UNITED STATES OF AMERICA NUCLEAR REGULATORY COMMISSION

Title:

BRIEFING BY NATIONAL MINING ASSOCIATION

ON REGULATION OF THE URANIUM RECOVERY

INDUSTRY

PUBLIC MEETING

Location:

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Date:

Wednesday, June 17, 1998

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1.	UNITED STATES OF AMERICA						
2	NUCLEAR REGULATORY COMMISSION						
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4	BRIEFING BY						
5	NATIONAL MINING ASSOCIATION ON						
6	REGULATION OF THE URANIUM RECOVERY INDUSTRY						
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8	PUBLIC MEETING						
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10	Nuclear Regulatory Commission						
11	One White Flint North						
12	11555 Rockville Pike						
13	Rockville, Maryland						
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15	Wednesday, June 17, 1998						
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17	The Commission met in open session, pursuant to						
18	notice, at 10:00 a.m., the Honorable Shirley A. Jackson,						
19	Chairman, presiding.						
20							
21	COMMISSIONERS PRESENT:						
22	SHIRLEY A. JACKSON, Chairman of the Commission						
23	GRETA J. DICUS, Member of the Commission						
24	NILS J. DIAZ, Member of the Commission						
25	EDWARD McGAFFIGAN, JR., Member of the Commission						

1	STAFF AND PRESENTERS SEATED AT THE COMMISSION TABLE					
2	JOHN C. HOYLE, Secretary					
3	KAREN D. CYR, General Counsel					
4	KATIE SWEENEY, NMA					
5	ANTHONY THOMPSON, Shaw, Pittman, Potts & Trowbridge					
6	GENERAL RICHARD LAWSON, NMA					
7	MARK WITTRUP, ESPRI					
8	STEPHANIE BAKER, ESWNI					
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1 PROCEEDINGS

2	[10:06 a.m.]
3	CHAIRMAN JACKSON: Good morning, ladies and
4	gentlemen. Today representatives of the National Mining
5	Association have requested an opportunity to brief the
6	Commission on its white paper entitled, "Recommendations for
7	a Coordinated Approach to Regulating the Uranium Industry."
8	The National Mining Association promised to
9	provide this white paper at a briefing of the Commission in
10	May, 1997. The paper was provided to the Commission in
11	April of this year and this meeting provides an opportunity
12	for the National Mining Association to discuss aspects of
13	the paper that it feels are most important for the
14	Commission to focus on.
15	Currently the NRC Staff is evaluating the entire
16	framework under which the uranium recovery operations are
17	regulated and is developing a detailed approach to be
18	presented to the Commission on how best to proceed.
19	This paper we expect to be presented to the
20	Commission for approval in the near future. This gives us
21	then the opportunity to consider the issues raised in your
22	white paper and discussed here today when it reviews the
23	recommendations by the Staff.
24	Now I understand that viewgraphs of your
25	presentation are available, copies of the viewgraphs, at the

entrances to the room, and unless my colleagues have 1 anything to add, Mr. Lawson, please proceed. 2 GENERAL LAWSON: Thank you very much, Madam 3 4 Chairman and Commissioners, and members of the Staff, and we are thrilled to have this kind of a turnout here today. 5 In the agenda, I thought I would give some brief 6 7 opening remarks and kind of set the stage for our actions, and then turn the discussions over to Mr. Thompson and Ms. 8 Sweeney to cover some of the specifics in the program, and 9 10 then we have members from the industry here as well to provide additional insights. 11 12 The National Mining Association, as I think you know, represents all of the mining that goes on in the 13 United States, and our efforts are to work as carefully as 14 we can to provide an environment for that activity to occur 15 and which not only meets the needs of the industry but meets 16 17 the needs of the country as a whole. 18 In our industry we say that everything begins with mining and that is only a little bit of an expansion on 19 20 reality. Last year the U.S. economy used 47,000 pounds per person of items and energy that we took out of the earth in 21 order to make this economy of ours run. 22 23 We are really talking here today about those items associated with the uranium industry, but I would just 24

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remind all of you that mining coal and uranium provide 80

percent of the electricity that is used in this country and 1 when you look out to the future and the needs of our economy 2 as projected from the Department of Energy, you begin to see 3 how critical that is to the country because now and the year 4 2010 our electrical grid is being asked to add an amount of 5 electricity equal to that currently used by Japan and 6 Germany, our two principal competitors, so it is a 7 remarkable program out there in front of us and those who 8 9 are familiar with energy in the most basic form realize that given some of the environmental concerns about certain 10 aspects of the electrical industry and given the 11 12 technological demands that are coming forth, this is a time when we need all of the energy that we can find for this 13 14 country of ours because there are about two billion people that will also join us at the same time that have to be fed 15 and housed and clothed. 16 17 Our efforts in this study -- and by the way, let me once again, as I did a year ago, congratulate the 18 Commission upon the establishment of this assessment. 19 Ιt 20 comes at exactly the right time for all of us to put together our heads on how to proceed into the 21st century, 21 22 it seems to me, and that is what we tried to do in this 23 paper. We discussed, as you will recall, a year ago, we 24 kind of circled around some of the problems and we gave a 25

- few of the incidents that we have concerns on, but in this 1 white paper what we have tried to do is say if we were part 2 of your Staff, what are the kinds of issues that we would 3 re-examine after this first 20 years? What kinds of 4 technology, what kinds of expertise, what kinds of legal 5 6 thoughts -- what are the general dimensions of the Staff's problems as they make this assessment and how can we provide 7 assistance? 8 9 In that fashion, let me just say as a postscript to this briefing, we will be there for any assistance that 10 any of the Staff need, for any discussions that any of the 11 Staff need, and to provide anything else that will be useful 12 because we believe that in the 21st century nuclear energy 13 14 is indeed not going to have a rebirth -- is going to be forced to have a rebirth because of the huge energy demands 15 16 that are just around the corner for the entire globe.
- So with that kind of a background, let me just ask
 Tony and Katie to proceed with the presentation. We will
 all be available for questions and thank you again for
 inviting us.
- 21 CHAIRMAN JACKSON: Thank you. You are going to 22 begin?
- MS. SWEENEY: Yes. I am Katie Sweeney, Associate
 General Counsel for the National Mining Association. NRC's
 strategic assessment and rebaselining initiative really

struck a chord with the National Mining Association's 1 uranium recovery members. It is not often that a Government 2 agency can or is willing to conduct a strategic assessment 3 4 of its regulatory program. 5 While NMA had identified some problems, some 6 regulatory problems that could pose serious problems, it wasn't until NRC came out with its strategic assessment that 7 we realized that a strategic reassessment of the Uranium 8 9 Recovery Program was exactly what was needed, so NMA's white paper builds on NRC's strategic assessment concept and at 10 heart really is a request that NRC perform a strategic 11 12 reassessment of some key NRC positions taken regarding the uranium recovery industry with a view towards the goal of 13 14 optimization of protection of public health, safety, and the environment, something that we believe both NRC and industry 15 would like to see achieved. 16 17 This presentation is, as General Lawson said, intended to provide to you with NMA's input on the issues 18 integral to such a reassessment and offer some 19 20 recommendations on how they should be addressed. 21 The white paper is an opportunity to address these 22 potential regulatory problems to ensure they are minimized 23 or eliminated before they undermine the intent of the 24 Uranium Mill Tailings Implementation and Control Act or

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UMTRCA.

