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NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

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ADVISORY BOARD ON RADIATION AND WORKER HEALTH

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86th MEETING

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THURSDAY, SEPTEMBER 20, 2012

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The meeting convened at 8:30 a.m., Mountain Daylight Time, in the Denver Marriott Tech Center, 4900 South Syracuse, Denver, Colorado, James M. Melius, Chairman, presiding.

PRESENT:

JAMES M. MELIUS, Chairman HENRY ANDERSON, Member JOSIE BEACH, Member BRADLEY P. CLAWSON, Member R. WILLIAM FIELD, Member DAVID KOTELCHUCK, Member RICHARD LEMEN, Member WANDA I. MUNN, Member GENEVIEVE S. ROESSLER, Member PHILLIP SCHOFIELD, Member PAUL L. ZIEMER, Member TED KATZ, Designated Federal Official

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REGISTERED AND/OR PUBLIC COMMENT PARTICIPANTS:

ADAMS, NANCY, NIOSH Contractor ALLEN, DAVE, DCAS BARRIE, TERRIE BURGOS, ZAIDA, NIOSH EVASKOVICH, ANDREW FITZGERALD, JOE, SC&A GLOVER, SAM, DCAS HINNEFELD, STU, DCAS KENNEY, CECELIA, DOE KINMAN, JOSH, DCAS KOTSCH, JEFF, DOL LEWIS, GREG, DOE LIN, JENNY, HHS MAKHIJANI, ARJUN, SC&A MCFEE, MATTHEW, ORAU Team NETON, JIM, DCAS RUTHERFORD, LAVON, DCAS STIVER, JOHN, SC&A TAULBEE, TIM, DCAS WALTZ, MARK*

*Participating via telephone

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3 1 P-R-O-C-E-E-D-I-N-G-S 2 (8:30 a.m.) 3 CHAIRMAN MELIUS: Good morning. This is the third day of our 86th Meeting here 4 in Denver, and I'll turn it over to Ted to do 5 the roll call. б KATZ: Thank you. And let me 7 MR. just note for people on the line we have one 8 main agenda item today, Nuclear Metals 9 SEC 10 coming up. Ιf you're interested in the materials for that, they're posted on 11 the NIOSH website under the Board section under 12 today's date, or September 18th, because that 13 covers all three days -- I mean, September, 14 15 June, no, September. 16 MEMBER BEACH: September. MR. KATZ: Thank you. I know what 17 time of year it is. 18 19 Okay. And, also, for folks on the 20 phone please mute your phones. Press *6 if you don't have a mute button. And that will take 21 22 care of it. Let's do roll call. And we have no NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

conflicts for today's agenda item, so I won't
 be speaking to them individually.

(Roll call.)

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MR. KATZ: Very good. Thank you.

4

5 CHAIRMAN MELIUS: Okay, qood б morning. So, we have like two items of 7 business we'll do. We'll do Nuclear Metals, and then after that we will do the Board 8 letters. And just so you know, you have, I 9 10 believe, four letters there. There's only one Mound. We're going to hold off on the letter 11 the other Mound, which 12 is the second on 13 presentation yesterday. We need to qet a little clarification, make sure we write that 14 one correctly, so don't think you're missing 15 16 one. That's all.

17 So, let me now start with Nuclear 18 Metals, Inc., and Sam Glover will be 19 presenting. Welcome, Sam.

20 DR. GLOVER: Thank you, Dr. 21 Melius. You only get to hear from me one time 22 this Board meeting, and I'm the last --

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CHAIRMAN MELIUS: Well, we went back to Stu, and then Jim, so we're working our way up to you.

4 DR. GLOVER: See, there's а 5 reassignment going on. So, today we're going б to talk about Nuclear Metals, Inc., and this 7 was delayed. We did have a large data capture that occurred, and we got 16,000 new documents 8 from the EPA. So, we had to go through those, 9 10 so this was delayed by three months, so it was a lot of material. 11

So, Nuclear Metals, Inc. They grew 12 13 out of the special metallurgical operations conducted by MIT, and that was during the 14 15 Manhattan Engineering District time frame. In 16 about 1945 or `6 that was consolidated at the Hood Building, which was a DOE facility. And 17 18 the Hood Building is a former, or one of the 19 SEC facilities that have taken we up previously. NMI took over the MIT operations 20 at the Hood Building as a private company, in 21 1958 transferred the operations to Concord. 22

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1	NMI provided the AEC special
2	fabrication facilities for Nuclear Metals,
3	special alloys, uranium, thorium, a lot of
4	different elements, and a lot of these things
5	still remain classified today.
6	In the mid-1970s, NMI began large-
7	scale fabrication of depleted uranium
8	munitions. The covered period for NMI as an
9	AWE facility begins October 29 th , 1958 and
10	runs through 1990 with a residual period of
11	1991 through March 1, 2011.
12	The petition was received October
13	20 th , 2011. The proposed Class was fairly
14	specific as they requested all employees in
15	Buildings, A, B, C, D, E and the Butler
16	Building, external storage containers and
17	
	outside areas immediately adjacent to the
18	outside areas immediately adjacent to the plant grounds at the Nuclear Metals, Inc.
18 19	
	plant grounds at the Nuclear Metals, Inc.
19	plant grounds at the Nuclear Metals, Inc. facility from January 1, 1970 through December

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didn't feel it would be appropriate to be
 outside of that.

On January 17th, 2012, the petition 3 qualified for evaluation. NIOSH expanded the 4 5 time period and the scope of evaluation versus б that requested by the petitioner based on our 7 preliminary investigations, that similar activities were ongoing before 1970. And, 8 also, that there were no real boundaries that 9 10 would prevent it being all employees, so we would make sure to review the entire complex. 11

So, NIOSH evaluated all employees 12 13 who worked at Nuclear Metals, Inc. facility in West Concord from January 1, 1958 through 14 31st, 15 December 1983. You will note that 16 there's discrepancy, discrepancy, not а difference between the 17 there's а covered 18 period. The Department of Labor later 29th, 19 determined that October 1958 is the actual date, the earliest date that they can 20 be considered to be an AWE, so the covered 21 22 period the evaluated period versus are

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1 slightly different.

