

DCD/DCB

MAY 19 1992

R

MEMORANDUM FOR: Region III Files

FROM: Roy J. Caniano, Chief, Fuel Facilities and  
Contaminated Sites Section

SUBJECT: APRIL 21, 1992 PUBLIC MEETING REGARDING  
COMBUSTION ENGINEERING, HEMATITE, MO  
LICENSE NO. SNM-33  
DOCKET NO. 070-0036

On April 21, 1992, a Public meeting was held at the Jefferson College, Hillsboro, Missouri, to discuss the consolidation plans for Combustion Engineering. This meeting was held at the request of Mrs. Martha Dodson, a private citizen with interest in the Combustion Engineering site. Approximately 75 people were present in the audience for the meeting. Participating in the meeting from the NRC were myself, Charles E. Norelius, John Hickey, and George France. The principal participant from the licensee was James Rode, Plant Manager; however, other Combustion Engineering management personnel were also present. Attached to this memorandum is a copy of the transcript from that meeting. Although there are some typographical errors in the transcript, the overall document is an accurate representation of the meeting. As can be seen in the transcript there were a limited amount of questions on the actual consolidation plan. One issue which did arise at that meeting pertained to a request for the establishment of a Public Document Room in the vicinity of Hematite, Mo. This matter will be pursued by Mr. Hickey.

Prior to the meeting, the aforementioned NRC staff members visited the Combustion Engineering site for a tour and general discussions of plant operations. The tour was headed by Mr. James Rode. During discussions with the licensee, the NRC staff was provided with a general overview of planned activities at the site. The licensee also offered an invitation to NRC staff members to visit the Combustion Engineering, Windsor, CT facility to observe a pilot fuel fabrications system similar to one which will be utilized at Hematite, MO. The NRC staff indicated that such a visit would be beneficial.

050124

L-69

111  
IE07

Combustion Engineering

- 2 -

MAY 19 1992

Subsequent to this meeting, feedback received from licensee representatives was that the meeting was positively received by the audience.

Attachment: As stated

Roy J. Caniano, Chief,  
Fuel Facilities and  
Contaminated Sites Section

cc w/attachment:  
DCD/DCB/RIDS  
License File SNM-33  
C.E. Norelius, RIII  
J. Strasma, RIII  
G. France, RIII  
J. Hickey, NMSS

cc w/o attachment:  
J. A. Grobe, RIII

RIII

Caniano/dh

05/18/92

PUBLIC MEETING

April 21, 1992

Place: Jefferson College

Hillsboro, Missouri

Present:

Nuclear Regulatory Commission:

Charles Norelius

John Hickey

Roy Canniano

George France

Combustion Engineer, Asea Brown Boveri:

James Rode

Hillsboro Reporting Company

P.O. Box 485

Hillsboro, Mo. 63050

789-2684

WJA  
CE 5/11/92

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25

HILLSBORO REPORTING COMPANY

P.O. BOX 485

HILLSBORO, MISSOURI 63050

789-2684

1                   MR. NORELIUS:     Good evening. My name is  
2 Charles Norelius and I'm the director of the Division of  
3 Radiation Safety and Safeguards in N.C.R. Region Three's  
4 office located near Chicago. The purpose of our meeting  
5 tonight is to provide you with information regarding the  
6 proposed construction of a new fuel rod and bundle assembly  
7 building at Combustion Engineering's facility here in  
8 Hematite. These operations, which are now being carried  
9 out principally in their Windsor, Connecticut plant are to  
10 be transferred to Hematite and consolidated as part of a  
11 planned program for fuel manufacturing operations here at  
12 Hematite. We are aware of the public's interest of  
13 activities that occur at the Hematite facility. We held a  
14 public meeting previously in this room in August of 1989 to  
15 discuss a previous expansion of the operations at the plant  
16 and some months ago Mrs. Martha Dodson of this area  
17 requested that we conduct a similar public meeting and that  
18 is why we're here tonight. I have several people from our  
19 staff here to participate in the meeting from the N.C.R.  
20 staff Chicago. I'll introduce, first, to my immediate left  
21 is George France. George is our principal project inspector  
22 for the plant here in Hematite and he's been inspecting down  
23 here for, I believe, about eight years, right, George? So  
24 he's very familiar with the activities and has followed them  
25 closely over several years. To George's left is John

1 Hickey. John is out of our Washington D.C. headquarters.  
2 John is the chief of the fuel cycle safety branch and he has  
3 the responsibility for the licensing of the plant here and  
4 will be talking about some proposed changes. And those  
5 amendments will have to be, those changes that are proposed  
6 will have to be reviewed by Mr. Hickey and his branch and  
7 he'll be describing a bit of how they do that in terms of  
8 licensing activities. And to his left is Roy Caniano. Roy  
9 is also from our office in Chicago. Roy is chief of our  
10 fuel facilities and contaminated site sections. He has  
11 overall responsibility for inspection here and Roy will be  
12 describing a little later on our inspection process and how  
13 that applies here. The combination of licensing and  
14 inspection are the mechanisms that the N.C.R. uses to assure  
15 that proposed uses of radioactive material can be carried  
16 out with due regard for public health and safety. We want  
17 to note that in the near future you will start to see some  
18 construction of the new facilities where the new work is  
19 going to be conducted. But we want to make it clear that no  
20 radioactive materials can actually be used there until such  
21 time as the company submits to us an amendment describing  
22 the process and we approve that process. So that has to be  
23 done before actual work with radioactive materials can be  
24 done, can be carried out there. Recognizing that the  
25 project is in its early stages tonight we can only describe

1 what is planned to be done and our process for approving it.  
2 Upon completion of construction and after approval of the  
3 operations we from the N.C.R. will be available for another  
4 meeting, if there is public sentiment to do so. And the  
5 company has also indicated to us a very strong willingness  
6 and desire also to participate in the second meeting, if  
7 that is so indicated. We are what we plan to do this  
8 evening is first to have a presentation from the Combustion  
9 Engineering plant manager here at Hematite, Mr. James Rode,  
10 and he will discuss the proposed changes at the facility.  
11 After his presentation we will allow some time for questions  
12 or comments and after we do that for awhile then we from the  
13 N.C.R. will describe our licensing and inspection process  
14 and after that we will take additional questions. So with  
15 that, I will turn it over to Mr. Rode.

16 MR. RODE: I'm happy to be here to talk to  
17 you about one of my favorite topics, the Hematite plant. It  
18 has a rich history and I would like to share a few of the  
19 highlights with you. The plant was built in 1956. It's the  
20 first commercial nuclear fuel plant in the world. I was  
21 part of the start up team. We started the plant with  
22 thirteen employees in 1956 primarily producing development  
23 quantities of uranium for everyone with visions of a future  
24 powered by nuclear reactors and a desire to participate in  
25 that growing future. During the next eighteen years the

1 plant was involved in supplying everyone in the nuclear  
2 industry. Although the operations were entirely  
3 commercial, much of our production was associated with  
4 defense programs. Much of our work was classified. This  
5 earned us a reputation for secrecy. The reputation for  
6 secrecy remains with us today, though, we are happy to  
7 discuss our operations with the public and have conducted  
8 many public tours during the last five years. Perhaps this  
9 meeting will remove some of the mystery from our operations  
10 and some of the concerns that the public has. In 1974  
11 Combustion Engineering purchased the Hematite plant and  
12 terminated the processing of all high enriched uranium. The  
13 plant work force then had grown to fifty-six employees.  
14 They were redirected exclusively to the production of fuel  
15 for the utility power market. Companies like Union  
16 Electric. In the spring of 1980 Combustion Engineering  
17 began an aggressive modernization program which resulted in  
18 the transfer of fuel pellet production from Connecticut to  
19 Jefferson County. Our employment at the start of this was  
20 seventy-eight. When A.B.B. assumed control in 1990 our  
21 employment had increased to a hundred and five. Then by the  
22 end of our modernization program our employment has  
23 increased to a hundred and sixteen. Now we're undertaking a  
24 consolidation program that will bring additional jobs to  
25 Jefferson County. We expect to have an employment of a



1 hundred and sixty-five in 1993. One thing remains constant  
2 over the thirty-six year history, change. The fuel design,  
3 the specification processes and equipment used for  
4 manufacturing have all changed resulting in higher  
5 productivity, safer operations. The regulatory requirements  
6 have also changed providing the driving force for constant  
7 improvements in our operations. Operations in our industry  
8 that could not or would not adapt to the changing  
9 environment have passed away with the dinosaurs. The  
10 Hematite plant has, however, evolved right along with the  
11 changes in the industry and we're bringing new jobs to the  
12 area. A few years ago our business was focused solely on the  
13 U.S.. In the 1990's our business focus, like many others,  
14 has changed. We're in a worldwide business in every sense  
15 of the word. Today our supplies of enriched uranium and  
16 equipment come from around the globe. Our competition for  
17 business here and overseas is not limited to U.S. companies.  
18 It is our intent to provide a world class plant for the  
19 production of nuclear fuel here in Jefferson County so we  
20 can remain competitive in the market. Our plant site is  
21 centered in a hundred and fifty-five acre plat of ground in  
22 the valley of Joachim Creek. The plant site itself consists  
23 of about ten acres. The area under roof is about eighty  
24 thousand square feet at this time. We're expecting that  
25 consolidation will add fifty percent to the area under roof.