1	We believe the white paper recommends a common
2	sense approach for conducting a reassessment of the Uranium
3	Recovery Program and we believe the recommendations make
4	sense and we'll help NRC conduct a strategic reassessment of
5	the Uranium Recovery Program. We also believe the
6	recommendations will assist NRC in instituting a
7	legally-sound program consistent with UMTRCA.
8	The white paper addresses four regulatory
9	positions for NRC to reassess.
10	The first is jurisdiction of nonagreement states
11	over nonradiological components of 11e.2 byproduct material.
12	The second is NRC jurisdiction over in in-situ
13	leach facilities.
14	The third is disposal of non-11e.2 byproduct
15	material and tailings impoundments.
16	Finally is NRC's alternate feed policy.
17	We will discuss each of those in turn today.
18	Why is reconsideration necessary? Reconsideration
19	is needed because these positions were adopted over the last
20	20 years on an ad hoc basis, in response to specific
21	questions and specific circumstances, without always
22	considering whether an efficient, coherent program was being
23	achieved.
24	I must stress that this is not intended as blame

or criticism of NRC Staff, but we are criticizing these

positions, recognizing that there may be reasons they were 1 reasonable or appropriate at the time they were developed. 2 Just because these positions have been followed 3 4 since they were developed, that should not prevent NRC from 5 revisiting these positions nor as new questions arise from adopting the mindset to stand back from an issue and look at 6 7 the whole program to see if the right questions are being asked or if an efficient, cohesive program is being 8 9 developed. 10 Basically the general problem with the positions taken is that these positions, particularly those on 11 12 jurisdiction, have become de facto Staff policy and they have been conformed to since their inception, built on, and 13 various regulatory questions and puzzles have been 14 developed. 15 MR. THOMPSON: I guess one of the next points that 16 17 we are making is some of the positions that were taken in 18 those days, while they may have made sense at the time, 19 aren't really compatible with the industry as it exists 20 today. 21 For example, the memorandum in 1980 assumed that 22 the focus of the NRC regulations was radiological and not 23 nonradiological, and in fact at the time the NRC's draft and final regulations were going to address groundwater on a 24 25 site-specific basis as did EPA's first standards for their

- 1 Title I sites, but by 1983 groundwater standards were
- 2 promulgated and now groundwater is the most problematic
- 3 issue at any uranium recovery facility, not control of the
- 4 radon or the radiation hazards.
- 5 There was an assumption there would be an enormous
- 6 number of additional mills -- I think some 50 or so. ISL
- 7 was considered to be just -- you know, going to be a minor
- 8 contributor to uranium production, yet now ISL production is
- 9 the primary focus of production, and you have in the ISL
- 10 area also an extensive EPA Safe Drinking Water Act,
- underground injection control program, that regulates these
- 12 facilities as well.
- So that is just by way of sort of a quick
- 14 reference to why we think things are little bit different
- than back when some of these decisions were made.
- 16 MS. SWEENEY: The most crucial issue addressed in
- 17 the White Paper is jurisdiction of non-agreement states over
- the non-radiological components of 11e.2 byproduct material.
- 19 In 1980 NRC's Office of Executive Legal Director issued an
- 20 advisory legal opinion concluding that federal law does not
- 21 pre-empt the exercise of non-agreement state authority over
- the non-radiological aspects of 11e.2 material.
- As discussed in extensive detail in the text of
- 24 the White Paper, this conclusion is legally unsound. We
- 25 would like to call your attention to the four reasons cited

1 by OELD to support is opinion.

First, the opinion advanced the idea that since it 2 appeared that radiological hazards, as Tony just discussed, 3 4 radon emissions, associated with those tailings and waste would be the primary focus of regulatory concern. And that 5 meant that federal pre-emption of agreement state regulation 6 existed only with respect to the radiological aspects. 7 argument is clearly incorrect since, as Tony just explained, 8 9 UMTRCA requires both the Environmental Protection Agency and NRC to regulate both radiological and non-radiological 10 components of uranium mill tailings and related waste from 11 12 the point of their generation to their ultimate disposition. Second, the OELD opinion cited the fact that 13 states regulate NORM, which is naturally occurring 14 radioactive material, which is similar in nature to these 15 mill tailings waste. OELD found this supported its 16 17 conclusion that states have concurrent jurisdiction over the 18 non-radiological components of 11e.2 material. But this argument makes no sense since the definition of 11e 19 20 byproduct material is what makes the legal difference, as 21 recognized in NRC's non-11e.2 disposal policy. 22 Third, the OELD found that the states' ability to 23 take custody of these sites after license termination implied that states have an independent authority over these 24 25 sites. But that is not the case. The state can only take

- 1 custody by becoming an NRC licensee, and then they will be
- 2 regulated by NRC and not have authority over the site
- 3 themself.
- 4 Fourth, the OELD asserted that the savings clause
- 5 contained in Section 275 of the Atomic Energy Act gave the
- 6 states authority over these sites. This savings clause
- 7 states that the UMTRCA amendments are not intended to impact
- 8 EPA authority under the Clean Water Act or the Clean Air
- 9 Act. The OELD appeared to reason that to the extent states
- 10 have derivative authority from the Environmental Protection
- 11 Agency, they can continue to exercise authority over
- 12 hazardous constituents. The savings clause does not even
- mention NRC authority and the Ninth Circuit recently held
- 14 the savings clause does not give EPA the authority to
- regulate 11e.2 by product material, so it would be difficult
- for the states to claim that that same savings clause would
- 17 give them authority to do so.
- 18 CHAIRMAN JACKSON: I am confused.
- MS. SWEENEY: Okay.
- 20 CHAIRMAN JACKSON: I mean it almost sounds as if
- 21 you just walked your way through to say that the savings
- 22 clause doesn't give anybody authority.
- MS. SWEENEY: I think that what the Court said --
- 24 and, Tony, jump in if you feel I am -- is that the savings
- 25 clause was not intended to impact the authority of the

- 1 Environmental Protection Agency under the Clean Water Act or
- 2 the Clean Air Act in other regards. And --
- 3 CHAIRMAN JACKSON: According to -- yes.
- 4 MS. SWEENEY: Yes. And -- what were you going to
- 5 say, Tony?
- 6 MR. THOMPSON: Well, I think that -- I think you
- 7 said it. I mean the opinion seems to suggest that it
- 8 doesn't affect the Environmental Protection Agency's
- 9 authority under the Clean Water Act or the Clean Air Act,
- 10 except that now we have, in conjunction with the Supreme
- 11 Court Opinion, something that says that under the Clean
- 12 Water Act, EPA doesn't even have the authority to regulate
- 13 byproduct material.
- MS. SWEENEY: Right.
- MR. THOMPSON: Including 11e.2 byproduct. Under
- 16 the Clean Water, the savings clause doesn't affect the
- 17 authority of EPA to issue regulations under the Atomic
- 18 Energy Act, which they clearly were given and which
- 19 regulations has conformed its regulations to.
- 20 CHAIRMAN JACKSON: Okay.
- 21 COMMISSIONER McGAFFIGAN: Madame Chairman.
- 22 CHAIRMAN JACKSON: Yes, please.
- 23 COMMISSIONER McGAFFIGAN: On an issue of this
- 24 sort, that has been kicking around for 18 years, and I guess
- 25 some of the others are almost similar duration, you are

- 1 basically arguing, our General Counsel's Office or its
- 2 predecessor erred, but -- and court decisions have come
- down. But if the Congress is indeed going to look at our
- 4 authorizing statues in some comprehensive way later this
- 5 year, as is implied in some of the Appropriations Report
- 6 language, do you want us to clarify, or do you want Congress
- 7 to clarify some of these matters?
- 8 MS. SWEENEY: I think that some of them could be
- 9 clarified without --
- 10 COMMISSIONER McGAFFIGAN: Without statute.
- MS. SWEENEY: Without statute. I think that,
- 12 particularly on the jurisdictional issues that we are
- raising, that it is something that the Commission could do
- on their own. I don't think that statutory changes are
- needed to implement the recommendations. However, if that
- 16 would help.
- 17 COMMISSIONER McGAFFIGAN: But let me just ask --
- 18 you know, there's always multiple parties. If we were to do
- 19 what you are suggesting, in clarifying the two
- jurisdictional issues, the other one that you are going to
- 21 come to, who is going to take us to court saying that we
- 22 have erred on the other side? And would you -- if there's
- 23 no one, then we don't have to worry, but if there is
- someone, would we be better off having Congressional
- 25 statutory clarification and legal clarification at that