2	And as you all are well aware, the
3	sources of available information, the standard
4	sources, the TIBs and the TBDs, our Research
5	Database, the claimant files, affidavits
6	provided by the petitioner, and they did
7	provide a lot of information. We conducted
8	nine worker interviews.
9	We had a fairly extensive outreach
10	meeting conducted by ATL, our ORAU team and
11	NIOSH. We had three outreach meetings in
12	Concord, and those were attended by us or with
13	SC&A. They were the Board was invited to
14	attend and SC&A did have a participant. We had
15	about 50 to 60 workers, as well as former
16	company management who go all the way back to
17	day one when the building was actually built.
18	So, they provided a lot of good history and
19	perspective.
20	We collected information from
21	OSTI, all the standard database searches,
22	internet. As you know, we've gotten to many
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1 facilities across the country, the classified 2 repositories at OSTI, Hanford. We collected 3 information from many of these different places regarding Nuclear Metals, 4 Inc., the 5 material they of did. The early type б Environmental Measurements Laboratory, 7 information from the Hagley Museum & Library, NRC. As I said, we got 16,000 documents from 8 Department of Environmental Protection 9 the 10 from Massachusetts. What happened was is that all the 11 12 records from NMI went to a long-term storage 13 facility, and when the company finally closed down, nobody paid the bill. So, those were 14 15 denied to us for many years. Eventually, they 16 were sent back to the facility and were just left in this abandoned facility. So, that's 17 the state of -- you can imagine the state of 18 19 records. So, they helped us, and they

20 considered the contaminated area so they boxed then relevant records 21 up and sent to а 22 facility where could actually capture we

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1 those. So, we really appreciate their 2 assistance, Ι did want but to let you 3 understand the state of records as we looked 4 at them. Not a large facility, at this date 5 б we have 23 claims. Many people who worked at 7 the Hood Building transferred to this facility, so they were actually oftentimes may 8 have been compensated under the previous SEC 9 10 Class as the Hood Building. Nineteen claimants who worked here 11 12 in the proposed SEC total number DR 16 at DOL. 13 We have 15 claims with internal dosimetry, and 18 with external dosimetry. 14 15 So, very quickly the background. 16 They operated at the Hood Building next to the 28th, campus until October 1958. Of 17 MIT course, there was a transition time frame as 18 19 they began moving the facility. It was located 20 at Concord, Massachusetts on approximately 30 acres of land. In the 1990s they expanded that 21 to 46.4 acres for this expanded operations. 22

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And as I mentioned, that they have been -- as of October 29th, 1958 DOL has determined that is the time when they become an AWE facility.

The workforce varied from 60 to 4 650 workers over time. The original 5 over б facility consisted of three buildings, Building A, 7 B, and C. They had basically office space and research laboratories in A, 8 cafeteria and supplies, services in B. And 9 10 Building C was the main production facility. 11 As they got more advanced or more -- when they qot busier, as they began taking on new work 12 13 before they built new facilities, many of the facilities would get used for storage 14 or 15 packing. The cafeteria was actually used for 16 packing depleted uranium parts at one time because they ran out of space. So, this is 17 approximately the operations in each facility. 18 19 Additional buildings were added 1978 they added Building 20 over time, D to expand the production space. Building E 21 in

1983 for wet processes including pickling,

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which is basically soaking uranium in 8 molar nitric acid to passivate the surfaces, coolant reduction, waste treatment. Butler Buildings were added over time and used for storage. And identified of those I've some were for depleted uranium, operations, or radiological, 7 some of those were not.

This slightly touched 8 is -- we this up. Unfortunately, the original diagram 9 10 had some -- was difficult to read but we tried to clarify the title so you can get a better 11 12 feel for how the 1994 NMI, they basically just built and added to the additional structures. 13

And when first 14 we wrote the 15 Evaluation Report, I felt like I was reading 16 the Iliad because it was just list after list after list of all of the things the NMI has 17 18 done. We significantly consolidated that 19 because it would have really been -- it would 20 have had to have been an appendix. So, pre-1972, essentially more of a research kind of 21 22 operation, fundamental metallurgy, physical

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metallurgy, chemical metallurgy, engineering, product development, fuel element development and manufacture, and manufacture of high-4 temperature materials.

They began shifting into more of 5 б an operation scale in '72 to '79 and began 7 looking at depleted uranium shields, 8 counterweights, armor penetrators, metal powders, beryllium, beryllium alloys, 9 and 10 special titanium parts. And after '79 operations continue, and 11 you as may have 12 noticed in our Evaluation Report with that 13 16,000 documents we have reserved the post-1979 time frame for further evaluation. 14

While we believe we have a good 15 16 handle on the pre-'79 and all that additional information, and the new data that we have, we 17 believe we need more time to evaluate whether 18 19 we can do dose reconstruction after 1979. 20 Unbelievably, for a facility that

handled as much material as they did, they had 21 no trained health physics staff until 1981. To 22

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1 remind you, this started in 1958. You know, in 2 the discussions that we had, you know, because 3 they weren't trained health physics staff, 4 oftentimes as they began evaluating this research material they weren't aware of the 5 б new hazards that were being introduced. It was 7 mentioned that they really didn't even understand as they rolled the uranium and 8 produced the daughter products, they never 9 10 realized even until the late '70s that that was a problem. So, it certainly is something 11 to consider very heavily as you think about a 12 13 very active research facility. The evolved 14 program over many 15 years, and you'll see periods of improvement 16 and lapses as people come in to review them, so it's not a clear-cut "this is how we do 17 things," but you would see that devolving at 18 19 times.

20 And just very briefly, mid-1960s 21 described significant uranium spills, 22 contamination which were left unreported. And

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the inspection reports in the '70s reporting emphasis on a lack of contamination controls and monitoring.

Radiation the 4 Improvements in 5 Protection Program coincided with the growth б of the company in the '70s and '80s. 7 Improvements in the period after 1979 will be described in a future report. They included 8 control enforcement, increased 9 access air 10 monitoring programs, air and swipe program analysis brought in-house to reduce delays, 11 12 Radiation Safety Training Program, employee 13 was for the first time actually provided, increased health physics coverage for all 14 15 three work shifts, and a large increase in the 16 amount of bioassays, you'll see.

production 17 NMI's research and activities involve 18 numerous sources of 19 exposure. These amounts go up and down with 20 Some NMI activities and source terms time. remain classified. Sources of internal dose 21 22 included uranium: depleted, natural, and

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enriched, including highly enriched, in many physical forms as a result of fires and explosions. They had thorium: oxides, powders and metal, uranium and thorium progeny, and recycled uranium components.

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б So, I want to emphasize thorium. 7 Thorium was transferred to the Hood Building from the very beginning. We believe that at 8 least one ton was transferred at that time. 9 10 Records are clearly -- we do not have all transfers, complete documentation, but we know 11 12 that in the 1960s they were extruding thorium 13 rods for the British and French companies. We know that they were converting thorium rods to 14 15 powder, extruding thorium powder at this time. 16 We know that Nuclear Metals, Inc. was casting thorium to billet size following machining, 17 jacketing, extrusion, pickling, 18 and then 19 additional machining.

Given the limitations in records, NIOSH believes we've identified a persistent and radiologically significant thorium source

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term over the operating history of NMI, which no monitoring exists for the period 1958 through 1979.