1 With the existing plant here, the new rod load and assembly  
2 building will be added here next to the creek and this will  
3 be a parking lot where shipping containers will be stored  
4 behind the plant. It's our anticipation that we will  
5 provide landscaping along the front and along this side to  
6 seal the plant from the road. We're planning to construct  
7 an automated fuel assembly or if you prefer, as people of  
8 the planning and zoning commission referred to it, a  
9 packaging facility in the plant which will add about fifty  
10 jobs. Prior to modernization efforts in 1989 the Hematite  
11 plant received uranium as a solid in steel containers. The  
12  $UF_6$  was converted to  $UO_2$  powder and the powder was shipped  
13 to the Connecticut facility for production of pellets and  
14 later for packaging in fuel rods and then into fuel  
15 assemblies. Today we have added the processing of pellets  
16 and we are today shipping finished pellets to Connecticut.  
17 It is our plan to transfer the loading of pellets and to  
18 ship it in the future in shipping cages directly to the  
19 utilities. The converse process which we now operate  
20 results from the reaction of steamed ammonia and uranium,  
21 hexafluoride, which are mixed in hot fluidized beds. The  
22 product is  $UO_2$  powder. The product gasses are passed  
23 through a bed of crushed limestone to remove the acid. The  
24 remaining gasses, steam and carbon dioxide are released to  
25 the environment. The uranium dioxide is then milled and

1 blended, pressed, sintered, ground to dimensions and  
2 inspected . The inspected pellets will be loaded into metal  
3 tubing, sealed by welding, assembled into fuel cages,  
4 inspected and sealed for shipments to our customers,  
5 American nuclear utilities. I believe the planned  
6 consolidation work at Hematite is the usual win, win  
7 opportunity. A.B.B. Combustion Engineering will have a more  
8 efficient fuel production operation with all your uranium  
9 operations located in a single site here in Jefferson  
10 County. Jefferson County will reap the benefits of  
11 additional employment and additional tax base with virtually  
12 no affect on the environment. Be happy to answer any  
13 questions. You want to take over?

14 MR. NORELIUS: If someone has questions,  
15 we're relatively a small group so I would just as soon keep  
16 it somewhat informal but what I would ask is that if you  
17 have a question, we ask that you give your name and home  
18 town where you live and then if you have a question or want  
19 to make a comment, either one, you're welcome to do so.  
20 Yes, sir.

21 DENNIS WARDEN: Dennis Warden.

22 MR. NORELIUS: A little louder, please?

23 DENNIS WARDEN: What do you do with your  
24 waste water?

25 MR. NORELIUS: Could you give your name,

1 again, please?

2 DENNIS WARDEN: Dennis Warden from Hematite.

3 MR. NORELIUS: Okay.

4 MR. RODE: Our waste water, it goes through a  
5 sanitary treatment plant and is then treated to conform to  
6 the Missouri D.N.R. requirements and discharged.

7 DENNIS WARDEN: Discharged where?

8 MR. RODE: Down stream from our pond.

9 DENNIS WARDEN: You have a pond and not a  
10 tank? What I'm saying is the conduit or in the dirt or just  
11 a pond?

12 MR. RODE: We discharge in the stream from  
13 the spring that flows down to Joachim Creek after treatment  
14 in the sewage plant.

15 DENNIS WARDEN: You don't contain it very long  
16 in the pond or anything like that before you send it out?

17 MR. RODE: You realize I'm talking, I  
18 understood your question to be addressed to our sanitary  
19 waste water. Our sanitary waste water is treated in a  
20 sanitary, in an approved sanitation plant and discharged to  
21 the stream. Now that is not, has nothing to do with the  
22 processing.

23 DENNIS WARDEN: What do you do with the  
24 processing water for your cooling and that?

25 MR. RODE: Okay. Our processing water is

1 evaporated, concentrated and fixed with steam and shipped to  
2 burial grounds. We do not generate a great deal of water,  
3 however, our process is a dry process for the conversion of  
4 UF6 to pellets. We are feeding gas, gasses into a fluidized  
5 bed reactor and reacting them. We don't have alot of  
6 liquid.

7 DENNIS WARDEN: Now, on the lime, as you are  
8 talking about limestone you were forcing the water through  
9 the limestone as a filter earlier.

10 MR. RODE: No, that's gasses--

11 DENNIS WARDEN: What do you do with the  
12 limestone after you get done with it? Do you have to change  
13 it every year or so?

14 MR. RODE: The limestone, we take a sample  
15 of, charge of limetone. We mill it to a fine powder and  
16 then count it to determine if there is any significant  
17 activity associated with it. After that we are storing it,  
18 we expect that we will receive permission to use it as fill  
19 material on site. The general level of it is only slightly  
20 above background and well within the deminimus quantity,  
21 deminimus concentrations which are spelled out at this point  
22 in the regulations.

23 MAURICE NUCKUS: My name is Maurice Nuckus. I  
24 live within five feet of the plant and first I want to  
25 compliment Mr. Rode on the way he keeps the outside grounds

1 and the plant and we hope he don't retire for along time.  
2 Second, my question is addressed to Mr. Rode, I would like  
3 to know how many fans there will be on top of the plant and  
4 how much emissions there will be from this new plant?

5 MR. RODE: Our current plans are not to have  
6 any blowers on top of the plant in the future. There will  
7 be a separate building. There will be one additional blower  
8 and filter and that will be housed within the building. We  
9 have had some difficulties with our filtration systems when  
10 we put them on the roof. We have found it far more  
11 practical to house it indoors and I'm sure our neighbors  
12 feel the same way about it because I have heard comments  
13 that the number of blowers that we have are becoming a  
14 source of quite a bit of noise in Hematite. We're sensitive  
15 to that but we're also sensitive to the fact that having our  
16 filters and blowers out of doors presents a major problem to  
17 our maintenance staff in keeping them operational,  
18 particularly in colds weather. You may not appreciate it but  
19 our people do.

20 MR. NUCKUS: How much emissions will there  
21 be from this?

22 MR. RODE: It's hard to say what the  
23 emissions will be. We, based on our experience in the  
24 addition of the pellet plant, there will be very little  
25 increase and we expect to upgrade the rest of our plant

1 sufficiently so that there will probably be no increase,  
2 most likely a decrease in emissions as a result of this. We  
3 can't say that with certainty but that appears to be the  
4 case based on our experience with the previous work on  
5 expanding the pellet plant.

6 MR. NUCKUS: Thank you.

7 MR. NORELIUS: Any other questions?

8 MARTHA DODSON: I'm Martha Dodson. I'm from  
9 Crystal City. Mr. Rode, you said that you filtered  
10 everything through these limestone filters; is that correct,  
11 and the remaining gasses are released to the atmosphere.  
12 Could you tell us exactly what those remaining gasses are?

13 MR. RODE: I skipped over that. Primarily  
14 we are dealing with steam and carbon dioxide. It is not  
15 filtered through the limestone exactly. The purpose of the  
16 limestone is the acid reacts with the limestone and the  
17 limestone neutralizes the acid forming, converting some of  
18 the rock to calcium flouride, which is a naturally occurring  
19 mineral of, the pharml mineral is flourispar. There is  
20 some hydrofluoric acids remaining in off gas stream,  
21 however, I would point out that that's really not the  
22 subject of the license amendment that will be submitted that  
23 is subject of our current operating license rather than any  
24 change at this point.

