many 18 19 aspects of plant operation, including reloads, emergency 20 diesel generator testing and loading, and numerous other tests and surveillances that are down at the plant site. 21 22 Again, success and benefits on those earlier

23 applications will only spur further interest to look more 24 broadly.

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In conclusion, on Slide 9, we seek overall a

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pragmatic approach that builds on the very extensive existing efforts that have gone on to date. We think that such an approach would provide incentives to evolve to a more risk informed regulatory approach on the part of the industry and every successful action should improve the plant's state of knowledge and the overall safety of the plant.

8 We think the Staff has done an excellent job of 9 developing the proposals to date. An awful lot of thought 10 and work has gone into it and we really appreciate that. We 11 think now it is up to the industry to make it workable from 12 the industry's perspective and to work closely with the 13 Staff and figure out how to implement this.

14

15 CHAIRMAN MESERVE: I'd like to thank all of you 16 for your comments. Let me turn to my colleagues questions. 17 Commissioner McGaffigan?

Thank you very much.

18 COMMISSIONER McGAFFIGAN: Maryann, I'm going to 19 start with you, because I mentioned in the last panel -- as 20 a Commissioner listening to today's presentation, I sort of 21 feel the sand shifting around me. Things have really 22 changed enormously in a few months.

You pointed out that NEI had submitted a document some time ago. I think Mr. Floyd may have been referring to the same document where they did at one point -- I mean, you 66

can interpret what they said then as do this comprehensive list of rules under the special treatment requirements all at once. That's how I interpreted it at the time. Now they're saying, taking a more gradualistic approach. The SECY 256 presumed that there were going to be pilots fairly soon. People are trying to make cost/benefit

7 calculations, and maybe that's going slower than we

8 expected.

9 There have been a lot of changes, and I'd 10 respectfully suggest that many of the things that you're 11 asking the Staff to do at the moment, if I were a staffer 12 and not a Commissioner, I would toss up my hands and say 13 it's impossible. 14 We really are going through this and inventing it 15 as we go along, and we cannot -- you suggest that we need a 16 rulemaking plan and it will say on date X that we'll 17 complete the rulemaking. We aren't even sure at the moment 18 what the rulemaking is. 19 I mean, the PRA quality issues, the Staff talked about earlier with the Commission, and the Commission says 20 21 it's important. 22 I think part of Mr. Floyd's presentation, the way 23 I read it, is, he's seeing that that's a very difficult 24 issue when he's looking for the low lying fruit from the 25 industry's perspective, as to where you can get by with the 67 1 quality that exists today. 2 And that's a pragmatic approach. He's 3 recommending it. It's not one that Staff has an opinion on 4 vet. 5 But I would just respectfully suggest to GAO, we 6 don't have -- you know, in Pentagon, which I dealt with when 7 I worked for Senator Bingamman for 14 years, they have lots 8 of Lt. Colonels and Majors and whatever who can write 9 five-year plans and satisfy GAO. But the second, third, 10 fourth, and fifth years of those plans usually are 11 worthless, from my experience. 12 We don't have enough Lt. Colonels and Majors here 13 to turn out plans that don't make any sense. If you have 14 any response to that, I'd be interested. 15 MS. KRUSLICKY: I can perfectly agree with you, however, some of your comments, I think, demonstrate why you 16 17 probably do need some sort of planning document to help to 18 sort of direct and guide all of your thinking. 19 The Staff generated SECY 0062 and that's only one small piece. It doesn't include an NMSS, it doesn't include 20 21 all the waste issues. 22 I don't know how you are, but as I mature --23 you'll notice that I don't use the O-word, but as I mature, 24 I find it very difficult to remember a lot of isolated facts in a lot of different documents. It would be nice, I would 25 68 1 think, from your standpoint and from good business practice 2 standpoint, to at least have something from which you are 3 making your decisions.

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Yes, as you get in the outyears, the data is going

5 to get soft, the resource estimates are not going to be as 6 precise as they would be for an effort that is ongoing now 7 or may be undertaken in the next fiscal year.

8 But with everything that is going on in this 9 Agency, as I said, you have set a course for yourself that 10 is extremely aggressive. How are you going to juggle and 11 keep all the pieces together and know that you're making the 12 correct priority decisions if you haven't at least laid out 13 something to help guide you?

14 COMMISSIONER McGAFFIGAN: I think that my reaction 15 to that is that it is -- given how much things are changing 16 -- and I think the Staff -- I suspect the Staff has some 17 sense of what they're trying to do at Staff level.