- 1 point just so we don't get into these endless court cases?
- I love lawyers, but I don't like lawyers' entitlement acts.
- MS. SWEENEY: I think that if you implemented all
- 4 of our recommendations, might you face some issues with the
- 5 states?
- 6 COMMISSIONER McGAFFIGAN: Yes.
- 7 MS. SWEENEY: I would say greater than -- yes,
- 8 greater than 50 percent chance that you would. I think it's
- 9 -- statutory changes probably would give you a stronger
- 10 basis for contesting their arguments in court. But they are
- 11 not --
- 12 COMMISSIONER McGAFFIGAN: But I wouldn't guarantee
- that they would take it to court. I mean you have agreement
- 14 -- I think if you are talking about, as your notice had
- suggested, that in conjunction with rulemaking, raising
- these issues for public comment, you would get a plethora of
- 17 comment and be able to sort through it and see what you
- think with respect to what the public has said. Certainly,
- 19 there might be some agreement states who would come in and
- 20 say, yeah, we agree with this. We go through all the
- 21 trouble of becoming an agreement state and, essentially, a
- 22 non-agreement state has more authority than we do, that
- 23 doesn't make sense.
- So I would -- I mean it hasn't come to litigation,
- 25 really, yet, except in a very special case in the past. And

- 1 I think part of that is that the issues weren't ripe until
- 2 now. Now, you have a bunch of these sites going to closure
- and the issues of where a non-agreement state gets involved
- 4 with final site closure of a mill tailing site are just
- 5 coming to the fore because you just now have the site
- 6 starting to go to closure.
- 7 COMMISSIONER DICUS: I have a follow-up question
- 8 to Commissioner McGaffigan's point that he was making.
- 9 Specifically, do you know of individual views of any states,
- if we were to assume the authority of 11e.2 material, the
- issue that you had before us, of any particular views how
- the states -- the non-agreement states would really view
- this, or EPA, their points on this, specifically?
- MR. THOMPSON: I would suspect that Utah and
- 15 Wyoming, who have been fairly aggressive in expressing their
- views, would take a different view. Whether they would, you
- 17 know, do any more than express their opinions in terms, in a
- 18 rulemaking proceeding, obviously, I couldn't say.
- 19 I know that, presumably, an agreement state like
- 20 Colorado will present a slightly different approach. Having
- 21 an agreement state program that is covering mill tailings
- 22 and has from the 1980s on, I suspect they would advance a
- 23 different position.
- MS. SWEENEY: And I don't think we have any views
- 25 on EPA, on their thoughts. I haven't -- or I don't --

MR. THOMPSON: No, I mean I don't know that EPA --1 it seems to me this is really -- really, NRC's call. 2 3 we know that EPA sets the general applicable standards and we know that EPA has, for ground water, provided equivalent 4 to RCRA standards for mill tailings, and we know that EPA is 5 6 forbidden from issuing RCRA permits for mill tailings sites. So, I don't know that EPA would be actively involved in 7 this. 8 9 MS. SWEENEY: We would like to provide you with some examples of problems with the concurrent jurisdiction 10 I would like to acknowledge that these are 11 position. 12 potential problems, at least for now. But with more sites nearing closure, there is a greater likelihood that one of 13 14 these problems could occur. The first example is the potential for perpetual 15 In January 1998, NRC and the Department of Energy 16 17 finalized their working protocol on license termination and 18 transfer of custody of 11e.2 byproduct material facilities. 19 The protocol states NRC will not terminate any site-specific 20 license until the site licensee has demonstrated that all 21 issues with state regulatory authorities have been resolved. 22 This language was presumably included to address 23 concerns that DOE could be required by the Federal Facilities Compliance Act to resolve these state issues 24

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after license termination. While this provision may address

- 1 DOE concerns, it forces any Title 2 site that is subject to
- 2 complex state regulations, such as ground water standards,
- 3 to grapple with the prospect of a substantial delay in
- 4 termination of the license, even after the licensee has
- 5 completed remediation satisfying all NRC requirements.
- 6 Given the active role playing by states such as
- 7 Wyoming in extending their regulatory jurisdiction over
- 8 uranium mill tailings sites, this scenario will likely be
- 9 played out at many Title 2 sites and may result in serious
- delays in license termination, or perhaps even a perpetual
- 11 license situation.
- The protocol, as agreed to by both NRC and DOE,
- demonstrates that DOE is extremely reluctant to accept title
- 14 to sites where concurrent jurisdiction means states will be
- able to require clean-up measures even after all NRC
- 16 requirements have been made.
- A second example is that concurrent jurisdiction
- 18 could also potentially create a whole new category of
- 19 licenses. For example, say a site has completed surface
- 20 stabilization and been granted an alternate concentration
- 21 limit. Anything within the point of exposure would remain
- 22 within NRC jurisdiction, but under the concurrent
- 23 jurisdiction approach, states would have jurisdiction over
- 24 ground water inside and outside the point of exposure. And
- if there are non-hazardous, non-radiological constituents in

- 1 such ground water that exceed the state standards, states 2 may require the licensee to institute pump and treat technology. If this involves pumping and treating 11e.2 3 byproduct material outside the point of exposure, a new 4 license for 11e.2 material could be required, which raises 5 some interesting questions such as -- What if the licensee 6 doesn't own the land outside the point of exposure, who will be the licensee, and where will the material being treated 9 be disposed? 10 A final problem is the concurrent jurisdiction could also pose a potential threat to the Agreement State 11 12 Program and Tony was just talking about this. Agreement states must carefully conform their 13 regulation of radiological and nonradiological hazards 14 15 associated with 11e.2 material to federal standards, as required by UMTRCA. Nonagreement states, on the other hand, 16 are free to regulate 11e.2 material without any regard to 17 18 consistency with the federal standards In other words, agreement states would have to 19 20 comply with stringent requirements in order to achieve and 21 retain their agreement state status and yet receive less 22 authority over 11e.2 material than they would otherwise be
- 25 CHAIRMAN JACKSON: Please.

this makes much sense.

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able to exercise as nonagreement states and we don't think

1	COMMISSIONER McGAFFIGAN: Is there real cases at							
2	the moment in Colorado and New Mexico that different from							
3	Wyoming and Utah in how they are going about terminating and							
4	turning over to DOE sites? Can you discern real differences							
5	in the programs of those states?							
6	MS. SWEENEY: At the moment, since only two Title							
7	II licenses have been terminated, and other sites are just							
8	starting to go through the process, I don't believe that we							
9	see any noticeable differences at this juncture.							
10	COMMISSIONER McGAFFIGAN: Which two are							
11	terminated?							
12	MS. SWEENEY: TVA and Atlas Blue Water.							
13	COMMISSIONER McGAFFIGAN: And Arco?							
14	MS. SWEENEY: Arco I mean Arco Blue Water, I'm							
15	sorry. Got Atlas on the brain.							
16	MR. THOMPSON: There have been assertions by state							
17	regulatory officials in New Mexico, Wyoming and Utah that we							
18	are aware of suggesting that they, because of their							
19	authority to regulate nonradiological constituents right up							
20	under the pile not just inside the point of exposure							
21	that they even have authority to review the surface							
22	stabilization plan because part of the surface stabilization							
23	is to prohibit infiltration and therefore it impacts							
24	groundwater and therefore they have a derivative authority.							
25	That has been expressed, in some cases in writing.							