25 MARTHA DODSON: Oh, I understand that.

1 MR. NORELIUS: Yes, ma'am.

2 BEVERLY WARDEN: My name is Beverly Warden  
3 from Hematite and I was wondering if it would increase the  
4 traffic on P Highway? Are we going to have alot of trucks  
5 coming out that way or is it going to be done mostly by  
6 rail?

7 MR. RODE: We have probably close to as much  
8 traffic today as we have in the future. It will be  
9 distributed a little differently. Right now we are shipping  
10 products weekly or several times a week in this case. When  
11 we ship fuel to utilities it will probably be bunched  
12 because they schedule an outage and want the fuel delivered  
13 in a relatively short period of time. The overall affect  
14 probably will be minor, though, you are not talking about  
15 that many trucks, to be perfectly fair about it. The trucks  
16 that you see are probably quite large and they can be a  
17 problem but that is, that does not represent a change from  
18 what the situation is today really.

19 BEVERLY WARDEN: I have one more concern and  
20 if something would happen, like to give an example, in the  
21 past we tried to get home and we were stop at the  
22 intersection of A and P and all we were told is that they  
23 had a nuclear accident. Our children were at home, that's  
24 all we could be told. We had to go back in town and call  
25 them. Is there going to be any kind of alarm system if



1 something would happen we would have the decision, rather  
2 than to leave or to stay we would have that option. I mean,  
3 I understand in the past it wasn't, supposedly it wasn't  
4 anything really emitted but I think we should have the  
5 option or some kind of an alarm system, if you have any  
6 plans to have that? Some kind of a siren or something you  
7 could blow in case there would be an accident?

8 MR. RODE: Well, ma'am, there is an alarm on  
9 our plant that some of our neighbors can hear, I'm sure.  
10 The problem is that under most, under the conceivable  
11 accident scenarios generally it would not be warranted and,  
12 in fact, would not be wise for you to leave your home. You  
13 would be better off to stay in your home rather than to be  
14 exposed in the course of trying to get out of the area. And  
15 I believe this has been discussed. Some of the people from  
16 the N.C.R. might like to comment on that but I doubt that  
17 you would get out before a problem got to you and most of  
18 the problems that would occur would be over very quickly.  
19 It would be hard for you to avoid the problem. We are not  
20 talking general. This is not bombs that we are dealing  
21 with. This is not something that is that catastrophic and  
22 you would generally be better off to stay in your home.

23 BEVERLY WARDEN: For how long when we don't  
24 know what is going on. I mean, we didn't, the people that  
25 were at home didn't even know anything about it. We knew

1 about it because we tried to get home and we were stopped  
2 but, I mean, we wouldn't be notified until it was evening.

3 MR. NORELIUS: Maybe I can comment a bit  
4 from our perspective for emergency planning purposes. We  
5 have one type of plans that we would require, for example,  
6 at a nuclear power plant and in that case we would require a  
7 detailed emergency plan, which would include sirens and plan  
8 for evacuation and this sort of thing. The problems at the  
9 Hematite facility are much different than that and there is  
10 not, what we call a source term there, sufficient quantities  
11 of radioactive materials that we could see being released in  
12 an accident that would warrant that kind of an emergency  
13 plan. So the emergency plans that we require for a plant  
14 such as this one are very similar to what would be required  
15 under any normal kind of fire and police action, if you  
16 will. If you have a fire in a local area, the local fire  
17 department and police department would normally determine  
18 what is the best action to take. In other words, if there  
19 were a major fire at a location they might determine which  
20 roads to block off, whether people should be in the  
21 immediate vicinity or not. And so the plans that we require  
22 for this plant are more along that nature that we believe  
23 can be best handled through the normal actions of local  
24 police and fire department. Now, the plans do require that  
25 the plant provide information and guidance and training to

1 the local police and fire departments to help them  
2 understand what is there, okay. Any other questions for Mr.  
3 Rode?

4 MARTHA DODSON: I have one more. Mr. Rode  
5 said that with the expanded plant that the rods would be  
6 packed and would be shipped to the customers. How does that  
7 shipping occur? Is it all truck or is there rail involved  
8 and then there is a follow up question.

9 MR. RODE: You have that slide of the truck  
10 with the shipping cages? This is what the truck looks like  
11 and these are the shipping cages. They are required to meet  
12 the same impact, fire emersion standards as our present  
13 oxide shipping cages. They additionally have another level  
14 of containment beyond that which we have currently on our  
15 pellets. This is the kind of fuel assembly that we will be  
16 shipping inside those shipping containers. If you imagine  
17 this thirteen feet long, this is what those tubes look like  
18 so you have all of the activity encased within a rod, in  
19 addition that is within the shipping container itself.

20 MARTHA DODSON: Okay. From Hematite to  
21 customer's truck or is there rail involved?

22 MR. RODE: It is by truck.

23 MARTHA DODSON: No rail?

24 MR. RODE: No rail.

25 MARTHA DODSON: And when I visited with you

1 we discussed that you're supplying fuel to Yankee Ray.  
2 Yankee Ray is no more.

3 MR. RODE: That's true.

4 MARTHA DODSON: I wonder we talking about  
5 export here?

6 MR. RODE: We are not generally talking  
7 about export. There is a possibility of export in the  
8 future. Primarily I think we have potential commitments to  
9 one customer in Korea. That is not firm business. I don't  
10 know how actively we are pursuing for other firm business  
11 but there is a possibility that it would be pursued. It's  
12 hard. We are participating in a worldwide market which is  
13 changing very rapidly. The changes are not all initiated by  
14 our company. We have to respond to the market place.

15 MARTHA DODSON: Surely appreciate that and  
16 your company is multi-national. Then a question, follow up  
17 question to N.C.R., someone on the N.C.R.. There were  
18 previously and I'm not sure of dates, whatever, there were  
19 previously regulations against the exportation of uranium.  
20 What changes have occurred?

21 MR. HICKEY: I think, I'm John Hickey again  
22 from N.C.R. headquarters in Washington. I'm not sure what  
23 changes you are referring to. There are restrictions on  
24 export of enriched uranium and they are designed to keep the  
25 uranium from falling into the hands of unfriendly

1 governments, so to speak. And A.B.B. would be expected to  
2 abide by those regulations. But there are people supporting  
3 nuclear fuel now so it wouldn't be an unprecedented type of  
4 operation.

5 MARTHA DODSON: Thank you.

6 MR. NORELIUS: Okay. Any other questions  
7 for Mr. Rode at this point?

8 HERB BEALEY: It's not a question, my name is  
9 Herb Bealey and I'm from A.B. & B. and I would like Mr. Rode  
10 to explain to them the advantages of sending the bundles out  
11 as opposed to sending out the individual shipments that we  
12 are talking about before they go into the bundles.

13 MR. RODE: Well, as I pointed out one of the  
14 major advantages is that you have another level of  
15 containment within the fuel rods. A matter of a few months  
16 ago there was an accident not involving a cage of the type  
17 that we will be using, that occurred in Massachusetts, I  
18 believe. And there was a major fire, the fire department  
19 did not attempt to extinguish it but there was no loss of  
20 any activity from the fuel because the fuel rods themselves  
21 retained all of the activity within the fuel assembly, even  
22 though in that case I believe the shipping cages were wooden  
23 shipping cages and our shipping cages are not wooden cages.  
24 They are designed to withstand fire and impact.

25 MR. NORELIUS: Okay. I believe we will

1 move on and I will ask John Hickey to come and describe our  
2 licensing process and reviews that we do there and then  
3 we'll talk about the inspection process and then we'll have  
4 an opportunity for some more questions after that. John.