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As a source of external exposure, 4 as we discussed, depleted, natural, enriched 5 б uranium and thorium metal submerged in 7 contaminated air and exposure to contaminated 8 surface, concentration of progeny during metalworking, 9 and separation process, а 10 enhanced radiation. They had several X-ray sources, including two industrial X-ray units, 11 40 millicurie unencapsulated iridium-192, and 12 40 curies of iridium-192, and 100 kV medical 13 X-ray machine. 14

External monitoring program data 15 16 availability, personnel monitoring program in place prior to the relocation of operations. 17 In the late 1950s, we believe that film badges 18 19 were issued to all uranium processing in the 1960s all personnel wore 20 personnel, film badges according to the documentation, 21 22 processing about every six and a half weeks.

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And clerical personnel badges were processed
 annually.

3 So, this provides, based on the records that we have found, there is nobody 4 actively managing the records. They don't have 5 б people to -- so, we have to go to the hard 7 copy records and review them based on just what we received. '58 we have 98 badges, and 8 I've provided the SRDB reference for each of 9 10 these, so you can kind of get a feel for the external -- the number of 11 badges as they 12 change and go over time, quickly going up to 13 about 1,000 and staying with that until we get into the late 1970s when you see a 14 large 15 increase in badging.

We do see that they had a weekly smear program in 1958, only very limited results have we been able to find. In '69, AEC inspectors remarked that they weren't taking them as required, other inspection reports that they weren't recorded on log paper, that they may have been recorded somewhere but it

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wasn't even on an official form. They may have basically just -- well, essentially, they were on a temporary form -- looked at, it was okay, they threw them away, so there's no long-term record retention.

б Internal dose monitoring programs 7 data availability of bioassay program consisted of urinalysis and lung counting 8 program during particular points in time. It 9 10 evolved over time to the AEC/NRC inspections. 11 1977 you'll see the bioassay program In 12 1983, starting to ramp By it up. was 13 reportedly consistent with Regulatory Guide 8.11. 14

NIOSH currently has identified
2,600 urine bioassay samples for the period
'58 to '79, and from the period 1980 through
'83 we have 12,500. You see a marked increase
as they began the munitions manufacture.
We do not have urine samples for

20 we do not have urine samples for 21 '68, '72, and '75, and some of that may be due 22 to how record retrieval has occurred. We do

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1	find lung counts for uranium annually during
2	the '82 to '86 time frame. We have about 500
3	lung counts that was done by Helgeson. And
4	here you'll see a graph that shows the number
5	of urinalysis samples, the massive ramp-up.
6	You're not talking about a lot of urine
7	samples early on, very limited. But then
8	again, so not nearly as many employees as we
9	ramp up to 650 around 1980. And this just
10	gives you a feel of the number of lung counts
11	versus urinalysis, and about what time they
12	occurred at.
13	Again, in this post-1970 time
14	frame which I'm asking you that we reserve for
15	a future report, just give you a feel for some
16	of the as they looked at the lung counting
17	data you'll see that in 1982 when they
18	initiated this they had a fairly high depleted
19	uranium not fairly high but certainly much
20	larger it dropped down quite a bit after
21	1982. It went from 154 and dropped down to 11

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for the massive depleted uranium in the lung.

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1	So, NMI did maintain an air
2	monitoring program from the earliest years.
3	These were sort of fixed air samples. We
4	obtained a few of these from 1980, 31 of 255
5	reports is all we found so far. The summary
6	data, which provide average/minimum/maximum
7	concentration, describes having 12 fixed air
8	samples located throughout the plant, and this
9	was to increase later.
10	1959 reports operations involving
11	enriched uranium or special jobs where they
12	have additional air sampling. But if they did,
13	we don't have the results. 1974 inspection
14	results report specifically that the fixed air
15	sample did not approximate worker breathing
16	zone samples. New data available to NIOSH, we
17	basically have 28,000 breathing zone samples
18	between 1980 and 1983 to evaluate.
19	So, summary of monitoring gaps.
20	Well, not really one to consider neutrons as
21	being a significant source of exposure at a
22	natural uranium plant. There are light
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1 elements which can interact with it, so we 2 believe that though there is even no 3 monitoring have quidance which would we provide a suitable estimation of dose. For 4 5 internal dose, however, the early bioassay б programs pre-1980 are often sparse, and NIOSH 7 cannot verify they represent the worst case exposures. Early air sample data is limited 8 and not equivalent to breathing zone samples. 9 10 Late 1970s, it's difficult to determine if included incidents. 11 results No bioassay 12 results for thorium operations urine or air, 13 also have no results for thorium and we 14 sources. So, a summary of why the Class:

15 16 workers were potentially exposed to enriched uranium, thorium, uranium progeny, and thorium 17 progeny who were not monitored, nor does a 18 19 suitable dose reconstruction method exist. The 20 decision was lack of based on adequate biological monitoring data, sufficient air 21 information, and/or sufficient 22 monitoring

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1	process and radiological source term data to
2	reconstruct dose with sufficient accuracy.
3	Why everyone? Based on reports by
4	the AEC and facility layout, the process areas
5	were not isolated from the non-process areas
6	and no barriers to access were in place, in
7	particular they were not enforced.
8	What about employees not included
9	in the SEC? NIOSH intends to use any internal
10	or external monitoring data that may become
11	available for an individual claim and can be
12	interpreted using existing dose reconstruction
13	processes and procedures. Therefore, dose
14	reconstructions for individuals employed at
15	Nuclear Metals during the time October 29^{th} ,
16	1959 through December 31 st , 1979 but who do
17	not qualify for inclusion in the SEC may be
18	performed using these data as appropriate.
19	NIOSH intends to estimate doses
20	from medical X-rays using information from
21	employee medical records and claimant-
22	favorable medical dose reconstruction
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1 assumptions and methods.