But given how much things are changing, it's very hard to plan even four months from now, let alone years from now. Yes, we need some information. I actually feel we have enough.

I used to plan for Senator Bingaman and we did theDefense bill. I did it on one sheet of paper.

I divided it up by Subcommittee, and this is what we're going to go do, and then everything else, he allowed 69

1 me to have in my head.

2 And I'd tell them what we're doing, where we were 3 making progress, where we weren't making progress. I mean, 4 I'm a single resource and I have to decide where to apply my 5 minutes as opposed to applying lots of minutes.

6 But I am not disappointed with what the Staff has 7 given us thus far, given the uncertainty in which they are 8 trying to do it. I would think the most important part of 9 the plan at the moment where I may agree with you, is that 10 we need to know where the uncertainties are.

You know, this rulemaking is dependent on having an ASME standard, which, by the way, is going to come in a year late, or maybe it isn't dependent on an ASME standard.

We need, I think, a good discussion in the plan as to where the uncertainties are, because at four-month intervals, they become obvious. That might be useful, because you know what is high risk and what isn't high risk.

But the detail that you seem to be looking for,
I'm not sure is possible.

20 In order to have a second with Mr. Lochbaum, I'm 21 going to cut that off and get to David.

There's almost a disconnect, I think, with your testimony and all the work on the risk-informed oversight process. We have probably put an awful lot of resources in there, and I think you agree that those resources were

reasonably well spent, although you also say the proof is in 1 2 the pudding and whether we -- that was -- there's no mention 3 of that here. 4 Where do we put our resources in order to get 5 safety improvements, and you list some things. But you 6 don't even list the new oversight process as a place where 7 we might want to put a few resources to get it right. 8 Why don't you respond to that first? 9 MR. LOCHBAUM: In my oral remarks -- and I very 10 carefully said I spent more time on allegations to 2.206 and 11 DPOs than I have on other issues. 12 Our top priority for the past year was the revised reactor oversight process, because we think it's very 13 important. Even though it's our top priority, I spent less 14 15 time on that than other areas, because the other areas were 16 emerging issues, and they needed, they demanded that time. 17 We're hopeful that the revised reactor oversight 18 process will have a back door emphasis on these other areas. The safety issues at specific plants will be harder not to 19 address in the future if this program is as successful as we 20 21 think it will be. 22 Despite that, we still think these process areas 23 need to be improved. The NRC needs to spend the resources 24 on those areas. 25 COMMISSIONER McGAFFIGAN: Okay. The 2.206 71 1 petition area is an area where we're expending resources at 2 the moment. There have been public meetings with you and other folks. There is a process underway under which we're 3 going to get another paper from Roy Zimmerman and the Staff. 4 Rule changes, I assume you're proposing some in 5 the process. I have not been privy to the interactions. 6 7 What is it that we're not doing in that area? I think it's unfair to say that Calvert Cliffs took 24 months 8 9 and we haven't changed 2.206. We respond to individual 10 2.206 petitions like your River Bend Fuel petition, much 11 faster. 12 You're saying there is a process issue here that we didn't fix. What is that we need to be doing in the 13 14 2.206 area that we're not doing at the moment? 15 MR. LOCHBAUM: The focus of the Staff's effort in 16 the 2.206 area is increasing the speed from the allegation to the Director's decision. There have been -- we and other 17 18 petitioners have had problems with this timeliness, but 19 that's not the only one. 20 There is the quality and the fact that we don't

21 have an appeal. We have to -- whether it's a speedy 22 decision or not, we have to like the answer, and we just 23 don't.