5 MR. HICKEY: Thank you, Chuck. What I  
6 would like to do very briefly is just go over the N.C.R.  
7 review procedures. As Chuck mentioned, I'm chief of the  
8 fuel cycle branch and I'm from N.C.R. headquarters in  
9 Washington. The remainder of our contingency is from our  
10 Chicago office. We have not received the license  
11 application yet for this particular addition and as Chuck  
12 mentioned they will not be allowed to process nuclear  
13 material in the facility. They have applied for an  
14 amendment and are successful in gaining the amendment and I  
15 would like to explain how that procedure works. When they  
16 submit the application we conduct, we break our review, for  
17 convenience of terminology into two parts. One we call the  
18 environmental review and the safety review. And there is  
19 some overlap. The environmental review is concerned more  
20 with off site impact, although, there is some consideration  
21 of on site impact, the traffic and the amount of land that  
22 is taken up. But we also look at emissions and waste  
23 generation and what is going to happen to the waste and  
24 whether there is any increase emissions or what emissions  
25 will come from the new facilities and also what the

1 incremental affects will be over and above the existing  
2 facility. We take into account the total impact of the  
3 entire plant, if they do add on to the plant. The safety  
4 review is more concerned with what happens on site  
5 protecting the workers from radioactive contamination,  
6 inhalation of radioactive material that might be in the air  
7 but it's also concerned with off site impact in terms of  
8 what liquid might be released from the facility and people  
9 asked about airborne emissions and what airborne emissions  
10 will result and what the radiological impact might be off  
11 site. Some specific examples would be we would look at  
12 their ventilation and infiltration systems to make sure the  
13 air is safe both what the workers are exposed to in the  
14 plant and the air that is released off site. Another  
15 example would be a criticality safety review. A criticality  
16 accident can occur if too much uranium or fuel is brought  
17 together in a small volume, a large mass in a small volume  
18 you can have what is call a criticality accident, which  
19 emits a large dose of radiation and can even cause a fatal  
20 accident. And we can, the licensee has to have procedures  
21 in place to make sure the uranium is kept in small amounts  
22 separated so that that type of an accident cannot occur. So  
23 overall with the review looks at the procedures and the  
24 equipment that the licensee has in place to make sure there  
25 are no safety or environmental problems. We also look at

1 the people that are working in the plant and their  
2 qualifications and we will do, although, in this case we  
3 already, since there is already a plant there we already  
4 know alot about the people and the qualifications. Now,  
5 after we do the initial review we will have questions and  
6 concerns that we will bring to the licensee and we may have  
7 meetings. If we do, they are open to the public. They  
8 won't be conducted in this manner but they will be open for  
9 observation by the public. And we also generally send  
10 questions, written questions to the licensee and the  
11 licensee is expected to answer those questions to our  
12 satisfaction. And all of that correspondence, all are  
13 ongoing correspondence between us and the licensee is open  
14 to public inspection and the, we have here what we call a  
15 local public document room that correspondence will be  
16 maintained and it's in a local public library. Which  
17 library, is it the Festus Library?

18 MR. RODE: I'm not sure whether there is any  
19 in the local library as opposed to the Washington University  
20 Library, I think there is a depository.

21 MARTHA DODSON: Wash U.

22 MR. HICKEY: I'm sorry, it's the Wash U. local  
23 public document room and, of course, the correspondence is  
24 available in Washington but many of you are not going to  
25 want to go to Washington. Maybe you don't want to go to



1 Washington anyway but if you did, it wouldn't be to look at  
2 this correspondence. And after they have addressed our  
3 questions we conduct what we call our final reviews. We do  
4 an environmental assessment and if our findings are  
5 favorable we publish a federal register notice and that puts  
6 the public on notice that we are about to make a decision  
7 with respect to the safety and environmental impacts of the  
8 addition to the plant. And at that time, as Chuck  
9 mentioned, we would plan on having a public meeting assuming  
10 that there is interest and we would anticipate interest and  
11 we would consider the public comments that we received from  
12 that, that public meeting and any written comments that we  
13 receive and then we would take a final licensing action and  
14 the licensing action is favorable, only then would they be  
15 permitted to introduce radioactive material or process  
16 radioactive material in this building to that's a quick  
17 overview of the process and I think we would like to have  
18 Roy Caniano from our region three office say a few words  
19 about our inspection program and then we will be happy to  
20 take any questions that you may have.

21 MR. CANIANO: Thank you, John. As I was  
22 introduced earlier, I'm Roy Caniano. I'm the chief of the  
23 fuel facility and contaminated site section in the N.C.R.  
24 region three office in Glen Ellyn, Illinois. What I would  
25 like to do is spend a few moments here describing to you our

1 inspection program that we have established at Combustion  
2 Engineering and what some of our plans are for the future  
3 with regards to the inspection efforts. Our inspection  
4 program for Combustion Engineering requires the region to  
5 perform periodic inspections in specific subject areas. I  
6 have listed a few of these areas for you here and I would  
7 like to briefly discuss a couple of the more pertinent ones.  
8 The areas include radiation protection, environmental  
9 protection, management and organizational controls that are  
10 in place at Combustion Engineering, quality assurance  
11 programs, operations review, by that would be mainly review  
12 of incidents, abnormal occurrences that may have occurred  
13 over the inspection period. Nuclear criticality control,  
14 which Mr. Hickey just briefly described. Fire protection  
15 programs that is in place at the plant, emergency  
16 preparedness programs, transportation of radioactive  
17 materials, training and retraining of staff, maintenance and  
18 surveillance testing and waste management. I'll take a few  
19 of these subject areas here and briefly describe  
20 specifically what we would look into. The first one we see  
21 up there is radiation protection. The licensee, Combustion  
22 Engineering, is required to have a radiation protection  
23 program at the plant. This requires periodic monitoring of  
24 the staff that work at the plant for not only the external  
25 hazards that maybe associated with the activities at the

1 facility but also with any internal type of inhalation, say,  
2 for example, and we monitor that program. The whole purpose  
3 is to assure that staff numbers at the plant do not receive  
4 radiation exposure, which are in excess of our limits. The  
5 licensee is also required to do periodic radiation surveys  
6 both internally and external to the plant. They are  
7 required to perform environmental monitoring. I know there  
8 were a couple of questions earlier with regards to the  
9 effluent, what is coming out of the stack at Combustion  
10 Engineering. We will review that licensee's program and not  
11 only will we review it via paper trail mechanism but we  
12 normally will take random samples. We'll actually go out  
13 and take environmental samples, which we would have done in  
14 the past. We will do independent type of surveys, radiation  
15 surveys. The whole purpose for that is that now we are not  
16 just relying on the licensee's results. We are actually  
17 doing a cross examination and submit samples, we'll call it,  
18 to make sure the results in fact are what they say they are  
19 on the record. We also take a look at other areas. Pick a  
20 couple of them over here, transportation, that was another  
21 question that came up. Transportation and waste management  
22 we routinely look at. What do we look at when we look at  
23 waste. We look at the packaging of the waste. We look at  
24 the classification of the waste. We take a look at the  
25 documentation. We will actually examine packages that are

1 on site that maybe ready for transport to make sure that  
2 they were, in fact, labeled properly and they have been  
3 packaged properly. Transportation which maybe going.  
4 Currently some of the pellets that are leaving the plant  
5 right now that are going to Windsor for some of their final  
6 preparation, we will review that documentation and, again,  
7 if available, if there are packages that are there, we will  
8 take a look at those packages. Waste, there was a question  
9 that came up earlier with regards to material that maybe  
10 going into the stream. We have in the past at Combustion  
11 Engineering actually taken samplesm environmental samples  
12 again for assurance that is there no hazards that are being  
13 released into the stream. And that's a program that we have  
14 established and we're going to continue those efforts.  
15 Emergency preparedness, not only do we review the licensee's  
16 emergency preparedness program because in that program they  
17 are required to have periodic drills within the plant  
18 itself. We also in the past have actually participated in  
19 emergency response exercises, in fact, we have participated  
20 to the extent where we have, via playing mechanism,  
21 activated our incident response center back in region three,  
22 where we have actually dispatched various members of our  
23 region three staff, who have come to the site and became  
24 quite familiar with the barns, which are right along  
25 adjacent to the highway over there. And, you know, again,