	·							
1	MS. SWEENEY: I am sure as more sites are going							
2	through the closure process, I think we will see some							
3	diverging activities between differences between the							
4	agreement states and the nonagreement states in their							
5	approaches.							
6	COMMISSIONER DICUS: But there have been to date							
7	no actual problems of the transfer in DOE. What I am							
8	getting at is wanting to address an issue before it becomes							
9	a problem, is that a fair statement?							
10	MS. SWEENEY: Correct. Definitely.							
11	The National Mining Association's recommendation							
12	on the concurrent jurisdiction issue is we are asking the							
13	Commission to re-evaluate the current de facto policy being							
14	applied and to affirmatively assert and as needed vigorous							
15	defend Federal preemption in this area.							
16	CHAIRMAN JACKSON: Please.							
17	COMMISSIONER DICUS: If the NRC were to do this, I							
18	want to try no, let me ask my question and see if I have							
19	to explain it.							
20	If we were to do this, would there be in your view							
21	net harm to the public health and safety or net improvement							
22	in the public health and safety? I am trying to tie the							
23	action to a health and safety issue if there is one, or is							
24	the issue predominantly legal and economic?							

Can you tie those together for me?

1 MS. SWEENEY: That's a big one. Do you want to --2 MR. THOMPSON: I think you can. I think you can 3 in the sense that you are going to optimize regulatory --MS. SWEENEY: -- efficiency. 4 5 MR. THOMPSON: -- efficiency. What you may wind 6 up with is the nonhazardous, nonradiologial constituents in groundwater, for example, driving the issue of when you can 7 terminate a license. 8 . 9 The NRC's program is risk-based. Alternate concentration limit is a site-specific risk-based standard. 10 11 The State of Wyoming says that we don't do risk-based. 12 have to meet a more stringent standard where there is any 13 risk to human health or not. That is one example, so we 14 think that it would promote human health and safety because the idea is to get these piles closed, address whatever 15 16 issues there are related to them in terms of long-term 17 public care and public exposure, get them stabilized, get the groundwater done and get on with it. 18 19 That would be my answer. 20 MS. SWEENEY: And I think that that's right and I 21 think that the risks being addressed by NRC encompass what 22 the states are trying to achieve. I think what we have is duplicative and that if the states were out of it, the 23 public certainly wouldn't be at any greater risk. They are 24

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already protected by the Nuclear Regulatory Commission and

- 1 the Environmental Protection Agency.
- 2 MR. THOMPSON: I am just going to briefly address
- 3 the in-situ issue.
- As I mentioned, in-situ at the time that opinion
- 5 came out was really a very small, tiny -- you know, R&D kind
- of a thing and now it is really dominating production in
- 7 this country.
- 8 Our view of that opinion is that it really is
- 9 perhaps -- I don't know why -- I mean it's sort of an
- 10 aggressive position on taking jurisdiction there and a more
- 11 reluctant position on taking jurisdiction over --
- 12 pre-emptying jurisdiction, shall we say.
- There is an inconsistent application of some of
- NRC's definitions and things as they are applied, as far as
- we are concerned NRC doesn't regulate or that is taken from
- 16 underground or surface uranium mines and stored on pads at
- the surface or transported to the mill, because NRC has
- 18 traditionally not regulated source material until it's
- 19 removed from its place in nature.
- We view this mining as mining and not underground
- 21 milling, which is what the Staff position is.
- 22 Also, the whole reason for creating 11e byproduct
- 23 material was that there was no source material left in the
- tailings at .05 percent or greater. The uranium in the
- 25 solution coming out of the underground mine is not at .05

- 1 percent until it gets at least to the I-X, and perhaps
- 2 further and it is not refined. It is unrefined and
- 3 unprocessed according to the definition of that, as far as
- 4 we consider it.
- 5 So the final thing I guess is you have now the EPA
- 6 UIC Program and basically what that says is you have got to
- 7 get an aquifer exemption first which says this is not a
- 8 drinking water aguifer that you are operating in because you
- 9 have got minerals in there and you have got high levels of
- 10 radionuclides. You can't drink it because you have got, for
- 11 example, radon concentrations in hundreds of thousands,
- perhaps millions of picocuries per liter, so they grant you
- an aquifer exemption within a certain confined area, and
- then you have to get a UIC permit which says how you pump it
- and all that, and that is completely overlapping with NRC
- 16 right now.
- 17 It is totally duplicative and the states as
- 18 well -- for example, in Wyoming the state has a very
- 19 sophisticated, I would day -- fair statement? --
- 20 sophisticated program that involves ISL because they have a
- 21 lot of ISL mines, so basically we think it would make sense
- 22 for the NRC to regulate the discrete surface wastes from ISL
- 23 mining because that is really what the Mill Tailings Act was
- looking at and not at the wellfields as such.
- I guess the -- I am not going to dwell on this

effluent guidance because the Staff is changing the effluent 1 guidance in response to comments and discussions we have had 2 with them, but as an example, you get into all kinds of sort 3 4 of funny situations. I mean under the current situation we are saying that the NRC -- that we have milling underground, 5 yet the wastes that are created underground are not 6 7 byproduct material, whereas the waste created by milling on the surface, the tailings and the contaminants that get into 8 the groundwater, are considered 11e.2 byproduct material, so 9 10 that we wind up with a mixture of what we call production wastes, which are 11e.2 byproduct materials because the 11 12 wellfield is part of NRC's jurisdiction currently, and then the restoration of the wellfield, which is not 11e.2 13 byproduct material, and that has led to a mixture of wastes 14 in the past in sludges, for example, that are a mixture of 15 process and restoration wastes. 16 What that then has resulted in is when you say, 17 well gee, we have a non-11e.2 policy that says we are not 18 19 supposed to put in effect restoration wastes in the tailings 20 pile, we have come up with predominant waste tests. We are 21 having to jerry-rig at this point in this point in time and 22 we are saying that if most of the wastes created by ISL are 23 from process then we can put it in the tailings pile and we 24 will call it all 11e.2, because most of the wastes are

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restoration.

Well, if that predominant test is the predominant 1 source test, you could put anything in a big enough mill 2 tailings pile because it is going to be swamped by the fact 3 4 that 98 percent of everything in there is 11e.2, so it just that I guess again, getting back to the strategic 5 reassessment, you have got to sort of back-and-fill now in 6 7 some of these situations and that is what has happened and it creates perplexing situations for I think the Staff and 8 for the licensees as well. 9 10 Our recommendation would be for NRC to consider essentially regulating the surface activities of ISL 11 12 facilities, waste that is to go to tailings piles, such as filters, things of that nature, that are on the surface, but 13 to get out of the wellfields. 14 COMMISSIONER McGAFFIGAN: Again, this has been in 15 place for 18 years and things have changed, but would we be 16 17 leaving a gap? I guess Wyoming hasn't come to rely on your testimony, but has EPA come to rely on us in other cases, 18 and would our backing off and just dealing with the surface 19 20 activities leave them in any fix or not? MR. THOMPSON: I don't believe so. 21 I mean I 22 believe that EPA proceeds independently under the UIC 23 provisions and those who are concerned, for example, with issues relating to an ISL project, there is a complete 24

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public input process involved in EPA's UIC program, so that

1	proceeds independently and in duplication of what NRC is						
2	currently doing, and indeed perhaps in triplication with						
3	certain states.						
4	CHAIRMAN JACKSON: Okay. Commissioner?						
5	COMMISSIONER DICUS: Follow-up on that.						
6	Does the EPA's UIC program provide the same degree						
7	of protection to the environment as ours, more or less?						
8	MR. THOMPSON: I would say yes, the same. Mark						
9	might be able to speak to the specifics more than						
10	MR. WITTRUP: I would say in general more,						
11	especially as administered in my case by Wyoming.						
12	CHAIRMAN JACKSON: EPA's provides more?						
13	MR. WITTRUP: Yes.						
14	CHAIRMAN JACKSON: Okay.						
15	MS. SWEENEY: The third issue addressed in the						
16	white paper is NRC's final guidance for disposal of						
17	non-11e.2 byproduct material and tailings piles.						
18	Under the guidance, a facility may dispose of						
19	non-11e.2 material and tailings impoundments only after						
20	satisfying nine criteria specified in the guidance. The						
21	purpose of the guidance is to prevent inappropriate						
22	commingling of mill tailings with non-11e.2 materials and						
23	tailings piles in order to prevent a mixed waste situation,						
24	and thus to avoid any duplicative regulation by EPA or a						
25	state and also to avoid DOE reluctance to accept title to						

1 the site.