24 COMMISSIONER McGAFFIGAN: I'll just say one last thing that's more a statement. Peter Bradford is getting 25 72 quoted routinely now, and I'm not aware that he has seen a 1 Commissioner recently or had a very large involvement in our 2 3 processes. Maybe being on your board gives it to him. But if he wants to come in and discuss with 4 5 Commissioners, I certainly will volunteer myself to discuss 6 with him, his allegation that we're retreating at a faster 7 pace from our obligations than ever before. 8 I think that that does a disservice to the 9 Commission. It's ridiculous, and if -- you said you can't 10 all be wrong. Well, the whole industry was -- the whole 11 public interest community was wrong on Y2K. 12 I think you tried not to associate yourself very 13 much with some of these ridiculous petitions we were 14 getting, rulemaking petitions, you personally. 15 But I think you probably ended up signing on to 16 some ridiculous thing. You all can be wrong. And I think 17 that this effort at risk-informing or safety focusing has been going on for a long time. 18 19 It makes sense when you have limited resources. 20 And the public interest community, since you hate us so much, you don't exactly go to bat for our budget up there, 21 22 you know, because why give people who are going to only mess things up, more resources to mess it up, I guess, is your 23 24 point of view. 25 Since we don't get very much help on our budget, 73 we're doing the best we can with the resources we have to 1 2 focus on safety. That's our goal, and if Mr. Bradford wants to talk about it, he's welcome to. 3 4 MR. LOCHBAUM: Okay. CHAIRMAN MESERVE: Commissioner Dicus. 5 COMMISSIONER DICUS: Okay, I will have a brief 6 7 statement and question to GAO, and then I have one for the 8 NEI. 9 Generally, I think your insights and the comments 10 you have made are pretty well on target, and I appreciated 11 them. 12 There are a couple of things I do want to bring 13 up, and associate myself with Commissioner McGaffigan's concern on just how much can we do all at one time? I'm 14 15 looking at your Slide 7 where you say NRC cannot wait until 16 the next iteration to plan to address the missing elements. I don't think we can do it all at one time. I 17 18 think what the Staff has got to do is prioritize what we 19 need to do first. We've talked about the importance of the

20 PRA, the standard, and things of that nature.

21 So I appreciate what you're trying to say with the 22 complete document, but I think we will be there, but we're 23 going to have to go there probably in some steps. It's a 24 resource issue and there are other things that we need to 25 do.

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1 The other thing you said on Slide 5, identify as 2 many activities as NRC can reasonably anticipate, and you heard me caution the Staff. Let's have a plan and not a 3 listing of activities, so we want to be sure we don't too 4 much emphasize the activities at the risk of the plan. 5 And, Mr. Floyd, on your Slide 5, where you talk 6 7 about PRA, I was never quite clear if you agree there should 8 be a PRA standard or not, or if you're willing just to go with the industry certification. I need a little 9

10 clarification there.

11 MR. FLOYD: We have no objections to an industry 12 standard at all. We agree that there does need to be some 13 standard. We're not in a position today to embrace the ASME 14 PRA standard because it hasn't been completed and we don't 15 know exactly what it looks like.

16 We think that the current version of it is headed 17 in the right direction, where it does acknowledge that the 18 PRA certification process certainly addresses or could 19 address a number of the elements which are identified to be 20 important in the ASME PRA Standard.

21 And if the final document comes out that way for 22 the application that it's intended for, then it would look 23 like to us that it would be a good standard.

24 COMMISSIONER DICUS: If it didn't, where would you 25 be?

MR. FLOYD: Well, I guess it would depend on the 1 areas where it didn't. But if it fundamentally required 2 what we would think would be a burden that didn't add a lot 3 4 of value, and we thought that the current certification 5 process, which was already completed and resulted in what we felt was an adequate level of quality for the area that the 6 7 insights are being applied to, then we would have a 8 disagreement with it. COMMISSIONER DICUS: Okay, thank you, Mr. 9 10 Chairman. 11 CHAIRMAN MESERVE: Commissioner Diaz? COMMISSIONER DIAZ: Yes, thank you, Mr. Chairman. 12 13 Maryann, I guess you prefer to be called. 14 MS. KRUSLICKY: I think that's easier for 15 everybody.

COMMISSIONER DIAZ: I agree. I think you have

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17 seen what one of our main problems is. That is, we have 18 multiple inputs that we have to process in real time and try 19 to obtain a single output out of that. 20 And that sometimes is quite difficult. You know, 21 one of the problems and blessings of risk-informed 22 regulations or PRAs is that they are, by nature, integral 23 techniques. They have to take into account, practically 24 everything that you can put your hands around. 25 And that creates the problem that I call the issue 76 1 of proliferation. And proliferation, then you have to look 2 at it and say, okay, I'm going to coverage here, I'm going 3 to diverge here because I cannot achieve convergence. 4 And then, of course, your statement that a plan 5 would help, I think we all agree on. My point is that if we have a plan, we have to be able to change it in real time, 6 7 quite frequently. 8 And then we will be criticized because we're changing the plan. 9 10 MS. KRUSLICKY: Can I comment on that? 11 COMMISSIONER DIAZ: Please. MS. KRUSLICKY: Actually, I think we had always 12 intended, and when Ms. Jones, the Associate Director 13 14 testified, I always said that we would anticipate that this 15 plan would be a living document, subject to change and 16 modification as conditions warranted. 17 I notice that the Staff proposal was to provide a plan to the Commission every six months. I might suggest 18 19 that you would consider at least for the short term, maybe 20 every three months, just to see, do we really have to change 21 it? Can we wait? Is six months better? 22 I know Commissioner McGaffigan is down there 23 shaking his head, no. I'm just saying that at least in the 24 initial stages, because so much is uncertain, and as you just pointed out, NEI is changing its mind. Four months ago 25 77 1 something was fine, and now four months later, it's not. 2 It is just something to consider. 3 COMMISSIONER McGAFFIGAN: If I can just make a 4 comment, there other processes whereby the Commission gets 5 informed other than a burdensome planning -- the TA 6 briefings and that sort of thing are mechanisms that are 7 less burdensome on the Staff than producing inch-thick 8 documents and it doesn't help everybody else but it helps 9 us. 10 COMMISSIONER DIAZ: Which was really my next point 11 is that I cannot agree that we don't have a sense of where 12 we are going. It might not look like it to somebody that is