1 we plan on doing that again in the future. Other areas that  
2 we routinely look at are training and retraining, very  
3 important aspect of our inspection program. When new staff  
4 comes on board we want to assure ourselves that they have,  
5 in fact, been trained in accordance with our regulations and  
6 in accordance with the licensee's program that they  
7 submitted to the N.C.R. and indicated to us that this is the  
8 mechanism that we are going to our employees. So these are  
9 some of the areas that we routinely will take a look into  
10 with regards to the new construction that's anticipated at  
11 Combustion Engineering. One of the areas which we plan on  
12 focusing on, is going to end up being fourth item on there,  
13 which is the quality assurance program. Very key point. We  
14 will review alot of management off site responsibilities at  
15 the plant. What type of quality assurances, what programs  
16 do the have in place. Again, it's for the protection of the  
17 employees, the environment, etcetera. In recent times sime  
18 of our inspection efforts ave changed. In the past we did  
19 in my mind a lot of compliance type inspections. We have  
20 changed that philosophy. The focus now is on safety  
21 inspections, the emphasis is on safety. It's our  
22 performance based inspections. That require our inspectors,  
23 when they go to a plant, they can easily sit down and review  
24 records and they usually should be able to get a feel of  
25 what the licensee's performance is. We're expanding that a

1 little bit right now. What we routinely do now is we get  
2 into the plant, actually observe operations, routine and  
3 non-routine type of operations. We talk to more people when  
4 we review a record and we see that the licensee indicated an  
5 X amount of release to the environment for the month of  
6 March, 1992, for example. We don't just rely on that.  
7 We'll go talk to the people who generated the record, how  
8 did you actually come up with this data. We're attempting  
9 to do more split sampling with licensees. Again, as I  
10 previously mentioned if a licensee takes an environmental  
11 sample outside the plant perimeter and indicates that there  
12 was no presence of radioactive materials there, we have in  
13 the past and we plan on continuing taking those  
14 environmental type of samples and again it's an additional  
15 assurance for the N.C.R. and I think to the public of the  
16 operations of the plant. Our principal goal in performing  
17 these inspections is to assure the protection of employees  
18 and members of the general public and the environment from  
19 the radiological hazards that are associated with plant  
20 operations. These inspections at least that region thru  
21 conducts at the site are performed at varying frequencies.  
22 We may not necessarily in one inspection trip cover each of  
23 the areas that are on the overhead. Our own region three  
24 inspector, George France, is responsible for performing the  
25 on site inspections at Combustion Engineering. Over the

1 past two years our average inspection effort has been at  
2 least one on site inspection each calendar quarter. In  
3 addition to our own fuel facilities inspector we also rely  
4 on the expertise of others. Just recently, for example, at  
5 Combustion Engineering we did a maintenance type of  
6 inspection participation. In that inspection in addition to  
7 Mr. France was someone from our reactor program in region  
8 three who had expertise in the area of maintenance. In  
9 addition, we have also invited and a few agencies, in fact,  
10 have participated, I should say the outside agencies that we  
11 have invited to participate in our inspection efforts so  
12 that has been on site. I believe, E.P.A. has also been on  
13 site. We make it a point during each of our inspection  
14 activities, in fact, we have a requirement that we must  
15 notify the state of all planned inspections. And we do  
16 provide the state an opportunity, if they wish, to  
17 participate in our inspection efforts. Over the past two  
18 years region three has performed twelve inspections at  
19 Combustion Engineering. These include routine and  
20 non-routine inspections. Non-routine in the event of a  
21 release, in the event of an over exposure, say, for example,  
22 that would need to get reported to the N.C.R.. Those are  
23 some types of examples where we would show up on a  
24 non-routine basis. We have also completed two emergency  
25 response type inspections over the past two years at

1 Combustion Engineering. The results of the inspections so  
2 far for the past two years resulted in two violations and a  
3 few minor areas of concern. We have been pleased with the  
4 licensee's response to the violations. We believe that they  
5 are pro-active in responding and take aggressive corrective  
6 actions to prevent recurrence of violations and/or areas of  
7 concerns. With the expansion proposal that Combustion  
8 Engineering is anticipating that our inspection efforts are  
9 going to continue and we probably are going to enhance our  
10 inspection efforts. This enhancement of our efforts are not  
11 only going to be once operations begin but we feel right now  
12 that we will be reviewing a lot of information with regards  
13 to the licensee's application when they do submit it. We  
14 are planning to perform construction type inspections during  
15 the initial phases. Some of the areas which we feel that we  
16 are going to be reviewing and paying close attention, one,  
17 of course is the quality assurance program that I previously  
18 indicated or mentioned. But the other one is in their  
19 operations. The licensee is going to be required to submit  
20 to us detail descriptions of safety equipment that is going  
21 to be within the new facility. For example, fire protection  
22 equipment, alarm type systems that are going to be placed  
23 in. In ventilation systems what type of filters are going  
24 to be in there. We are anticipating that throughout this  
25 construction phase we will have N.C.R. on site reviewing



1 some, if not all, of those areas. We also feel that during  
2 the construction activities we may again rely on the  
3 expertise from other staff members either from the N.C.R.  
4 and or they could be from outside agencies. Headquarters  
5 staff has also participated in our inspection activity at  
6 Combustion Engineering over the past few years and it's  
7 anticipated that they also will be providing some export.  
8 One of the things that we really want to assure ourselves is  
9 that the information that is provided in the application  
10 that Mr. Hickey and his branch will be reviewing, that the  
11 materials and the equipment will be installed as indicated  
12 in that application. Are there any questions?

13 JERI MCKEE: I have some questions. My name  
14 is Jerry McKee. I'm your neighbor directly to the north.  
15 First question, I like it when you come out and test the  
16 soil but we raise cattle and horses and is there anyway we  
17 can find out the results of the soil testing in words that I  
18 would understand. I mean, you are going, I'm sure I could  
19 probably find them, like you said, all of these are made  
20 public. But you're going to tell me the soil content is  
21 this and this. And we ship cattle to market to people all  
22 over the United States and we're assuming because you never  
23 say it's not safe that they were safe and if the cattle are,  
24 should the cattle be tested? Should the people in Hematite  
25 be tested for radiation? I'm talking about safety

1 conditions for the people that work there. I have lived in  
2 this area for over twenty years and I know have never been  
3 tested.

4 MR. NORELIUS: There are no requirements we  
5 have for testing of individuals or cattle who live in the  
6 area. Our program is placed on what is released from the  
7 plant so the controls that we exercise are two ways. One is  
8 external radiation levels that you can measure with a meter  
9 and the other are radioactive materials that maybe emitted  
10 from the plant. And those are the two things that we have  
11 limits on and that we inspect and so long as the results are  
12 within those limits, there is no need for any additional  
13 testing of individuals or cattle or whatever on the outside  
14 so that's our point of control.

15 JERI MCKEE: Okay. The next question is I  
16 just want a better answer because when they had the small  
17 leak and the traffic was shut down I was outside. My  
18 children were in the house. And it was like several hours  
19 later when we saw all of the news helicopters flying around.  
20 That is scary. Is there some way that we can, I mean, just  
21 give us a phone call and say, hey, look, it's just a little  
22 bitty deal. Traffic has been shut down but it's okay.  
23 Maybe you should tell us what the worst is here, Mr. Rode  
24 says it's going to be too late for you to walk to your house  
25 and get out of here. You're scaring us, people, and if my

1 children are in the home and I'm outside, are you telling me  
2 I'm not going to make it to the house?

3 MR. NORELIUS: No, let me, Mr. Rode, do you  
4 care to respond to that.

5 MR. RODE: Thanks.

6 JERI MCKEE: We just want an answer or phone  
7 call.

8 MR. RODE: Of the situation I was trying to  
9 describe is, and you alluded to it also, that the amount of  
10 activity that would be released is quite small and it is  
11 going to pass super quickly. And it is unlikely that  
12 evacuation from the area will improve anything. It is more  
13 likely to take you into the problem, that is what I was  
14 trying to, the point I was trying to get across.

15 JERI MCKEE: Well, that makes me feel better.

16 MR. RODE: That's the reason that the road  
17 was closed is that there is a relatively short distance from  
18 the area that was a matter of concern to the road where it  
19 passes immediately past the plant. Now, if we had thought  
20 that there was concern for neighbors, we would have a list  
21 of our most immediate neighbors and we have a phone system  
22 to call them.

23 JERI MCKEE: That's what I wanted to know.

24 MR. RODE: We do have that and we do have  
25 wind direction and velocity equipment and when we have an

1 event the instructions are there and the emergency director  
2 is supposed to set up a phone system where he will contact  
3 the immediate neighbors that might be down wind from the  
4 problem.