We believe that guidance is too restrictive,

3 making it very difficult to actually dispose of such

4 materials and tailings piles.

5 Let me tell you that the materials we are talking

about aren't materials that would increase the risk to the

7 public. We are talking about materials that are similar in

8 nature to the wastes already in the tailings impoundments.

9 NMA believes that facilitating such disposal is

10 consistent with sound public policy and the goal of

optimizing protection of public health, safety and the

12 environment.

17

18

19

Given the current shortage of disposal capacity

14 for low level radioactive materials, difficulties involved

with siting new facilities, and the conservative UMTRCA

16 requirements that protect public health and environment, it

makes sense to allow such disposal. And NRC has recognized

that uranium mill tailings may potentially be a solution for

radioactive waste disposal in Direction Setting Issue 9,

20 Option 7 of its Strategic Assessment.

We believe that DOE should not have a problem

22 accepting title to sites with such material. While UMTRCA

only requires DOE to take 11e.2 byproduct material, the

24 Nuclear Waste Policy Act authorizes DOE to take title to and

25 custody of low level waste under certain conditions that we

- 1 believe UMTRCA and the regulations thereunder satisfy by
- 2 definition.
- As to duplicative regulation by EPA, UMTRCA's
- 4 statutory scheme provides for EPA-NRC dual jurisdiction in a
- 5 variety of circumstances, so we don't think that dual
- 6 jurisdiction poses a new problem here. And we think that
- 7 duplicative regulation with EPA or the states is something
- 8 that can be worked out, maybe memorandums of understandings,
- 9 maybe legislation. There might be solutions out there, and
- 10 we think that this is an areas where perhaps being creative
- can be helpful, and it just makes a lot of sense to allow
- 12 this type of disposal.
- 13 CHAIRMAN JACKSON: Let me ask you a question. As
- 14 far as I understand, the staff's guidance doesn't preclude
- 15 --
- MS. SWEENEY: No.
- 17 CHAIRMAN JACKSON: -- the disposal of the
- 18 materials, --
- MS. SWEENEY: It just makes --
- 20 CHAIRMAN JACKSON: -- it just says that there
- 21 should be special reviews done?
- MS. SWEENEY: Correct.
- 23 CHAIRMAN JACKSON: So is it that -- is your
- objection then to having the special reviews done?
- MS. SWEENEY: Of special nuclear material?

1	CHAIRMAN JACKSON: Yes.
2	MS. SWEENEY: No. We don't object to that. As a
3	matter of fact, in the White Paper, we wrote that perhaps
4	for special nuclear material that there would have to be a
5	new framework set up. But once that you know, there
6	might have to be certain criteria that would have to be met
7	before you could dispose of special nuclear material in the
8	pile. But we think if that framework was in place, then we
9	wouldn't have to have an individual review each time that
10	you wanted to place special nuclear material in the pile,
11	you would just have to have met those specific new criteria.
12	CHAIRMAN JACKSON: Please.
13	COMMISSIONER McGAFFIGAN: I think you said
14	something to the effect that DOE can take possession under
15	the Low Level Waste Policy Act of this material and it is
16	similar to the material that is at UMTRCA. But do you end
17	up in a situation where the site, having accepted this
18	material, essentially, is both a low level waste site and
19	comes under that regulatory scheme, and I mean if you are
20	DOE, you know have you have a low level waste site and
21	you have a which DOE currently self-regulates, if it's a
22	DOE low level waste site, but you and a uranium mill
23	tailings site, and you will end up with a very complex
24	regulatory framework?

MS. SWEENEY: I --

1	COMMISSIONER McGAFFIGAN: Go ahead.							
2	MS. SWEENEY: I was going to say, no, I don't							
3	think so. The UMTRCA program has a much larger horizon of							
4	time that it covers. It is more protective than the Low							
5	Level Waste Program, so I believe that DOE could follow the							
6	UMTRCA requirements.							
7	COMMISSIONER McGAFFIGAN: And just say that by							
8	MS. SWEENEY: That by following those they are							
9	meeting the low level waste.							
10	COMMISSIONER McGAFFIGAN: Low level waste. So							
11	there is nothing additional? The one regime trumps the							
12	other and anything the other requires is already met by the							
13	UMTRCA, that's							
14	MR. THOMPSON: I think you could address that							
15	issue, and you probably should address that issue if you are							
16	going to try to create alternate criteria. The issue has							
17	been somewhat addressed, for example, with respect to the							
18	Envirocare 11e.2 facility, in which initially there was some							
19	question about whether there would have to be sort of a dual							
20	Part 61-Part 40 license and, basically, they said, no, this							
21	is 11e.2, it will be under Part 40, however, you are going							
22	to have to comply with some Part 61 record keeping							
23	requirements.							
24	So to the extent that there and waste form, for							

example, is more important in -- at least in Part 61

- 1 because, in Part 40, if you are talking about an operating
- 2 mill, you have got liquid in it, and you don't have liquid
- 3 in the waste that is going to a Part 61 facility. But those
- 4 are kinds of issues that could be addressed, and it seemed
- 5 to me that NRC could include some provisions that they felt
- 6 were relevant in Part 61 that would be applicable to the
- 7 disposal of any such material as part of the generic
- 8 criteria. There could be a waiver of certain Part 61
- 9 requirements, a generic waiver based on certain
- 10 requirements. And I think we suggest that in the comment.
- 11 CHAIRMAN JACKSON: Have you ever petitioned the
- 12 NRC for rulemaking?
- MR. THOMPSON: Have I ever?
- 14 CHAIRMAN JACKSON: Yes, on these particular
- 15 issues.
- MR. THOMPSON: No. No, in fact, we -- the
- 17 question was whether -- should we petition for rulemaking on
- 18 these issues? And the answer, essentially, was we knew that
- 19 NRC was possibly going to be looking at some of the issues
- in conjunction with Part 41. Also, again, this is an issue
- 21 that is just coming to maturity in some ways now, because
- 22 what we are really talking about in a lot of respects is a
- lot of high volume wastes that are simply unlikely to go to
- 24 a compact site just because of the cost, if for no other
- 25 reason. Where you are talking about hundreds of dollars a

- 1 cubic foot and we are talking about thousands of tons of
- 2 material. So we had just, really, in the last year begun
- discussions, that is, the NMA did, with members of the Fuel
- 4 Cycle Facility Forum. And so these issues are still, I
- 5 would say, in the opening phases of consideration and that's
- 6 the way we proffer them. We don't necessarily suggest we
- 7 have all the answers, but we think they might ought to be
- 8 looked at.
- 9 CHAIRMAN JACKSON: Well, Commissioner Dicus, then
- 10 Commissioner McGaffigan.
- 11 COMMISSIONER DICUS: Have you discussed this issue
- 12 with, for example, the Low Level Radioactive Waste Forum or
- with compacts as to whether or not any changes that we might
- 14 make in our criteria create problems or take away problems
- with, particularly, states that are in the process of either
- 16 trying to license a new site or those states that are still
- in the process? I would just be interested to know if this
- 18 creates a problem.
- MR. THOMPSON: I think we are too preliminary. We
- 20 are just raising the issues. I mean I think that there have
- 21 been active discussions amongst our group in the Fuel Cycle
- 22 Facility Forum licensees that if they were to petition for
- 23 rulemaking, and that has been discussed, that they would
- need to go and talk to the compacts and the state regulators
- 25 as well. And there is an awareness that that would have to