2	Why stop at 1979? A continuing
3	analysis affects only post-1979. NIOSH
4	determined that it is appropriate to proceed
5	with the pre-1980 feasibility evaluation while
6	continuing to analyze the impact of newly
7	obtained data on post-1979 dose
8	reconstruction. Therefore, NIOSH is reserving
9	its full assessment with available post 1979
10	data and will continue to evaluate the
11	feasibility of sufficient, accurate dose
12	reconstruction for the period January 1, 1980
13	to December 31 st , 1983.
14	And the standard "health
15	endangerment." We saw evidence of accumulated
16	chronic radiation exposures, and consequently
17	specifying that health may have been
18	endangered.
19	Proposed Class: all Atomic Weapons
20	Employees who worked at the facility owned by
21	Nuclear Metals, Inc. or subsequent owner in
22	West Concord, Massachusetts during the period
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1	from October 29 th , 1958 through December 31 st ,
2	1979 for a number of work days aggregating at
3	least 250 work days occurring either solely
4	under this employment or in combination with
5	work days within the parameters established
6	for one or more other Classes of employees
7	including the Special Exposure Cohort.
8	And our standard closure slide. We
9	have feasibility no. Health endangerment, yes.
10	Thank you, Dr. Melius.
11	CHAIRMAN MELIUS: Okay. Thank you,
12	Sam. Good presentation. Board Members with
13	questions? Yes, Paul.
14	MEMBER ZIEMER: Sam, I noticed in
15	the original Class Definition there was some
16	descriptive information referring to the plant
17	grounds outside the buildings, and it wasn't
18	clear to me whether this was all fenced in.
19	Does this new definition include what was
20	originally referred to as these grounds
21	immediately outside the buildings? You know,
22	I'm really asking
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1 DR. GLOVER: We were careful to 2 modify it. We originally said in the buildings 3 or in the facility. We want to make sure that it's the entire facility owned by that, so 4 5 it's the entire designated facility, so it б includes the entire grounds and also the 7 structures. MEMBER ZIEMER: And that was fenced 8 off so others could not access the grounds? 9 DR. GLOVER: Well, within the AWE, 10 they'd have to be an AWE -- DOL would have to 11 12 certify them as being an employee of this 13 contractor. MEMBER ZIEMER: Okay. 14 15 DR. GLOVER: So we're not 16 segregating the grounds that are part of the facilities. 17 18 MEMBER ZIEMER: Gotcha. 19 CHAIRMAN MELIUS: Could I just add, 20 because I want to make sure -- in the proposed Class you'll see it says "Nuclear Metals, Inc. 21 or a subsequent owner." I think that's -- I 22 **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 thought LaVon was trying to trip me up or 2 something when we were getting ready for this 3 and reviewing it, but I think the Department of Labor, as I understand it, has requested it 4 standard language now with these 5 serve as б sites because ownership changes, and I think 7 some of the issues is the grounds may be split, people take over buildings, and trying 8 to keep which is the actual AWE facility in 9 10 mind, because that's really what it's focused 11 on. So, we may see that language later on 12 other sites, also. So, I was wrong. LaVon 13 wasn't trying to catch me on something. Okay, Gen. 14 15 MEMBER ROESSLER: I notice in your

16 presentation you said that there was no trained health physics staff until 1981, and 17 18 yet it appears from what you've presented that 19 there were some changes in '79 or certainly 20 during 1980, so what was the change that happened to make things, it appears to be, 21 very different? 22

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1	DR. GLOVER: I would imagine that
2	there's some contractual obligations that you
3	have in that '70 time frame, but I'm not
4	completely it is clear that changes were
5	occurring, the number of samples had to
6	increase, but whether that was part of an Army
7	requirement or a contractual change, it's not
8	clear to me. But it wasn't until that time
9	frame, that '81, that we actually got an
10	increase in the health physics staff.
11	CHAIRMAN MELIUS: Wanda, then Dave.
12	MEMBER MUNN: There's an awful lot
13	of information here, Sam. It is of concern, I
14	think, that we have such apparently good
15	badging information and it appears to be
16	ultimately worthless when we come down to
17	identifying whether or not we can perform
18	individual dose assessments.
19	Winnowing this down to its
20	absolute bottom essence, does this really boil
21	down to the fact that since we don't have
22	thorium and radon monitoring for internal
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exposure we're hogtied with what we can or can't do? Is that the bottom line?

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3 DR. GLOVER: And that's why Ι emphasized the thorium component. I believe in 4 5 our Evaluation Report we will likely be able б to do at least components of the uranium based 7 on the data that we have. But without the thorium, there are a number of alloys and 8 processes that we do not have anywhere near 9 10 full documentation of the facility to determine all the source terms. And there's a 11 12 number of classified sources as well. So, it 13 was a substantial source term at the facility and we simply have 14 over time, no way to 15 correlate the air sampling data with it. And 16 there's no bioassay, either in vitro or in vivo. 17

18 Now, post-1979 that source term 19 exists. However, with the increased air 20 sampling data, we're not going in and just saying we can't do it. We do want to carefully 21 22 evaluate whether this new data and all the

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1	additional breathing zone samples, whether
2	that gives us a path forward to doing dose
3	reconstruction.
4	MEMBER MUNN: Okay, thanks.
5	CHAIRMAN MELIUS: Dave, then Paul.
6	MEMBER KOTELCHUCK: I wonder, NMI
7	no longer exists, right? As a company.
8	DR. GLOVER: That's correct.
9	MEMBER KOTELCHUCK: And I'm just
10	curious, do you know if that facility or
11	did it come across that that facility is
12	still in use privately? I'm just wondering
13	about successor companies, not obviously,
14	they're not part of our compensation program.
15	DR. GLOVER: It was cleaned up or
16	is in the process of being cleaned up. It
17	became Starmet. It then became bankrupt. I'm
18	not sure if there's not a small operation on
19	site. I'd have to refresh my memory. I
20	apologize, I didn't
21	MEMBER KOTELCHUCK: No, no, no,
22	it's not necessary. But I just was curious
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sort of how life proceeded after it left the
 government contract.

3 DR. GLOVER: I believe it was 4 abandoned for a number of years. Now, the 5 Massachusetts Department of Health is having б to work on cleaning it up.

7

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MEMBER KOTELCHUCK: Thanks.

CHAIRMAN MELIUS: Paul.

9 MEMBER ZIEMER: The feasibility 10 chart doesn't really give the usual breakdown. 11 I assume it's feasible to do external partial 12 dose reconstructions in the early years. Is 13 that correct, from the film badge data?

believe DR. GLOVER: Ι the 14 15 terminology they use, and it's a little bit of 16 difference. Ι think we put "may be а feasible." Certainly, we're going to use any 17 18 data that people have in their records to do 19 their dose reconstruction, so if their external dose -- I don't know if you would 20 have as much -- we have -- I don't think we 21 22 have a coworker model so to speak.