removed from here, but I can assure you that we have a 13 14 reasonable sense of where we are going, however, not enough 15 that we can make final decisions, which is important, but we 16 do have the sense and the Staff does provide us with that 17 sense, but it is very difficult unless you are inside of 18 this building, especially on the 17th and 18th floor, okay, to realize the magnitude of the information that we get and 19 the multiple ways in which we get informed. 20

I think that is basically -- I can understand somebody looking from the outside and not realizing that but I want to assure you all that we have a reasonable sense of what we are doing and what we are not doing, and I think there are improvements in the process, so we appreciate your 78

1 testimony.

2 Mr. Ortcigar, I just have a quick question. You 3 seem to put your efforts in the area of transportation and 4 waste and is there something that you particularly see that 5 we could, you know, reasonably tackle in the foreseeable 6 future that will bring up your concerns into the forefront 7 of what the Commission is doing?

8 MR. ORTCIGAR: Well, listening to this discussion, 9 you have so many things on the plate that it is going to be 10 hard to move some of these issues along. I think what I was 11 saying though -- in reading the sections in the papers that 12 the Commission has received, it appears to me, and maybe I 13 am incorrect, but it appears to me that particularly on the 14 waste issue Staff seems to feel that they have gone about as 15 far as they need to go and there doesn't need to be new 16 direction.

17 18 I may be misreading that, but there --CHAIRMAN MESERVE: I think you are.

19 MR. ORTCIGAR: I hope I am, but there seem to be 20 some key phrases in there when they were talking about rules 21 and guidance that are in place that they are mature enough 22 and that, you know, we need to keep those in place and I 23 just think we need to refocus our thinking.

24 I am not certain we can do anything in the short term. I am not certain with what you have on your plate 25 79 1 right now we should be addressing further issues, and I am 2 hearing from GAO that you need a plan just for what you 3 have. 4 I was just trying to bring up a level of awareness here, Commissioner. 5 6 Mr.

COMMISSIONER DIAZ: Thank you so much. Mr.
Lochbaum, I think some of the issues have already been
addressed, but I want to focus on the fact that you have
actually, you know, in your presentation today, you actually

10 make a break within the risk informed implementation plan. 11 If I read you correctly, and please -- I am sure you will 12 correct me, what you are saying is that these things that we are doing you don't have a problem with it, but we are 13 14 missing a component, and that component is providing focus 15 on those activities that will protect those who have valid 16 complaints on safety and those processes that will assure 17 that concerns regarding safety are taken, you know, not as 18 we'll do it next month, but something that has priority, is 19 that correct?

20 MR. LOCHBAUM: That is a fair assessment. The 21 vocabulary can easily get lost. We look more to actions. 22 The emphasis in these areas and what we perceive to be the 23 deemphasis in these other areas gives us discomfort and we 24 would like to see that discomfort lessened.

25 COMMISSIONER DIAZ: Okay. I think it's a valid 80

point. I think we have an obligation of the law to make, you know, visible issues and those things to be properly taken care of and I think the Commission have taken steps to do that, but we appreciate your emphasis and I think that we will take another look at it, because I think it is important.

7 However, having said that, I think that the issue 8 that we have been facing is besides those, what do we do to 9 focus on safety and I think in that sense it is almost like you have a parallel -- let's call it a risk informed 10 11 implementation plan that is a subset which I understand the importance to you, but I want to tell you that we have not 12 13 ignored it, that we are continuing to focus on it, and we 14 appreciate you bringing it to our attention.