1	be	something	that	would	be	addressed.
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- 2 COMMISSIONER McGAFFIGAN: And my question directly
- 3 follows Commissioner Dicus'. The other interested party in
- 4 this may be DOE, not just from a regulatory perspective, but
- 5 if somebody has large volumes of low activity waste lying
- 6 around at various places, it is the Department of Energy
- 7 itself. Have you talked to them about whether, you know, in
- 8 their environmental management mode, they would be
- 9 interested in these sorts of schemes? I mean the sort of --
- 10 MR. THOMPSON: Not directly. But, certainly, that
- 11 has also been discussed, because, in conjunction with the
- 12 potential that DOE may be ultimately, or some portions of
- DOE may be regulated by NRC, it seemed to make some sense to
- 14 raise the issue, since by law these sites will in all
- likelihood, since no state has expressed an interest, be DOE
- licensees anyway under the Mill Tailings Act.
- 17 COMMISSIONER DIAZ: Going back to the bottom line
- 18 on this issue, you are really at the present time just
- 19 saying that the criteria need to be maybe simplified and
- 20 clarified for use and in other possible options, that is the
- 21 bottom line on this?
- MS. SWEENEY: Correct.
- 23 COMMISSIONER DIAZ: Okay.
- 24 MS. SWEENEY: And just to add to Tony's response
- on Department of Energy, I know that there have been some

folks that I have talked to just very casually about the 1 idea at Department of Energy who have said that is something 2 that should be considered. And, in fact, the National 3 4 Mining Association submitted comments to DOE on its notice of intent to consider use of commercial facilities for low 5 level radioactive waste, and in addition to our comments, we 6 7 submitted a copy of the White Paper with those comments to highlight that issue. So I think it is something that at 8 least some people at DOE are aware of and are considering. 9 10 COMMISSIONER McGAFFIGAN: Could we get a copy of those comments just to have in our system as well? 11 12 MS. SWEENEY: Sure. COMMISSIONER McGAFFIGAN: Thank you. 13 MR. THOMPSON: Actually, this fits rather nicely 14 into the next topic, which is the alternate feed policy. 15 You have two tests now under the alternate feed policy, the 16 17 co-disposal test, which incorporates all nine of the requirements for the non-11e.2 disposal and therefore is, 18 practically speaking, of little use. And then the 19 20 certification test which now appears to incorporate some sort of economic analysis of whether or not the uranium 21 itself is in and of itself economically viable to process 22 23 the ore.

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And it is the position of NMA, and embellished

upon in the IUC petition, that, basically, when they create

1 11e.2 byproduct material, Chairman Henry's testimony was to modify the definition of byproduct material to include -- so 2 that there wouldn't be a waste stream escaping the 11e.2 3 4 designation. That would include processing ores below the .05 percent licensable level. And that was designed in 5 order to assure there was no -- in other words, our view is 6 7 that the real focus is to make sure there is no regulatory gap here, and there isn't a regulatory gap. It isn't really 8 whether the economics of the production are based only on 9 10 the uranium. In fact, NRC's policies for a long time have recognized that that isn't necessarily the case because you 11 12 have the IUC mill and previously the energy fuels and Union Carbide, when they owned that mill, were processing dual 13 streams of vanadium and uranium. 14 There are other facilities -- and the point is 15 that the word primary, and in NRC's own language, which we 16 17 quote in the IUC petition, the word primary is to distinguish from secondary uranium recovery facilities, a 18 molybdenum or a copper facility that is taking off, you 19 20 know, lead, zinc, whatever, perhaps uranium, because it

22 licensed under a source material license, but it doesn't

turn all the tailings and the mill and everything else into

isn't their primary purpose. Their uranium recovery may be

24 11e.2 byproduct material.

21

25 And we think this fits very nicely with this idea

- of waste disposal. For example, there is an amendment
- 2 before the staff now to take some FUS wrap materials, which
- 3 DOE has classified as essentially byproduct material, and to
- 4 do it at less cost than other options that have been quoted.
- 5 At the same time, to be able to take out whatever valuable
- 6 components, in terms of source material, are in that
- 7 material. And so this is an example of a way in which --
- 8 this was formerly DOE, now Corps of Engineers, but some DOE
- 9 wastes can be disposed after you process them, recycle them
- 10 to get whatever value there is, and then dispose of them in
- 11 the tailings. It is not escaping regulation.
- 12 CHAIRMAN JACKSON: So you think that the staff's
- 13 concerns about sham disposals are unfounded?
- MR. THOMPSON: Yes, we do. We think that,
- basically, -- I mean there was an opinion in a case where
- 16 the judge said we have to look at economics, but there was a
- 17 recent opinion where the judge said, well, what would be
- 18 wrong with recovery valuable source material and lowering
- 19 the cost of disposal at the same time? As long as you make
- 20 the basic assumption that uranium mill tailings facilities
- 21 are licensed as part of the fuel cycle and, therefore, the
- 22 primary purpose for processing materials that contain source
- 23 material is, by definition, to recover the source material
- 24 content. There can be second side stream or secondary
- 25 recovery such as vanadium or tantalum or niobium or other

- things, but the materials become 11e.2, the wastes become 11e.2.
- 3 CHAIRMAN JACKSON: Okay.
- 4 MR. THOMPSON: And, really, again, we are talking
- 5 here about materials that are similar to mill tailings,
- 6 large volume soil and rubble that just it's going to be hard
- 7 to send to a compact, and just direct disposal doesn't give
- 8 you the benefit of taking whatever value -- valuable
- 9 minerals are in there, whether it be just uranium or uranium
- 10 and some other things.
- 11 COMMISSIONER DICUS: What technical assessments
- have been made to demonstrate that the hazardous waste
- components from a milling alternative feed, materials are
- 14 generically within the design parameters of conventional
- 15 uranium mill tailings disposal sites would not affect their
- 16 performance?
- MR. THOMPSON: Well, right now the Staff's policy
- 18 requires that you demonstrate that it doesn't contain a
- 19 listed -- that it isn't a listed hazardous waste, so that
- you don't run into a mixed waste problem, but the Staff
- 21 policy says that if it is, just the corrosivity, toxicity
- 22 and those things, that recycling takes it out from under
- 23 RCRA.
- 24 Essentially you have RCRA requirements or the
- 25 equivalent of RCRA requirements applied to mill tailings

- 1 facilities anyway and you are really talking about hazardous 2 materials and groundwater. The same RCRA standards that are 3 applicable to surface impoundments essentially are 4 applicable to these facilities through the EPA and NRC 5 regulations, so there is no gap there. 6 We know that one of the reasons they said mill 7 tailings are to be all waste was that they knew that it contained heavy metals, hazardous constituents and they 8 wanted to cover it all, and that is why Congress for this 9 10 one subset of your licensees has made them responsible for the nonradiological components. 11 Mill tailings, if you look at them physically, 12 13 radiologically and hazardous, they are classic mixed waste, but NRC's interpretation, and which we cite in here in a 14 15 memo from Mr. Lohaus says that because it is 11e.2 byproduct material it is not, by definition, mixed waste, and DOE and 16 EPA agree with him -- even though it has hazardous 17 18 constituents that might otherwise make it a mixed waste. is because of that definition, and that is why we say these 19 20 definitions are very important. 21 CHAIRMAN JACKSON: I want you to repeat the question, because I thought it was an interesting question.
- 22 23 COMMISSIONER DICUS: Well, I am not sure it's --CHAIRMAN JACKSON: -- been answered. 24 25 COMMISSIONER DICUS: -- been answered either.