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ZIEMER: Okay. You have a 1 MEMBER 2 partial external, and you don't have the other 3 components that the badge might have missed. You referred to a little bit of neutron and 4 5 there were -б DR. GLOVER: Enhanced beta 7 radiation from the daughter progeny, so there may be aspects for which we don't have a full 8 9 10 MEMBER ZIEMER: Well, these badges do not include beta? 11 GLOVER: Well, but for, 12 DR. say, 13 extremity dose, or for operations where the C-- they certainly would have beta --14 15 MEMBER ZIEMER: But you would do 16 partials to the extent you could, for externals. 17 DR. GLOVER: Yes, sir. 18 19 CHAIRMAN MELIUS: Gen. 20 MEMBER ROESSLER: So, there was no affiliation with MIT after they once 21 got 22 started. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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DR. GLOVER: So, right, MIT staff -1 2 - it was to segregate all that activity that 3 was at MIT in the Hood Building. And then staff 4 essentially the who were -- that 5 separate company became NMI, if that's what б you mean. And then Nuclear Metals, Inc. 7 actually moved -- changed from the Hood Building out to Concord, but they were no 8 longer associated with MIT. 9 MEMBER ROESSLER: Yes, that's what 10 11 I mean. 12 DR. GLOVER: Yes, ma'am. 13 MEMBER ROESSLER: Okay. CHAIRMAN MELIUS: I don't know if 14 MIT had health physics staff, but I think they 15 16 would. MEMBER ROESSLER: They did. 17 18 CHAIRMAN MELIUS: Yes. 19 MEMBER ZIEMER: Ι think Dr. 20 and I are thinking about certain Roessler people that we know at MIT and wondering why 21 22 this happened. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

1 CHAIRMAN MELIUS: Yes, that was my 2 comment to Paul, when Sam was partway through 3 his presentation, with that. But Ι quess 4 that's a separate issue and so forth. And I 5 was a little bit surprised also how slow they б seem to be responding to some of their 7 inspection reports also. MEMBER ZIEMER: Well, if I could 8 add another comment, I think Josie has 9 а 10 comment, but I assume this was an NRC-licensed facility during those early years. And it's a 11 12 little surprising with the amount of materials 13 they handled that there wasn't some sort of radiation safety staff required to get the 14 15 license. Although, I know in those early days 16 many facilities had people designated as radiation safety officers, and that was 17 а title for somebody who was kind of clerically 18 19 responsible for certain things. 20 GLOVER: I used the term that DR. it was the first time they had a trained 21 health physicist on staff. 22

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1	MEMBER ZIEMER: Right. Exactly.
2	DR. GLOVER: So, they may have had
3	a safety office.
4	MEMBER ZIEMER: Right.
5	DR. GLOVER: They may not have had
6	training in the field.
7	CHAIRMAN MELIUS: Josie.
8	MEMBER BEACH: Sam, I'm looking in
9	the Evaluation Report under your summary of
10	feasibility findings, and for the natural and
11	depleted uranium it says that you're going to
12	reconstruct dose using some monitoring and
13	TBD-6000. Can you kind of explain that? You
14	may have already mentioned it, but what the
15	percentage that you have samples?
16	DR. GLOVER: Is that where we said
17	"may" let's go to
18	MEMBER BEACH: Yes, it says "May be
19	feasible"
20	DR. GLOVER: I don't have that in
21	front of me. I apologize.
22	MEMBER BEACH: "to reconstruct
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internal doses," but it says you're going to use available claimant information and TBD-6000. So, I was just wondering --

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believe 4 DR. GLOVER: Ι it was between the two where it's appropriate. 5 TBDб 6000 would not cover all the operations that 7 they had here. So, we will have to carefully look at what our path forward is. That's why 8 we used the language "may." We have not fully 9 10 developed all the alternate dose reconstruction methods which may be utilized, 11 12 certainly existing bioassay data that can be utilized under existing claimant methods will 13 be used. 14

15 MEMBER BEACH: So, that may be 16 something that we want to look at once you 17 make a determination for that time period it 18 sounds like, from '58 to '79.

DR. GLOVER: Yes, so there will be a -- we will have either a TBD or an appendix for this facility.

MEMBER BEACH: Okay, thanks.

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1	DR. GLOVER: That would have to
2	conclude what we're supposed to do. That's
3	correct.
4	MEMBER BEACH: Okay.
5	CHAIRMAN MELIUS: Any other
6	questions or comments? If not, do I hear a
7	proposal from the Board? Brad.
8	MEMBER CLAWSON: I move that we
9	accept NIOSH's recommendation.
10	CHAIRMAN MELIUS: Okay.
11	MEMBER FIELD: I'll second.
12	CHAIRMAN MELIUS: Second, okay. Any
13	further discussion?
14	MEMBER BEACH: I just wonder if
15	we're going to set up has SC&A been tasked
16	to look at this? Probably not.
17	CHAIRMAN MELIUS: I personally
18	think it's a little early for that. Because
19	they have to do the post-'79 period, and I
20	would think let's wait. I think that would
21	be, at least in my mind, would be more of a
22	priority, and then let's see what the work
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1 plan is from there in terms of doing that. So, 2 I think it's just early to set up a Work 3 Group. It certainly may depend -- the future priority may actually depend on what 4 they 5 decide to do with the '79 to '83 period. б MEMBER FIELD: Jim, there's no 7 petitioner? CHAIRMAN MELIUS: Pardon? 8 9 MEMBER FIELD: There's no 10 petitioner? Thank 11 CHAIRMAN MELIUS: you for reminding me. Is the petitioner on the line 12 and wishes to make comments? 13 This Yes. is 14 MR. WALTZ: Mark 15 Waltz, the petitioner. 16 CHAIRMAN MELIUS: Okay. MR. Borough, 17 WALTZ: In North Massachusetts. would like 18 Т to first. 19 compliment Dr. Glover. I know he and his team 20 there at Oak Ridge had a very intensive task with the scope of information we provided, and 21 22 he and his team have done an excellent job. NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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I'd like to thank Vern McDougall as well as the petitioner counsel, Josh Kinman, for their assistance over this period of time. Again, thank you for your efforts.

5 I can shed some light on some of б the questions raised. One was what happened 7 with the company in its transition from bankruptcy. I am aware that when the company 8 went bankrupt, I think it was around 2001 time 9 10 frame. I may be off on that a little bit. But 11 there representative from Bank of was а 12 America that held the mortgage to oversee the 13 dissolution of the company.

fellow ended up purchasing 14 That 15 the assets of the company, the technology and 16 proprietary information and all that, and he and a small group of employees continued to 17 inhabit the building and operate in the area 18 19 of some beryllium alloy work and some specialty products, powders and so forth, up 20 until perhaps two years ago. I believe he sold 21 off segments of the business or relocated it 22

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or whatever, and they were perhaps in the 2001-on time frame, perhaps 25 employees working at the facility.

have 4 But right now I also а 5 suggestion that since this report is so б exhaustive and really sheds some light on 7 activities that weren't fully appreciated at the company during the '60s and '70s and then 8 into the '80s, that the EPA that is there with 9 10 a team of prior owners of the facility over time to decommission the facility, that the 11 12 reports and information that's been gathered 13 by Dr. Glover and his team perhaps be shared EPA, with the because there 14 was some 15 activities, particularly with the enriched 16 material on thorium, that aren't fully appreciated perhaps by the decommissioning 17 team, and the potential hazards they may face 18 19 in decommissioning the facility. So, I think 20 that suggestion could be useful to them. I do have two questions. One, Dr. 21