15Do you want to add anything to it?16MR. LOCHBAUM: No. Thank you.

17 COMMISSIONER DIAZ: Okay. All right. Now Mr.
18 Floyd, I'm sorry --

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COMMISSIONER McGAFFIGAN: He was hoping to duck. [Laughter.]

21 COMMISSIONER DIAZ: You know, many times when we 22 meet in here we are tough with the Staff. I just want to 23 say that I want to get tough with the industry today, and 24 what I see, and I am probably wrong because I am frequently 25 wrong is that a certain degree of complacency is creeping in 81

1 in this area.

2 If I look at your top industry priorities for 3 Option 2, I can see, you know, and I know that is not what 4 you are doing, but I can see a certain amount of what the 5 Commission said we were not going to be doing with this, 6 some cherry-picking, okay? And I don't think that that was 7 the intention when we entered into it, and if we start 8 selecting a series of things because they are already there, 9 you know, (a)(4) -- we have done the oversight process, all 10 those things I realize put burden on the industry and maybe 11 the pragmatism is that burden stabilizes before we get to 12 the next stage.

Well, I think it would be wrong, okay, and it 13 14 might not serve this country well if we just do not continue 15 to take a more holistic look at what are the things that should be done. Eventually the Commission has manifested 16 17 that some of these things will be voluntary and there are 18 people that will do it and there are people that will not do 19 it, but, you know, like I said one time, windows of 20 opportunities open and windows close and you don't know how 21 long any of this group is going to be here, whether it is 22 going to be a different perspective, so I just want to make 23 sure the industry understands that there is a window of 24 opportunity and unless we move into some areas to do what I call plant poles the ground, like the quality of the PRA, 25

1 whichever level we want to do it -- that should be there, 2 that should be known. It should be established and that is 3 something that everybody will have to go around, the Staff, 4 the industry, but it is there, and unless we plant a few of 5 the things, not only the ones we have done, I would tell you 6 that I think divergence will take place, multiple paths will 7 be created and we will not be able to end up in a reasonable period of time with a good set of regulations that will 8 9 serve this country, that will comply with our mission and 10 that will actually serve the industry.

With that small statement, I will invite your comments on it.

13 MR. FLOYD: Well, actually I think I agree with Our intent in putting those four regulations on Slide 14 you. 7 was to point out that we think that a smaller set of 15 16 regulations to be piloted in a consistent fashion by a broad 17 number of plants in the industry is probably a better way to test out the process. I still think, and we discussed this 18 19 with the Staff yesterday, we still think it is possible to 20 develop a 50.69 regulation that identifies all the 21 regulations that can take the benefit of this approach but 22 that it is not practical to try to test all those out in the 23 implementation phase.

24 We think this particular set of regulations to25 test during the implementation phase because of their

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breadth and scope would give you confidence without having
 to test each subsequent regulation individually, would give

3 you confidence that you have a workable process.

4 For example, if you look at the maintenance rule and technical specifications, the maintenance rule is 5 6 probably fairly easy on one end of the spectrum because of 7 all the work and foundation that has been set in that area, 8 but if you go over to the technical specifications, that is 9 probably tougher to do, and if you can do those two ends of 10 the spectrum there is probably another whole set of 11 regulations that it kind of bounds and validates in the 12 interim, so I would agree with you, and that was not the 13 intent of the slide, to suggest that 50.69 be written to 14 only say make changes to these regulations.

15 COMMISSIONER DIAZ: Okay, thank you, Mr. Chairman.
16 CHAIRMAN MESERVE: Thank you. Mr. Ortcigar, I
17 think there is one perhaps misimpression that you have that
18 I wanted to just correct, and that is that we have a very
19 partial draft of this plan that is in front of us.

It is intended to include and will include in its next iteration some components that will deal with the materials and waste area and you have raised in particular the spent fuel issue, transportation and low level waste, and we have some initiatives that are under way in at least some of those areas and those will be encompassed in the 84

1 next round, and it's something that we do have awareness of 2 that whole side of the house.

As busy as we are with all the reactor things that
you have heard about, we have not forgotten those other
issues.