1 I am asking specifically technically assessments. 2 Have they been done --MR. THOMPSON: 3 Yes. 4 COMMISSIONER DICUS: -- or are you aware that they have been done? 5 6 MR. THOMPSON: Yes. COMMISSIONER DICUS: Where? MR. THOMPSON: In conjunction with license 8 amendments, licensees have done detailed tests to determine 9 10 whether or not the materials contain hazardous waste or 11 hazardous materials and would have an adverse impact --12 COMMISSIONER DICUS: -- on the performance. 13 MR. THOMPSON: -- on the performance. In general, the rules that EPA created when they created the rules in an 14 15 engineering sense, made the assumption that they wouldn't because they were going to be subject to these RCRA 16 17 groundwater standards anyway. If you go back and look at the EPA, in 1983 they 18 just incorporated the RCRA requirements in. 19 20 COMMISSIONER DICUS: Are you aware of any of those assessments that were done that found a problem with a 21 certain strange alternative feed? 22 23 MR. THOMPSON: I am not aware of any but there

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hazardous constituent is a problem, a listed hazardous

were, I am sure they weren't granted. To the extent that a

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constituent, bringing dual jurisdiction, I think you could 1 set that aside and deal with that later, but I think the 2 3 assumption is now that for an alternate feed it has to meet 4 the requirements of RCRA that it be characteristic and that 5 there be recycling so it is no longer a hazardous concern. 6 I don't think there's ever been any real concern 7 expressed that I am aware of that any of the hazardous constituents that typically go with alternate feeds are 8 going to adversely affect the performance of the mill 9 10 tailings cell. If there were, I am sure that the Staff wouldn't grant the amendment or if there were I am sure that 11 12 the licensee, certainly if they were raising it with their counsel, their counsel would say don't put it in there if it 13 is going to impact the -- if you go beyond what is accessed 14 environmentally or EA or whatever, you can't put it in. 15 CHAIRMAN JACKSON: Well, as far as you know, the 16 Staff explicitly considers the impact on the --17 MR. THOMPSON: Yes. 18 19 CHAIRMAN JACKSON: And has an application filed 20 for the processing of alternative feed material ever been denied by the Staff? 21 MR. THOMPSON: You know, I can't answer that. I 22 23 know that there have been --

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MR. THOMPSON: -- sort of withdrawn but --

CHAIRMAN JACKSON: I think not.

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CHAIRMAN JACKSON: Okay. I think not, and so I 1 quess I am trying to get at what the fundamental issue is. 2 MR. THOMPSON: The fundamental issue is I think 3 4 that the Commission's actual practice in addressing applications is almost right where we are suggesting it 5 ought to be explicitly. 6 7 CHAIRMAN JACKSON: But in practice there's --MR. THOMPSON: In practice, but for example the 8 9 question comes up when you are dealing with some FUSWRAP 10 material or perhaps some other DOE wastes or other wastes, do we have to go through a full-scale process every time to 11 12 address it, and do we have to look at the economics of the uranium alone and our answer is no. 13 14 COMMISSIONER McGAFFIGAN: My sense is what they are saying is delete the economic tests and have all the 15 health and safety tests that we put them through in terms of 16 17 justifying that this material, once it is processed, still 18 is similar to the material that is going to be in the 19 tailings pile anyways, and so it is the economic tests that 20 you are suggesting that we delete while keeping all of the health and safety tests. 21 22 MR. THOMPSON: That is one way of saying it, yes. 23 We think you are very close to the way we want it addressed, but we think a easy way to do it is to make that 24 25 assumption that we talked about.

CHAIRMAN JACKSON: Well, an easy way would be the 1 health and safety way -- is to focus on the health and 2 3 safety issues vis-a-vis the performance of the mill tailings. 4 MR. THOMPSON: Right, and we agree with that. 5 6 CHAIRMAN JACKSON: All right. 7 MS. SWEENEY: We have a few suggestions for changes necessary to institute the recommendations as a 8 9 whole in the white paper. 10 The strategic reassessment will be required and as your letter yesterday to me stated, Chairman Jackson, that 11 12 seems to be a path that you are already on, and you are going to be looking at these issues in conjunction with 13 14 Staff and the Staff is looking at rulemaking options and we think that changes in regulatory practices or regulations 15 16 may be necessary. 17 We know that there are concerns about the nonradiological, nonhazardous components of 11e.2 byproduct 18 material, and maybe there is need for some work in that 19 20 area. 21 Also, there might be, as we were discussing, with the special nuclear material, maybe there is a need there to 22 23 find out -- to draw up some quidelines on what could and could not go in the tailings pile for disposal. 24

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We also believe that on the jurisdictional issues

that Commission directives would be helpful. We don't think 1 2 legislation is necessary but if that is the path the NRC would like to follow, we would certainly support it and we 3 4 would like to support any efforts in this area and will 5 continue to work with the Staff and the Commission to proceed on these issues. 6 7 We just have a few questions that we feel need to 8 be asked and they are questions that highlight the issues that we talked about today, and we consider these common 9 10 sense questions and if we could go back to the beginning, these are the kind of questions that we would like to ask 11 and we think that these kind of questions can help focus our 12 13 attention on the issues. Does concurrent jurisdiction over nonradiological 14 15 component of 11e.2 byproduct material make sense, given how it will interfere with site closure and license termination? 16 Does it make sense to treat the subsurface aspects 17 18 of ISL mining differently than conventional mining when the processes are essentially similar? 19 20 Does it make sense to ignore the waste capacity of mill tailings piles given the difficulty in siting new waste 21 disposal facilities? 22 23 Does it make sense to create barriers to putting other materials in tailings piles as long as risks to the 24

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public do not increase?

1	Does it make sense to create barriers to running
2	alternate feed through the mill when such activity makes
3	both environmental and economic sense?
4	The answer to all these questions of course, in
5	our opinion anyway, is no. We believe NMA's white paper
6	recommendations are legally sound, are good public policy
7	and will optimize the protection of public health and
8	safety, which is the primary mission of the Nuclear
9	Regulatory Commission.
10	We thank you for your attention today and hope to
11	continue to work with you on these issues.
12	CHAIRMAN JACKSON: Let me take you back to your
13	more common sense questions.
14	MS. SWEENEY: Okay.
15	CHAIRMAN JACKSON: Where you say does it make
16	sense to ignore the waste capacity of mill tailings piles
17	given the difficulty in siting new waste disposal
18	facilities, are you willing to have your mill tailings piles
19	subject to the same regulatory requirements as low-level
20	waste facilities?
21	MS. SWEENEY: I would have to ask my I think
22	there are some NMA member companies who would, but I cannot
23	answer for them individually, but I do believe that there
24	are some companies that would be interested enough in
25	pursuing that.

CHAIRMAN JACKSON: I mean given that there are low 1 2 level waste requirements, as well as ones that relate to siting of them -- I am just only focusing on that one common 3 4 sense question --MS. SWEENEY: 5 Yes. 6 CHAIRMAN JACKSON: -- that at the heart of it, you 7 seem to be suggesting that we adopt a policy that would de facto allow you to create a low level waste disposal site 8 9 and therefore the question has to be addressed as to the subjection of that given mill tailings site to low level 10 waste siting requirements and there are specific ones that 11 are in the low level waste -- in the Nuclear Waste Policy 12 Act, et cetera, and so this one is not -- and we talked 13 about it and you --14 15 MR. THOMPSON: I think you would have to address those issues and see which ones are relevant at a particular 16 17 site, and I think again that the focus here is on low level waste that you could say are essentially similar --18 MS. SWEENEY: Similar. 19 20 MR. THOMPSON: -- physically, chemically and 21 radiologically to what is in there, so we are not talking 22 about all low level waste, clearly. We are talking about a very fine subset of low level waste. 23 CHAIRMAN JACKSON: Commissioners? 24 25 [No response.]