22 Glover, in your presentation you note that I

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1	think 19 of the 23 outstanding claims on NMI
2	would be covered by this petition, but it
3	wasn't clear to me. Was that for the '58 to 83
4	time frame or for up until the '79 time frame
5	that you're recommending?
6	CHAIRMAN MELIUS: Sam Glover is
7	coming to the microphone to answer.
8	MR. WALTZ: Oh, okay.
9	DR. GLOVER: That should go through
10	'79 which is the covered which is the point
11	of this particular report.
12	MR. WALTZ: Okay, thank you.
1.0	Another mostion T have for you is when yo
13	Another question I have for you is when we
13 14	were doing our data search, and we have
14	were doing our data search, and we have
14 15	were doing our data search, and we have uncovered the information that the Department
14 15 16	were doing our data search, and we have uncovered the information that the Department of Energy was recycling the spent fuel rod
14 15 16 17	were doing our data search, and we have uncovered the information that the Department of Energy was recycling the spent fuel rod material in the depleted uranium stream, so
14 15 16 17 18	were doing our data search, and we have uncovered the information that the Department of Energy was recycling the spent fuel rod material in the depleted uranium stream, so there were fission products in the depleted
14 15 16 17 18 19	were doing our data search, and we have uncovered the information that the Department of Energy was recycling the spent fuel rod material in the depleted uranium stream, so there were fission products in the depleted uranium that we were unaware of. We just
14 15 16 17 18 19 20	were doing our data search, and we have uncovered the information that the Department of Energy was recycling the spent fuel rod material in the depleted uranium stream, so there were fission products in the depleted uranium that we were unaware of. We just assumed it was textbook-grade depleted uranium

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1	impact, if any, did it have on your
2	evaluation?
3	DR. GLOVER: For the recycled
4	uranium components
5	MR. WALTZ: Yes.
6	DR. GLOVER: Most of the recycled
7	uranium in the stockpile at that time was
8	recycled and not just depleted, and if you
9	look at the munitions, what the Army has
10	utilized, those and this is talking off the
11	cuff. I don't have the report in front of me -
12	- but those also include other products. But
13	I'd have to we didn't go into the details
14	on that. We really focused on some of the
15	thorium aspects, and we would include we
16	have some default values for recycled uranium
17	that could be utilized.
18	We will have to address that as
19	part of the 1979 through '83 report, so that
20	would be really the focus of that when we go
21	into large-scale depleted uranium munitions.
22	I'll make sure that we include that
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1 specifically in our next report.

2 And I did -- I was reminded to be 3 very clear that the Department of Labor makes all determinations on who is eligible who 4 would be included in the SEC. It's just our 5 first estimate of the number of claims that б 7 would be part of that. MR. WALTZ: Sure. Thank you. There 8 was a mention before about the health physics 9 10 staff, and whether or not there was an RSO. 11 And Ι believe [identifying information 12 redacted], [identifying who the was information redacted] in at least the '60s and 13 '70s later became [identifying information 14 15 redacted], I believe in the late '70s. He was 16 interviewed, a telephone interview, and in my discussions with him he commented to me what 17 when he was assigned responsibility, he didn't 18 19 have any formal training, and it was kind of a 20 learn-as-you-go experience for him. And he did the best he could, but there were limitations. 21 22 And, in fact, there was no one with formal

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1 training in health physics in charge of the 2 health and safety program, which is probably 3 responsible for the quality of the program 4 that's been cited in the evaluation. 5 That's all the comments I have. 6 Welcome if anyone has any questions that I

could answer, I'd be more than happy to. Again, thank you for the effort, Dr. Glover, and the whole team.

10 CHAIRMAN MELIUS: Thank you for the comments. Any questions for the petitioner? 11 12 Okay. I don't believe anyone has questions. 13 Now, I would just certainly urge you to keep in touch with Dr. Glover and the NIOSH team 14 15 involved in terms of information. They will be 16 following up and so forth on this. So, anyway, thank you. Appreciate your comments. 17 18 MR. WALTZ: Thank you. 19 CHAIRMAN MELIUS: Thank you, Bill, 20 for reminding me of that. Okay. Any further questions? 21 Ιf 22 not, Ted, do you want to do the vote? **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W.

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1		MR. KATZ: Dr. Ziemer.	
2		MEMBER ZIEMER: Yes.	
3		MR. KATZ: Mr. Schofield.	
4		MEMBER SCHOFIELD: Yes.	
5		MR. KATZ: Dr. Roessler.	
6		MEMBER ROESSLER: Yes.	
7		MR. KATZ: Ms. Munn.	
8		MEMBER MUNN: Yes.	
9		MR. KATZ: Dr. Melius.	
10		CHAIRMAN MELIUS: Yes.	
11		MR. KATZ: Dr. Lemen.	
12		MEMBER LEMEN: Yes.	
13		MR. KATZ: Dr. Kotelchuck.	
14		MEMBER KOTELCHUCK: Yes.	
15		MR. KATZ: Dr. Field.	
16		MEMBER FIELD: Yes.	
17		MR. KATZ: Mr. Clawson.	
18		MEMBER CLAWSON: Yes.	
19		MR. KATZ: Ms. Beach.	
20		MEMBER BEACH: Yes.	
21		MR. KATZ: And Dr. Anderson.	
22		MEMBER ANDERSON: Yes.	
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1	MR. KATZ: So it's unanimous,
2	motion passes, a number of absentee votes to
3	collect.
4	CHAIRMAN MELIUS: Very good. So,
5	I'll now draw your attention to the we
6	should have four letters for review. And I'm
7	going to start in reverse order, but our
8	counsel is approaching the table.
9	Okay. I'm going to start with the
10	site we just discussed.
11	"The Advisory Board on Radiation
12	and Worker Health (the Board) has evaluated
13	Special Exposure Cohort (SEC) Petition 00195
14	concerning workers at the facility owned by
15	Nuclear Metals, Inc. and a subsequent owner in
16	West Concord, Massachusetts under the
17	statutory requirements established by the
18	Energy Employees Occupational Illness
19	Compensation Program Act of 2000 (EEOICPA),
20	incorporated into 42 CFR Section 83.13.
21	"The Board respectfully recommends
22	that SEC status be accorded to, quote, `all
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1	atomic weapons employees who worked at the
2	facility owned by Nuclear Metals, Inc. or a
3	subsequent owner in West Concord,
4	Massachusetts during the period from October
5	29 th , 1958 through December 31 st , 1979 for a
6	number of work days aggregating at least 250
7	work days occurring either solely under this
8	employment or in combination with work days
9	within the parameters established for one or
10	more other Classes of employees included in
11	the Special Exposure Cohort.'
12	"Recommendation is based on the
	"Recommendation is based on the following factors: individuals employed at
12	
12 13	following factors: individuals employed at
12 13 14	following factors: individuals employed at this facility in West Concord, Massachusetts
12 13 14 15	following factors: individuals employed at this facility in West Concord, Massachusetts during the time period in question worked on
12 13 14 15 16	following factors: individuals employed at this facility in West Concord, Massachusetts during the time period in question worked on research and production for materials used in
12 13 14 15 16 17	following factors: individuals employed at this facility in West Concord, Massachusetts during the time period in question worked on research and production for materials used in the production of nuclear weapons. Two, the
12 13 14 15 16 17 18	following factors: individuals employed at this facility in West Concord, Massachusetts during the time period in question worked on research and production for materials used in the production of nuclear weapons. Two, the National Institute for Occupational Safety and
12 13 14 15 16 17 18 19	following factors: individuals employed at this facility in West Concord, Massachusetts during the time period in question worked on research and production for materials used in the production of nuclear weapons. Two, the National Institute for Occupational Safety and Health (NIOSH) review of available monitoring