6 I would like to follow up on one point that was in 7 your written submission but not in your oral comments but 8 which intrigued me. You make the observation that with the 9 growing number of, relatively growing number of materials 10 licensees that are the responsibilities of states, rather 11 than the NRC, that we have a situation where more states are 12 becoming Agreement States, and that the number of Staff 13 that -- the Staff effort on licensing is going to be 14 diminished here, and you make the suggestion that perhaps 15 more cooperative activities with the states in developing 16 rulemakings would be appropriate. Then you go on to say 17 that this may also require that NRC reconsider the concept 18 of compatibility and how it is applied to rules developed 19 using a cooperative process.

I was not exactly clear what you meant. Is it the idea that if we involve the states more at the front end that we could then tighten the compatibility requirements and assure more interstate congruence?
MR. ORTCIGAR: Correct. Yes. from materials licensees and certainly so in my private practice is problems of licensees who operate in several states having very different requirements from one state to another, and that the lack of compatibility was a serious concern.

6 I am pleased to see that or hear that the notion 7 if we could engage the states more earlier that there would 8 be an opportunity and agreement that we could tighten the 9 compatibility requirements.

MR. ORTCIGAR: And we would encourage that,
 because I think you also have sometimes shopping around.
 CHAIRMAN MESERVE: Yes.

MR. ORTCIGAR: For a license, and I think that is something that we could control better if we worked together and then the compatibility issue I think disappears in a sense.

17 CHAIRMAN MESERVE: Well, there might always, since 18 it would be a negotiation, there may be some difference of 19 views that end up reflecting themselves perhaps in some 20 different approaches in the states. We have the right in 21 our rules to establish compatibility requirements that limit 22 that, so we might have the opportunity to exercise those 23 more perhaps is something you are suggesting.

24MR. ORTCIGAR: We would support that.25CHAIRMAN MESERVE: Mr. Lochbaum, I understood you

to -- obviously you focused on allegations, DPOs and the petition processes being an area that you think that we should be devoting more attention. As my colleagues have indicated, this has not escaped our scrutiny and we have things underway.

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6 You also said in your oral statement and I don't 7 think I found it in your letter that you thought the concept 8 of risk informing the regulations was okay, but there might 9 be some problems in implementation.

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Did I understand that correctly?

MR. LOCHBAUM: That is correct. That is our view.
That is -- the risk informed oversight process is under that
umbrella and we were --

14 CHAIRMAN MESERVE: Sure.

15 MR. LOCHBAUM: -- clearly supportive of that

16 process.

17 CHAIRMAN MESERVE: And we have got a wide number 18 of other activities that the Staff has identified as ones 19 that they are contemplating risk informing, and I can assure 20 you with full involvement of affected stakeholders.

Is that process one that is acceptable to you?

22 MR. LOCHBAUM: It has been. We have been involved in some of them -- for example, risk informed inspection 23 24 frequencies for piping, or we have attended some of those, 25 not seen an issue and not opposed it. 87 1 I can't say we have looked at all of them but the 2 process is -- can be sound. CHAIRMAN MESERVE: Good. Mr. Floyd, I have just 3 one sort of comment, and it is really a fundamental one. 4 I want to make sure that we are on the same 5 6 wavelength. You had noted that you see the risk informed 7 regulatory initiative as one that in the industry's perspective should serve to improve overall safety. I think 8 9 our capacity to be able to do any of this is dependent on 10 our being able to establish that proposition. 11 One of the items that I know all of us have 12 emphasized various times when we have talked about this is 13 that risk informed regulation is going to be and has to be a 14 dual-edged sword, in that there will be some areas where our 15 regulations are ones that are excessive and we may cut them 16 back, but on the other hand, there are going to be areas 17 that there will be some tightening as well. 18 MR. FLOYD: Exactly. 19 CHAIRMAN MESERVE: In order to -- and then in 20 aggregate we expect that process would result in improved 21 overall safety. I think that message is absolutely 22 essential for us to be able to do any of this. 23 Would you agree with that? MR. FLOYD: Yes, we certainly do. For example, on 24 25 the technical specification a disconnect between (a)(4) and 88 the tech specs right now that I think Rich Barrett very 1 2 articulately stated, if you listen carefully to what he said 3 implicit in that was an acknowledgement that there are 4 instances today in the allowed outage times in tech specs 5 where your (a)(4) risk evaluation would tell you that it 6 really ought to be a shorter period of time and in other 7 cases it would be, no, you could have a longer period of 8 time to have that equipment out of service. 9 I think the industry certainly recognizes that and 10 acknowledges that and is willing to do that. 11 CHAIRMAN MESERVE: Okay, good. Thank you very 12 much, and with that we are adjourned. 13 [Whereupon, at 11:36 a.m., the briefing was 14 concluded.]