1	CHAIRMAN JACKSON: Any further comments?
2	MR. THOMPSON: Thank you very much.
3	MS. SWEENEY: Thank you.
4	CHAIRMAN JACKSON: Well, thank you very much.
5	I think it's been a helpful presentation and as we
6	are considering our various reassessments and the Staff
7	recommendations relative to that later on this year,
8	particularly relating to the regulation of uranium recovery
9	operations, your white paper will be useful to us.
10	Thank you very much for coming.
11	MS. SWEENEY: Thank you.
12	[Whereupon, at 11:12 a.m., the briefing was
13	concluded.]
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CERTIFICATE

This is to certify that the attached description of a meeting of the U.S. Nuclear Regulatory Commission entitled:

TITLE OF MEETING:

BRIEFING BY NATIONAL MINING

ASSOCIATION ON REGULATION OF THE

URANIUM RECOVERY INDUSTRY PUBLIC

MEETING

PLACE OF MEETING: Rockville, Maryland

DATE OF MEETING: Wednesday, June 17, 1998

was held as herein appears, is a true and accurate record of the meeting, and that this is the original transcript thereof taken stenographically by me, thereafter reduced to typewriting by me or under the direction of the court reporting company

Transcriber: Ruse Sushin

Reporter: <u>Jon Hundley</u>

Recommendations for a Coordinated Approach to Regulating the Uranium Recovery Industry:

A White Paper
Presented by the National Mining
Association

NRC STRATEGIC ASSESSMENT AND REBASELINING INITIATIVE

- NMA's White Paper builds on NRC's strategic assessment concept
- White Paper is a request that NRC perform a strategic assessment of some key NRC positions taken regarding the uranium recovery industry
- Both Strategic Assessment and White Paper have same goal -- optimization of protection of public health, safety and the environment.

WHITE PAPER RECOMMENDS COMMON SENSE APPROACH

These recommendations make sense – these recommendations will help NRC conduct a strategic reassessment of the uranium recovery program, and redesign a program that optimizes the protection of public health, safety and the environment.

Recommendations will assist NRC in instituting a legally sound program consistent with UMTRCA

3

NRC NEEDS TO REASSESS FOUR REGULATORY POSITIONS

- Jurisdiction of Non-Agreement States over Non-Radiological Components of 11e.2
 Byproduct Material
- NRC Jurisdiction over In-Situ Leach Facilities
- Disposal of Non-11e.2 Byproduct Material in Tailings Impoundments
- NRC's Alternate Feed Policy

RECONSIDERATION NECESSARY BECAUSE POSITIONS ADOPTED ON AD HOC BASIS

White Paper requests that NRC reconsider four positions it has taken at some point over the last 20 years, positions taken in response to specific questions and situations without regard to whether such ad hoc positions, taken together, actually work to achieve an efficient uranium recovery program and to optimize protection of public health, safety and the environment.

5

NRC's JURISDICTIONAL POSITIONS ARE NOT CONSISTENT WITH THE

CONGRESSIONAL INTENT OF THE AEA AS AMENDED

- These Positions are not Compatible with the Modern Uranium Recovery Industry
- Evolution of Industry has Brought Jurisdictional Problems More Into Focus

JURISDICTION OF NON-AGREEMENT STATES OVER NON-

RADIOLOGICAL COMPONENTS OF 11E.2 BYPRODUCT MATERIAL

- OELD Opinion is Legally Unsound
 - Focus Of UMTRCA on Radiological Hazards
 - State Regulation of NORM
 - Authority of Non-Agreement States to Assume Custody over 11e.2 Material
 - Savings Clause of the AEA

7

EXAMPLES OF PROBLEMS WITH THE CONCURRENT JURISDICTION POSITION

- Potential for Perpetual License
- DOE May Be Reluctant to Accept Title
- Potential Need for New License
- Non-agreement States More Authority than Agreement States

NMA RECOMMENDATION

The Commission must reevaluate the current de facto policy being applied by its staff and to affirmatively assert, and if necessary, vigorously defend, federal preemption of non-Agreement State regulation of all aspects of 11e.2 byproduct material.

9

NRC'S OELD OPINION ON ISL MINING IS FLAWED

- NRC May Regulate Only those Materials Within the Jurisdiction of the AEA
- Wellfield Materials do not Constitute Source Material
- NEPA Provides no Supplemental Jurisdiction
- EPA Already Regulates the Underground Activities at ISL Wellfields

EXAMPLE OF PROBLEM WITH POSITION ON ISL JURISDICTION.

- NRC's Liquid Effluent Guidance
- Effluent at ISL Facilities
- NRC's Requirements for Effluent Disposal

11

NMA RECOMMENDATIONS

- NRC Must Develop a Logical, Consistent and Predictable Regulatory Approach
- NRC Should Renounce Jurisdiction Over ISL Wellfields Until the Pregnant Lixiviant Reaches the Elution Stage at the Mill

NRC NON11E.2 DISPOSAL GUIDANCE IS TOO RESTRICTIVE

- Too Many Criteria must be Met Prior to Disposal of Such Material
- Guidance Makes Actual Disposal of Such Material Extremely Difficult Even When Risks Posed are No Greater
- Facilitating Such Disposal is Consistent with Sound Public Policy and with the Goal of Optimizing Protection of Public Health, Safety and the Environment

13

NMA RECOMMENDATIONS

- NRC Should Revise the 1995 Guidance to Make the Policy Less Restrictive
- NRC Must Explore Allowing the Disposal of NORM, Mixed Wastes, SNM and Even 11e.1 Material if They are Similar to Uranium Mill Tailings
- Creative Approach May be Needed --i.e., State/Interagency MOUs or Legislation

NRC'S ALTERNATE FEED POLICY IS TOO RESTRICTIVE

- It Can Be Presumed that Materials Processed in a Licensed Uranium Mill are Being Processed Primarily for Their Source Material Content
- Economics of a Processing Transaction Should Be of No Concern to NRC
- Facilitating the Use of Alternate Feed at Uranium Mills Produces Substantial Benefits

15

NMA RECOMMENDATIONS

- NRC Must Reconsider the Standard for Demonstrating the Ore is Processed Primarily for its Source Material Content
- NRC Should Not Focus on Economics in Determining Whether to Approve Alternate Feed Applications

CHANGES NECESSARY TO INSTITUTE RECOMMENDATIONS

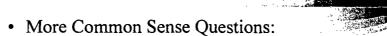
- Strategic Reassessment will be Required
- Changes in Regulatory Practices or Regulations may be Necessary (i.e., perhaps to address nonradiological, nonhazardous components of 11e2 byproduct material or to outline which materials may be accepted for disposal in a tailings pile)
- Commission Directives must be Issued

17

COMMON SENSE NEEDED ON THESE ISSUES

- · Questions need to be asked
 - Does concurrent jurisdiction over the nonradiological component of 11e.2 byproduct material make sense, given how it will interfere with site closure and license termination?
 - Does it make sense to treat the subsurface aspects of ISL mining differently than conventional mining, when the processes are essentially similar?

COMMON SENSE CON'T



- Does it make sense to ignore the waste capacity of mill tailings piles given the difficulty in siting new waste disposal facilities?
- Does it make sense to create barriers to putting other materials in tailings piles as long as risks to the public do not increase?
- Does it make sense to create barriers to running alternate feed through a mill when such activity makes both environmental and economic sense?

19

Conclusion

- These Questions Highlight the Issues We Have Raised Today -- The Answer to All the Questions is NO
- NMA's White Paper Recommendations are Legally Sound, are Good Public Policy and Will Optomize the Protection of Public Health and Safety, Which is the Primary Mission of NRC