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to complete individual dose reconstructions 1 2 with sufficient for internal accuracy 3 radiological exposures to enriched uranium, 4 thorium, uranium progeny and thorium progeny 5 to which these workers may have been subjected б during the time period in question. The Board concurs with this determination. 7 "Three, NIOSH determined 8 that health may have been endangered for employees 9 10 at this facility during the time period in question. The Board also concurs with this 11 12 determination. "Based on these considerations and 13 discussion at the December 18th to 20th, 2012 14 15 Board meeting held in Denver, Colorado, the 16 Board recommends that this Class be added to the SEC. Enclosed is documentation from the 17 meeting where 18 Board this SEC Class was 19 discussed. The documentation includes copies 20 of the petition, the NIOSH review thereof, and related materials. If any of these items are 21 unavailable at this time, they will follow 22

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1 shortly."

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Comments? Questions? Okay.

Moving on, this is the Mound 83.14 petition.

5 "The Advisory Board on Radiation б and Worker Health (the Board) has evaluated 7 Special Exposure Cohort (SEC) Petition 00207 concerning workers at the Mound Plant in 8 Ohio under Miamisburg, the 9 statutory 10 requirements established by the Energy Employees Occupational Illness Compensation 11 2000 12 Act of (EEOICPA), Program and incorporated in 42 CFR Section 83.13. 13

"The Board respectfully recommends 14 15 that SEC status be accorded to, quote, `all 16 employees to the Department of Energy, its predecessor agencies and their contractors and 17 subcontractors who worked at the Mound Plant, 18 19 Miamisburg, Ohio from September 1st, 1972 through December 31st, 1972, or from January 20 1st, 1975 through December 31st, 1976 for a 21 number of work days aggregating at least 250 22

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work days occurring either solely under this employment or in combination with work days within the parameters established for one or more other Classes of employees included in the Special Exposure Cohort', close quotes.

б "Recommendation is based on the 7 following factors: individuals employed at the Mound Plant in Miamisburg, Ohio for the time 8 period in question worked 9 on research, 10 development, and production related to nuclear National Institute 11 weapons. Two, for 12 Occupational Safety and Health (NIOSH) review 13 of available monitoring data as well as available process and source term information 14 15 for this facility found that NIOSH lacked 16 sufficient information necessary to complete individual dose reconstructions with 17 sufficient accuracy for internal radiological 18 19 exposures to radon to which these workers may 20 have been subjected during the time period in question. The Board with this 21 concurs 22 determination.

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"Three, NIOSH determined that health may have been endangered for these Mound Plant employees during the time period in question. The Board also concurs with this determination.

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"Based on these considerations and б discussion in the September 18th to 20th, 2012 7 Board meeting held in Denver, Colorado, the 8 Board recommends that this Class be added to 9 10 the SEC. Enclosed is documentation from the meeting SEC 11 Board where the Class was 12 discussed. Documentation includes copies of 13 the petition, the NIOSH review thereof, and any of related materials. Ιf these 14 are 15 unavailable at this time, they will follow 16 shortly."

17MEMBERBEACH:Under that first18bullet you said 83.13; shouldn't that read 14?19CHAIRMAN MELIUS: No.20MEMBER2113?22CHAIRMAN MELIUS: It's always 13.

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1	MEMBER BEACH: Okay.
2	CHAIRMAN MELIUS: We used to
3	include both, but our attorneys advised us
4	that's no longer necessary.
5	MEMBER BEACH: Okay, thank you.
б	CHAIRMAN MELIUS: And we believe
7	them.
8	MEMBER BEACH: Gotcha.
9	CHAIRMAN MELIUS: Okay. Any other
10	comments or questions? Okay.
11	Next I'll do the Weldon Spring.
12	"The Advisory Board on Radiation
13	Worker and Health (the Board) has evaluated
14	Special Exposure Cohort Petition 00143
15	concerning workers at the Weldon Spring Plant
16	in Weldon Spring, Missouri under the statutory
17	requirements established by the Employees
18	Occupational Illness Compensation Program Act
19	of 2000 (EEOICPA) and incorporated into 42 CFR
20	83.13.
21	"The National Institute for
22	Occupational Safety and Health has recommended
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individual dose 1 that reconstructions are 2 feasible for, quote, `all employees at 3 Department of Energy, Department of Energy contractors or subcontractors who worked in 4 any area of the Weldon Spring Plant in Weldon 5 б Spring, Missouri during the applicable covered operational period from January 1st, 1957 7 through December 31st, 1967.' 8 "NIOSH found that it has access to 9

10 adequate exposure monitoring, other information necessary to do individual dose 11 reconstructions with sufficient accuracy for 12 13 members of this group, and therefore a Class covering this group should not be added to the 14 15 SEC. The Board with this concurs determination. 16

"Based on these considerations and 17 discussion at the September 18th to 20th, 2012 18 19 Board meeting held in Denver, Colorado, the Board recommends this Class not be added to 20 the SEC. Enclosed is documentation from the 21 Board meeting where this Class was discussed. 22

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Documentation includes copies of the petition, 1 2 NIOSH review thereof, and related materials. 3 If any of these items are unavailable at this time, they will follow shortly." 4 5 Comments or questions? Okay. Last б but not least here, the United Nuclear 7 Corporation. Advisory Board on Radiation 8 "The Worker Health (the Board) evaluated 9 has 10 Special Exposure Cohort (SEC) Petition 00116 workers the United Nuclear 11 concerning at 12 Corporation in Hematite, Missouri, under the 13 statutory requirements established by the Employees Occupational Illness 14 Energy Compensation Program Act of 2000 (EEOICPA) and 15 16 incorporated into 42 CFR 83.12. "The National Institute for 17 Occupational Safety and Health (NIOSH) 18 has 19 recommended that individual dose 20 reconstructions are feasible for, quote, `all site employees who worked in any area of the 21 22 United Nuclear Corporation, Hematite, Missouri NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS

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site from January 1st, 1958 through December 31st, 1973, and the residual period January 1st, 1974 through July 31st, 2006.' "NIOSH found that it has access to

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adequate exposure monitoring and other information necessary to do individual dose reconstructions with sufficient accuracy for members of this group and, therefore, a Class covering this group should not be added to the SEC. The Board concurs with this determination.