5 JERI MCKEE: That is what I wanted to know.

6 MR. RODE: However. They are not going to  
7 contact the entire community because there is not going to  
8 be a large enough release that, by the time it has  
9 distributed that it is going to cause a problem.

10 JERI MCKEE: But as your immediate neighbor,  
11 I want, I feel like I would be one of the first ones and,  
12 like I said, if my children are in the house and I'm outside  
13 you kind of left it open there when you said, well, you  
14 might not have time to get to your car.

15 MR. RODE: That isn't quite what I said. I,  
16 what I was trying to imply was that it would be a mistake to  
17 attempt to evacuate because it wasn't likely really that it  
18 was going to help the situation unless you happen to be down  
19 wind and received a call from us warning you and we would  
20 have a far better knowledge of what the situation is and  
21 whether it was advisable than you or probably than anyone  
22 else would. Because we do have the equipment to keep track  
23 of the wind velocity and the direction as well as we know  
24 the magnitude of the release. We tend to be conservative.  
25 That is, we will try and warn people if we think there is

1 any danger. That is the reason that we closed down the road  
2 not because there was a problem but we were concerned that  
3 there might be a, be problems with the road being closed?

4 JERI MCKEE: We found that out like three  
5 days later but until we knew that everybody was really kind  
6 of ify and stepping on egg shells.

7 MR. RODE: Yes, I can understand that. I have  
8 to apologize.

9 JERI MCKEE: No. Well, once, you know, you  
10 understand it there is no problem but it's just until, but I  
11 would like to know, yeah, I mean get a phone call if this is  
12 coming in any direction so I would have time to leave.

13 MR. RODE: You can be sure the McKees are--

14 JERI MCKEE: I don't want it to be for the  
15 McKees, I want it to be for the Lucases and Jacksons and  
16 everybody but I didn't want to die before I got to the  
17 phone.

18 MR. RODE: I understand. We have a map and  
19 we do have phone numbers of the immediate neighbors in the  
20 evacuation center with phones so you can be contacted.

21 MR. NORELIUS: Okay. I believe the  
22 gentleman here, did you have a question?

23 MR. HOWE: No, I was going to refer to the  
24 map that was in the evacuation center. It has the people's  
25 names listed in the general area so that they know where but

1 he already covered that so it doesn't matter.

2 CAROL HOWE: Okay. I have a comment. My name  
3 is Carol Howe. My husband works at Combustion Engineering  
4 and I just want to make a comment. We appreciate our news  
5 media but we also have to remember how frantic they do  
6 become and love to thrive on things like this. So when you  
7 see the helicopters flying in and emergency crews and so  
8 forth from the news media we want to try and focus a little  
9 bit, too, on their job and not let it, not let it scare us  
10 to death.

11 MR. NORELIUS: Okay. Yes, sir.

12 DAVID JARVIS: I live within a thousand feet  
13 of the plant. You were talking about these inspections,  
14 N.C.R. inspections. Are these all planned or do you ever  
15 have any unannounced spot inspections where you come in  
16 un-announced and you take air, water, the measurements and  
17 different sorts of things as far as plants and everything.  
18 Are all of these planned inspections?

19 MR. NORELIUS: We plan them but we do come  
20 in unannounced. From the N.C.R. we plan periodically to  
21 come in and inspect but we do not share that schedule with  
22 the licensee.

23 DAVID JARVIS: You indicate that you share  
24 it with the state each time, that's why I wondered if you  
25 shared it with A.B.B. each time?

1                   MR. NORELIUS:   No, we invite the state along  
2 as a matter of working in cooperation with the state. So we  
3 tell the state agency and invite them to come along, if they  
4 wish, but most of our inspections are un-announced at the  
5 plant.

6                   DAVID JARVIS:   One other question, is there  
7 an air monitor at the plant twenty-four hours a day as far  
8 as monitoring the emissions from this plant?

9                   MR. NORELIUS:   Yes, and we could describe,  
10 maybe you want to describe more of those, Jim?

11                  MR. RODE:    In general the emissions from the  
12 plant from every stack on the plant are monitored. They are  
13 monitored continuously with a few exceptions. The few  
14 exceptions are on stacks which are not always in operation.  
15 Those may not be monitored when that portion of the plant,  
16 when that stack is not in operation. The others are  
17 monitored continuously. They are sampled and counted. One  
18 of the problems that we do run into, though, is that we are  
19 looking for extremely low levels of activity so we have to  
20 wait for decay of some of the materials, which are naturally  
21 occurring so that we get an accurate count and can see how  
22 much of it is due to the operation, due to uranium  
23 specifically. We do monitor them, as I recall, and, Hal,  
24 you may have better numbers than that but my recollection is  
25 that your report is now running several thousand samples per

1 month.

2 HAL: Generally we run about ten thousand  
3 samples per month of air samples, contamination smears, all  
4 types of accounting, about ten thousand a month.

5 MR. NORELIUS: I assume that number, from  
6 what you have said, Hal, is both your internal plant  
7 measurements as well as your effluent, right? Just to  
8 satisfy a bit, we require, again, as part of our licensing  
9 process that they have sufficient detection equipment to  
10 monitor a material that is leaving the plant from wherever  
11 that might be, process stacks or whatever. And they set up  
12 a system, they describe that to us, we would approve the  
13 system as part of the licensing process. Then in our  
14 routine inspections we will sample, look at their records,  
15 make sure the sampling system itself is working and as Roy  
16 mentioned, periodically take our own samples to confirm the  
17 results, okay. Yes, Mrs. Dodson.

18 MARTHA DODSON: I would like to direct a  
19 question to Mr. Caniano on contaminated sites. I think we  
20 all know this is a contaminated site. You mentioned the  
21 infamous pick-up truck in the pond. What efforts are being  
22 made, I appreciate the fact that the Asea, Brown can't do  
23 anything until you guys tell them what to do. What is  
24 happening in terms of you guys telling them what to do?

25 MR. CANIANO: There are currently a number



1 of, couple of areas on site that are considered to be  
2 contaminated areas. One, as you mentioned, is the site  
3 where the pick-up truck is buried. That whole area was  
4 buried in accordance with our regulations that were in  
5 affect at that time under 10CFR part 20. There are also some  
6 areas on the site that have, I guess you would call them  
7 retention ponds. I believe two of them that is known to  
8 contain small amounts of radioactive materials and, in  
9 addition, there is an area on site that contain low  
10 quantities of radioactive materials that are contained in  
11 the limestone. The licensee and we are reviewing this, has  
12 a couple of proposals how to remedy the situation. They are  
13 currently doing sampling specifically the sampling  
14 especially in the old, what I refer to, as the old part  
15 twenty burial site. Those are periodic samples that are  
16 taken by the licensee. George, I think you can correct me,  
17 if I'm wrong, but I believe we also have taken some samples  
18 from that area?

19 MR. FRANCE: Yes.

20 MR. CANIANO: And one of the things we want  
21 to assure is there is no migration of radioactive material  
22 from that area. The retention pond areas contain very small  
23 amounts was of residual uranium. The total activity, I  
24 believe, is in the low millicury amount, which is very small  
25 activity. The licensee currently has hired a contractor.

1 The contractor has done an evaluation of the exact types and  
2 quantities of materials that are there and they are  
3 proposing a plan which will be submitted to the N.C.R. of  
4 those two retention ponds. Those are, that plan will be  
5 reviewed by not only the region but our low level waste  
6 division in headquarters. We have a few technical  
7 policies, I'll call them right now, that if the licensee  
8 wishes to leave the material there they have to meet  
9 specific criteria. The N.C.R. will perform a detailed  
10 review of that proposal.

11 MRATHA DODSON: What about on site storage,  
12 will there be more with the expansion of on site storage on  
13 an already contaminated site?

14 MR. CANIANO: Mr. Rode, I think I'll refer  
15 this one to you because we had some discussion on that  
16 earlier.

17 MR. RODE: Well, you're raising very  
18 interesting subjects. The storage of low level waste, is  
19 what you are referring to?