"Based on these considerations and 12 the discussion at the September 18^{th} to 20^{th} , 13 2012 Board meeting held in Denver, Colorado, 14 15 the Board recommends that this Class not be 16 added to the SEC. Enclosed is the documentation from the Board meeting where 17 this SEC Class was discussed. Documentation 18 19 includes copies of the petition, the NIOSH review thereof and related materials. If any 20 of these items are unavailable at this time, 21 they will follow shortly." 22

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1	Okay. Any additional business? I
2	will follow up on to complete the two Work
3	Groups. Loretta had to leave, and also I need
4	to check with John Poston. He had actually
5	expressed an interest in a Work Group, and I
6	want to always get consent before appointing
7	anybody. But I will try to get that done. I'm
8	not sure how long John is away. Okay, so I'll
9	follow up with him and get that.
10	I think we have our meeting
11	scheduled, and I don't believe there's any
12	correspondence. I'm not aware of any pending.
13	And I think we can do I hear a motion to
14	adjourn?
15	MEMBER ZIEMER: So moved.
16	MEMBER CLAWSON: Motion to adjourn.
17	MEMBER BEACH: Second.
18	CHAIRMAN MELIUS: Okay. Note Dr.
19	Ziemer made the motion, Josie seconded it.
20	Brad was a close third, and we'll see
21	everybody in Oak Ridge.
22	Oh, yes, Ted, the last Mound
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letter I will circulate around when I receive 1 that back from our counsel's office, so you're 2 3 aware of it. The action stands so I think we're set. It's just making sure the wording 4 5 is coordinated with the Department of Labor. б You need to turn the mic on. MS. LIN: Dr. Melius, I think we're 7 ready to present a letter here, and we can 8 all the conclude Board business. And if 9 10 there's any more language that needs to be revised, then we'll bring it back to the Board 11 12 for your approval. 13 CHAIRMAN MELIUS: Okay. MS. LIN: If that's okay. 14 15 CHAIRMAN MELIUS: Yes. If everyone 16 could just wait a second, hold the adjournment in abeyance. Someone gag the parliamentarian 17 18 quickly. 19 (Laughter.) 20 CHAIRMAN MELIUS: And you'll have to bear with me. You'll have to listen to 21 22 This is the other Mound. And I will this. **NEAL R. GROSS** COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

still circulate the final, but --

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2 "The Advisory Board on Radiation 3 and Worker Health (the Board) has evaluated 4 Special Exposure Cohort Petition 0090 at the 5 concerning workers Mound Plant in б Miamisburg, Ohio during the period from March 1st, 1959 through December 31st, 2007, under 7 the statutory requirements established by the 8 Employees Occupational Illness 9 Energy Compensation Program Act of 2000 (EEOICPA) 10 incorporated into 42 CFR 83.13. 11

National "The Institute for 12 13 Occupational Safety and Health (NIOSH) has recommended that individual dose 14 `all 15 reconstructions are feasible for 16 employees of the Department of Energy, of Energy 17 Department contractors or subcontractors who worked in any area of the 18 19 Mound Plant in Miamisburg, Ohio during the period from March 1st, 1959 through December 20 31st, 2007, except for the workers covered in 21 the approved SEC 00171 and the approved SEC 22

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1 00207.' Close quote.

2 "NIOSH found it has access to 3 adequate exposure monitoring and other information necessary to do individual dose 4 5 reconstructions with sufficient accuracy for б members of this group and, therefore, a Class 7 covering this group should not be added to the SEC. The Board with this 8 concurs determination. 9

"Based on these consideration and 10 discussion in the September 18th to 20th, 2012 11 Board meeting held in Denver, Colorado, the 12 Board recommends this Class not be added to 13 the SEC. Enclosed is the documentation of the 14 15 Board meeting where this SEC Class was 16 discussed. Documentation includes copies of the petition, the NIOSH review thereof, and 17 related materials. If any of these items are 18 unavailable at this time, they will follow 19 20 shortly."

21 So, basically, it's the original 22 petition minus what we -- and it's a little

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complicated because they actually consolidated some petitions there, so we have an earlier time period that is covered. Yes, Paul.

MEMBER ZIEMER: If I might make one 4 comment, a bit of concern as I hear these 5 words for the first time. But the exclusion of б 7 this group expressed in terms of the other groups, I want to make sure that if there's 8 someone that lacks the 250 days in the other 9 10 groups would still be able to pick up the rest in this. It sounds like if they're already --11 12 I quess if they're already in the other group 13 they already have their 250 days, so maybe it -- yes, I'll withdraw that. 14

15 CHAIRMAN MELIUS: Yes, I think --16 Jenny and I talked about this, and I think one of the things we want to make sure is that 17 language coincides with Department 18 the of 19 Labor language so that we're not inadvertently 20 a problem like that. So, Ι causing think that's most likely the change that would take 21 22 place.

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61 1 MEMBER ZIEMER: No, I think it's 2 not a problem. 3 CHAIRMAN MELIUS: Yes. 4 MEMBER ZIEMER: Now that I heard 5 what I had to say. б CHAIRMAN MELIUS: Well, when I'm 7 reading the letter I found another error, too, but -- threw an extra state name in there, but 8 that's okay. But yes, I think that's 9 the 10 issue. The discussions -- these letters are actually harder in some ways to write than --11 12 especially when it's a long history like 13 this, than others, and you throw in an 83.14, and so forth, so we do that. But, again, I 14 15 will circulate what we finally do. And then 16 you can call me up and talk about it again, and we can go through it. 17 Okay. I think we can go ahead and 18 19 adjourn now. 20 (Whereupon, the above-entitled matter was adjourned at 9:30 a.m.) 21 22 NEAL R. GROSS COURT REPORTERS AND TRANSCRIBERS 1323 RHODE ISLAND AVE., N.W. (202) 234-4433 WASHINGTON, D.C. 20005-3701 www.nealrgross.com

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