20 MARTHA DODSON: Yes.

21 MR. RODE: The storage of low level waste  
22 will not be impacted substantially by the additional  
23 hardware packaging operations, which will be added as a  
24 result of consolidation. However, as you probably realize  
25 the status of disposition of low level waste is very fluid

1 at this time. The state would like for us to immediately  
2 begin constructing an on site storage facility. The N.C.R.,  
3 at least, some of the commissioners are anxious that we not  
4 proceed too rapidly on that. The supreme court is now  
5 reviewing a case involving low level waste storage, but what  
6 I can say on these issues is we are prepared to provide for  
7 on site storage of the low level waste, if that is required.  
8 And we have discussed our plan with both the D.N.R. and  
9 N.C.R.. But as long as we can ship to burial grounds it is  
10 our intent to continue to ship to burial grounds.

11 MARTHA DODSON: That is really short term,  
12 isn't it?

13 MR. RODE: Well, maybe. That again is also  
14 fluid because the state legislature, as I understand it, in  
15 South Carolina has indicated a desire to keep their burial  
16 ground open to the public as long as they are willing to pay  
17 the fee. And, of course, it is a very high fee. And the  
18 reason the state legislature would like to keep it open is  
19 because it's a very lucrative operation and a source of  
20 considerable cash for the state.

21 MARTHA DODSON: Thank you.

22 MR. NORELIUS: Your earlier question related  
23 somewhat to the handling of contamination on site and I just  
24 wanted to add a couple of things that the N.C.R. has done to  
25 address this question. One is within the last couple of

1 years we have implemented a regulation for decommissioned  
2 funding plans and each license facility now has to prepare a  
3 decommission funding plan to assure that they will have  
4 funds available to clean up the residual contamination at  
5 such time as they terminate their license. So that is a new  
6 initiative and regulation that has been put into place in  
7 the last two years. Secondly, the commission has instituted  
8 a new policy for clean up promptly after a license is  
9 terminated. And what this provides for really is that if a  
10 licensee decides to terminate their license and stop doing  
11 business in this area, it will be given a specified amount  
12 of time by the commission to first prepare a  
13 characterization report, which would fully characterize the  
14 contamination on the site. And then subsequent to that  
15 would be given a specified time to remediate the site, that  
16 is to correct it so that it could be released for general  
17 public use. So this is our two initiatives that are recent  
18 with the commission.

19 MR. NORELIUS: Have other questions?

20 LINDELL NORMAN: Yes, sir. My name is  
21 Lindell Norman from the DeSoto area. This is directed to  
22 Mr. Rode. Is the local hospital educated in what the plan  
23 is doing in caring for the people, that is if there was an  
24 accident or anything like that, I understood that the man or  
25 one of the persons that was involved in the accident a year

1 or so ago was turned down for treatment at the local  
2 hospital?

3 MR. RODE: There are two sources of treatment  
4 that we have. One is the Jefferson Memorial Hospital and  
5 the other one for radiation treatment, which is,  
6 constitutes, the experts in the St. Louis area is Barnes  
7 Hospital. We have arrangements with Barnes Hospital where  
8 we would have taken the patients had we felt that it was  
9 warranted by the contamination situation. It is unfortunate  
10 that we had difficulties in getting that person admitted  
11 promptly to the hospital. We have subsequently talked to  
12 the people at the hospital. We hope that it will not happen  
13 again but we do have the option of transportation to the  
14 Barnes complex where they are well set up for handling any  
15 kind of radiation problems. And, in fact, they have  
16 agreements both with us and with Calloway nuclear plant.

17 MR. NORELIUS: Any additional questions?

18 BEVERLY WARDEN: I would like to ask Mr. Rode,  
19 any of the new jobs it's going to create? Is there going to  
20 be any special consideration given to Hematite residence?

21 MR. NORELIUS: You stay here.

22 BEVERLY WARDEN: I'm not applying.

23 MR. RODE: Well, I should indicate that in  
24 general we have endeavored where it's practical to hire  
25 people from the immediate area. I'm not sure that we give

1 people in Hematite preference over people in DeSoto or  
2 Festus but we do try and hire from the immediate area.  
3 There are a number of reasons for it. One of them is just  
4 because they are the people who have the burden of our plant  
5 being there and we would like to have them as benefiting  
6 from our being in the area. You may not benefit immediately  
7 yourself but perhaps your friends or your relatives do. And  
8 we like to think of ourselves as a part of the community so  
9 we do try first to hire from the area around the plant not  
10 just Hematite but generally the area Hillsboro, Festus,  
11 DeSoto, Crystal City. It also makes it more attractive to  
12 the people in the area because they then have a very short  
13 drive to get to our plant. It's convenient for us too  
14 because if there were an emergency and we needed to get  
15 people into the plant. For instance, in a snow storm, if we  
16 were hiring people from St. Louis, it would be very  
17 difficult for them to get into the plant if there was bad  
18 weather.

19 MR. NUKUS: Jim, if I'm not out of order what  
20 would be your yearly payroll total? If I'm out of order,  
21 just forget it.

22 MR. RODE: I really should know that. I  
23 suspect that the number, Len, you may have a better idea on  
24 this is something in the neighborhood of four to five  
25 million dollars.

1 JANET BUREN: Who owns the plant?

2 MR. NORELIUS: Could we get your name,  
3 please? My name is Janet Buren, B-U-R-E-N, I'm from Hematite  
4 and I just was wondering who owns the plant? I mean, I know  
5 there is stockholders but who actually owns the plant? And  
6 where are they from?

7 MR. RODE: The owners of the plant are  
8 A.B.B. Combustion Engineering. Combustion Engineering is a  
9 U.S. focused company but it is part of Asea, Brown, Boveri.  
10 Asea, Brown, Boveri has its corporate offices, the main  
11 offices in Zurich, Switzerland. But they, in turn, are  
12 owned by two large companies, Asea and Brown, Boveri. Asea  
13 is in Sweden. Brown Boveri in Switzerland. But from our  
14 standpoint the operating directives come from a president in  
15 the United States. What the larger company does primarily  
16 is direct strategy for a world wide business unit. The  
17 operational instructions are on a national level for the  
18 company.

19 MR. NORELIUS: Any other questions? Okay.

20 MARTHA DODSON: Martha Dodson, Crystal City,  
21 asking once again for local public document room. I have  
22 requested that about a dozen times.

23 MR. NORELIUS: Your request is for a local  
24 public document room. Is that what you would like.

25 MARTHA DODSON: We would like a local public

1 document room. Washington University is extremely  
2 inconvenient, okay.

3 MR. NORELIUS: Okay. I think we could left  
4 us pursue that and we'll see what we can do to change it.  
5 There were certain requirements that are beyond our agency  
6 as to what type of a library it has to be, certain space and  
7 certain arrangements, all of which I'm not familiar with. I  
8 just know from another person that it's not quite as simple  
9 as one might hope.

10 MARTHA DODSON: I understand that. Well, I  
11 know it's very difficult, it's exceedingly difficult for a  
12 local citizen to get any information.

13 MR. NORELIUS: Let us take your request back  
14 and get back to you in terms of what we can do on that.

15 ROGER HIMES: Roger Himes, Assistant Chief  
16 Hematite Fire Protection District. I know there is a  
17 disaster plan on paper for this location. Is there is any  
18 requirement that that disaster plan be tried out or be  
19 rehearsed and, if so, when do they intend to do it?

20 MR. NORELIUS: There are requirements for  
21 the company to periodically meet with local fire and police  
22 departments to review their operations. We periodically  
23 rehearse and test the response with the company and I  
24 believe we did it last about two years ago, as I recall.  
25 There is not a requirement for us to do that but we do that



1      periodically.

2                      ROGER HIMES:    There is no requirement for any  
3      participation by outside agencies?

4                      MR. NORELIUS:    Let me ask, the current plan  
5      if that's required, John, the existing plan?

6                      MR. HICKEY: Jim correct me if I'm wrong, but  
7      we only require the company, in fuel plants like this we  
8      require that the company itself conduct drills and they have  
9      to have some communication and training of off site people.  
10     But the drills themselves do not have to include the off  
11     site personnel and I'm not sure what you all actually do in  
12     practice but that is what the requirements are.

13                     MR. RODE:    We have attempted on several  
14     occasions to work with outside agencies. I think the most  
15     recent one that you are referring to that the N.C.R.  
16     participated in there was a problem that we had made  
17     arrangements before hand with the ambulance district but the  
18     ambulance district failed to participate because they had  
19     had a real emergency with a school bus accident. We don't  
20     necessarily work with every emergency agency on every  
21     emergency test. We do attempt to include other agencies but  
22     not necessarily every agency depending on the nature of the  
23     drill which we are running.

24                     MR. NORELIUS:    Let me ask Mr. Rode, do you  
25     periodically work with the local police and fire

1 departments, do you have some affiliation with them in  
2 setting up your plans?

3 MR. RODE: We do. Hal, you would be better  
4 equipped to speak to that.

5 HAROLD ESTRIDGE: I'm Harold Estridge manager  
6 of nuclear licensing and safety at the Hematite plant.  
7 Recently we prepared a new emergency plan, which was now  
8 submitted to the N.C.R. for some comments and approval,  
9 hopefully. But this plan we did submit to all of the local  
10 off site support agencies for their comments. We sent it to  
11 the local ambulance district, both the Jefferson Memorial  
12 and Barnes Hospitals, the local fire department, the county  
13 emergency district and the state office of emergency  
14 preparedness. So we incorporated their comments in the plan  
15 and one of the plan's provision is that we do conduct an all  
16 full case exercise and invite the off site agencies to  
17 participate in this exercise. So in the future we'll be  
18 having alot more contact with the off site agencies both  
19 providing to us and training and inviting their people to  
20 participate in drills and exercises that we have both as  
21 observers, which I think we had a fire exercise back late  
22 last year that uncovered some additional training we needed  
23 to do, which the local fire department was a help in  
24 evaluating that exercise. Any other questions?

25 MR. NORELIUS: Yes.

1                   JANET BUREN: Do you have tours of the plant  
2 where the regular people can come in?

3                   HAROLD ESTRIDGE: No. Yes, we do normally if  
4 somebody expresses an interest in seeing the plant.

5                   JANET BUREN: Like a group so you don't have  
6 to take them one at a time?

7                   MR. RODE: I think I better respond to that  
8 one. We do bring people through on tours. The one  
9 restriction is the group cannot be too large because we have  
10 to suit them out with protective clothing but we can and  
11 will happily arrange for people to come through. We have to  
12 have a little notice and make arrangements to have the  
13 clothing and have people to escort them through but we have  
14 taken quite a few people through on plant tours. Would be  
15 happy to that more through.

16                  MR. NORELIUS: Anything else? Okay. As I  
17 said earlier our purpose tonight was to really try to give  
18 you a heads up on what was planned and I think you have  
19 heard from the company what they plan to do. We have tried  
20 to tell you what we plan to do in terms of licensing and  
21 inspection activities. I would repeat again what I said  
22 earlier that the N.C.R. will be willing and I know the  
23 company has expressed their willingness to have another  
24 meeting after this proceeding down the road a bit and prior  
25 to operations. So if that is of interest to the local

1 citizens here, we will be happy to come back and meet with  
2 you again.

3 BEVERLY WARDEN: Is the meeting next Tuesday  
4 going to be just about the same as what we had last night?

5 MR. NORELIUS: I don't know. I believe  
6 that's the local planning commission.

7 MR. RODE: That it a meeting of the county  
8 commissioners. This will be with respect to planning and  
9 zoning. It's a necessary practice to getting a building  
10 permit to begin construction.

11 BEVERLY WARDEN: Okay. Thanks.

12 DENNIS WARDEN: I notice you put a new water  
13 tour up there on the top of the hill.

14 MR. NORELIUS: Look at this man, he put it  
15 up, I didn't.

16 DENNIS WARDEN: Is that for your effluent on  
17 your water coming--

18 MR. RODE: Is that for what?

19 DENNIS WARDEN: Is that strictly for fire?

20 MR. RODE: The primary purpose of it is  
21 dealing with emergencies. There are two reasons, one,  
22 really. The secondary reason is for fires. One the major  
23 concern that we have is our ammonia tanks, which we have  
24 behind the plant and we want to be able to have plenty of  
25 water available with adequate pressure for fogging the tank

1 in case of a leak on the ammonia tanks. But it also  
2 provides water for fire fighting purposes, yes, that's the  
3 primary reason for it.

4 DENNIS WARDEN: Does your present effluent  
5 discharge that you have say you're discharging to the creek  
6 or wherever it's going after you leave the pond, would it be  
7 big enough to handle all of that water if you had to use it?

8 MR. RODE: We would, we will in the future  
9 have a much larger sewer line. I'm not sure. We have a  
10 gentleman here who was participating in the design. Would  
11 you like to speak to that.

12 JOHN KOSTYSLOCK: My name is John Kostyslock,  
13 K-O-S-T-Y-S-L-O-C-K, I'm with Metropolitan Engineering  
14 Company. The purpose for the waste water treatment plant  
15 that we have and it is a brand new facility, is to treat the  
16 sanitary waste that is generated on the site and that is the  
17 sole purpose for that. It is has been designed and  
18 constructed in accordance with the state requirements. It's  
19 also governed by an N.P.D.S. permit, which has been issued  
20 by the state, and on March the 23rd the state came out and  
21 reviewed that facility and they have approved that facility.  
22 The only water, again, that will pass through that treatment  
23 plant will be the sanitary waste that is generated from the  
24 toilet and things of this natures.

25 DENNIS WARDEN: That's not what I'm talking

1 about.

2 MR. RODE: He's asking about if water, the  
3 sewage, sewer system, the storm sewer system don't take the  
4 water.

5 DENNIS WARDEN: Your wash down areas, your  
6 discharge on like from a rain coming off your roof.

7 JOHN KOSTYSLOCK: That is going through a  
8 brand new storm system that is proposed and construction  
9 should commence on that around the first of May. There are  
10 new requirements again for that even by the E.P.A. to  
11 monitor that discharge and the company will be in compliance  
12 with that. In fact, currently they are operating under an  
13 N.P.D.S. permit which requires them to monitor that  
14 discharge and that has been, they are operating under a  
15 permit back in 1989 so they have been under that permit for  
16 some three years and probably prior to that. So, again,  
17 that is being governed by the state and that sewer system  
18 would be able to handle, if they were to have that type of  
19 discharge on the site, the sewer system would be able to  
20 handle that also.

21 DENNIS WARDEN: It would be able to handle it  
22 and it would not be discharged to the creek, in other words.

23 MR. KOSTYSLOCK: No, the water generated on  
24 that site is contained on the site and passes through the  
25 sewer system for monitoring.

1 MR. NORELIUS: Okay. We have other  
2 questions? Okay. I thank you for coming. Good night.

APR 15 1992

NOTICE OF SIGNIFICANT MEETING

Name of Licensee: Combustion Engineering, Inc.

Facility: Hematite Facility  
P.O. Box 107  
Highway P  
Hematite, MO 63047

Docket No. 070-00036

Date and Time: April 21, 1992, 7:00 p.m.

Location: Jefferson College  
Arts Center  
Little Theater  
Hillsboro, Missouri

Purpose: Public Meeting to inform concerned citizens, elected representatives, and Jefferson County officials regarding the planned expansion of Combustion Engineering, Inc. facilities located in Hematite, Missouri.

Attendees: NRC CE  
J.W.N. Hickey J.E. Rode  
E.M. Keegan CE staff  
C. E. Norelius  
J. A. Grobe  
R. J. Caniano  
G. M. France

Approved By: Original Signed By:  
Michael Tokar, Section Leader  
Uranium Fuel Section  
Fuel Cycle Safety Branch

Distribution:  
NRC File Center CENorelius  
Docket No. 70-36 JAGrobe  
PDR RJCaniano  
NMSS R/F CRobinson  
IMSB R/F EKeegan  
MTokar  
JHickey  
SSoong  
VTharpe  
Beveridge/Cornell 1-23

[SS/NOTICE]

NF15 11

OFC	:IMUF	:IMUF	:IMUF	:IMSB	:	:
NAME	:SSoong:11:fb:VTharpe	:MTokar	:JHickey	:	:	:
DATE	:04/14/92	:04/15/92	:04/14/92	:04/15/92	:	:

9204160233 920415  
PDR ADOCK 07000036  
PDR

RECORD COPY