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GLOBAL NUCLEAR ENERGY PARTNERSHIP
PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT
PUBLIC HEARING

The public hearing in the above matter was held on November 17, 2008, at 6:30 p.m., at Red Lion Inn, 2525 North 20th, Pasco, Washington.

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P R O C E E D I N G S

MR. BROWN: If folks will take your seats, we'll get started with this evening's meeting. We had folks signing in, I think they're all set now.

Good evening, and welcome to this public meeting on the draft Programmatic Environmental Impact Statement for the Global Nuclear Energy Partnership. The development of an Environmental Impact Statement for this project by the Department of Energy's Office of Nuclear Energy is required by the Environmental Policy Act.

My name is Holmes Brown. I will serve as the facilitator for this evening's meeting. My role is to ensure that the meeting runs on schedule and that everybody has an opportunity to speak. I'm not an employee of the Department of Energy nor an advocate for any party or position.

I trust you've had an opportunity to attend the open house. At the registration table, you should have received a participant's packet. If not, please raise your hand so staff can bring one to you. It contains important information on the presentation and has a convenient place to take notes during the briefing that will follow in a few moments.

There are three purposes for tonight's

1 meeting. The first purpose is to provide information on
2 the content of the draft Programmatic Environmental Impact
3 Statement, or PEIS, and on the National Environmental
4 Policy Act, NEPA, which governs the process; second, to
5 answer your questions on the draft PEIS and NEPA; and,
6 third, to receive and record your formal comments on the
7 draft PEIS.

8 The agenda for tonight's meeting reflects
9 these purposes. We will begin with a presentation by Ray
10 Furstenau, who is Deputy Manager for Nuclear Energy for
11 DOE's Idaho Operations Office. To answer your questions,
12 the project staff will be available throughout the evening
13 at the display tables. They can discuss the draft PEIS,
14 the NEPA process, the contents of the printed and poster
15 materials on display, and the contents of Mr. Furstenau's
16 slide show.

17 Following Mr. Furstenau's presentation, we
18 will recess so that we can set up to receive your comments
19 and so that you can pursue further questions with
20 available project staff.

21 Once we reconvene, the court reporter will be
22 available to receive your comments and suggestions
23 regarding the draft PEIS. All your comments will be
24 transcribed and made part of the permanent record. At
25 this time also please turn off all cell phones and pagers.

1 unusual terms throughout my presentation.

2 I want to thank all of you for coming to this
3 public hearing. It's important that we hear from you.
4 I'm glad you're here. It's good that you do this and help
5 us out on this. Your participation will help us prepare a
6 better document which will, in turn, lead to better
7 decisions by the Department.

8 After my presentation, we'll begin the formal
9 public comment session. Those of you who wish to provide
10 oral comments will be given an opportunity to speak, or if
11 you prefer, you could provide written comments as well.
12 After everyone who wishes to provide oral comments have
13 been given the opportunity to do so, we will adjourn.
14 Here's an outline of my presentation.

15 First, I will briefly discuss the National
16 Environmental Policy Act, or NEPA, process. Next, I will
17 discuss the GNEP PEIS, reviewing the various aspects of
18 the document, such as the changes to the scope of the
19 document since we heard your comments during the scoping
20 process, the purpose and need for agency action, the
21 alternatives addressed, international GNEP initiatives,
22 the environmental analyses, and key conclusions regarding
23 the alternatives.

24 Remember, this is a programmatic EIS. What
25 that means is that it's looking at the impact at a

1 national level, using generic sites, and, therefore, does
2 not enable a siting decision. A siting decision would
3 require a future proposal, a future NEPA action, and there
4 would be, at that time, an additional opportunity to
5 provide public comment.

6 And the rest of the outline, I'll discuss
7 later on, the Record of Decision process and how decisions
8 based on the GNEP PEIS may be implemented. And, finally,
9 I will discuss and address how you can help DOE make
10 better decisions and the many ways you can provide
11 comments to us on the draft GNEP PEIS.

12 NEPA is designed to ensure that Federal
13 agencies consider the potential environmental impacts of
14 proposed actions and alternatives. A fundamental aspect
15 and important aspect of the NEPA process is public
16 participation, why you're here tonight. Under NEPA, an
17 Environmental Impact Statement, or EIS, is required for
18 any major federal action that may significantly affect the
19 quality of the human environment. A programmatic EIS is
20 generally used to address broad programs, such as GNEP.

21 To the right on the slide, I used the similar
22 slide when I was here for the scoping process. You can
23 see the public scoping process. I was here in March of
24 2007. From that, we created a draft PEIS, which was
25 issued just this past month, and now we're at the public

1 hearing stage.

2 DOE received over 800 comments during the
3 Advanced Notice of Intent stage, the very top block there,
4 and over 14,000 comments were received during the public
5 scoping period after DOE issued the Notice of Intent. As
6 a result of this public input, during the scoping process,
7 we made several significant changes to the GNEP PEIS, and
8 we'll talk about those in a few minutes.

9 The Notice of Availability of the draft PEIS
10 was published in the Federal Register on October 17, 2008,
11 opening the public comment period, which ends December
12 16th, 2008.

13 There's been a request to extend the public
14 comment period and consider additional locations for
15 public hearings like this one. DOE right now is currently
16 considering both requests.

17 As I mentioned earlier, DOE has made some
18 adjustments to the scope of the GNEP PEIS based on your
19 public input during the scoping process. In response to
20 public comments and further analysis, DOE determined that
21 decisions regarding any of the three originally proposed
22 facilities would be premature. As you recall, we talked
23 about three facilities during the scoping process -- the
24 recycling reactor, separations facility, and advanced fuel
25 cycle facility -- but as a result of the comments, no

1 project-specific or site-specific proposals are being made
2 at this time.

3 Based on future decisions regarding the GNEP,
4 DOE or industry might propose new facilities which would
5 be subject to appropriate NEPA review.

6 It was important to the Department of Energy
7 to return to each site that was initially considered for
8 GNEP facilities. Though this PEIS will not include
9 decisions on siting, these sites are not ruled out for
10 future consideration.

11 Four programmatic alternatives were added to
12 the analysis. The first two are closed fuel cycle or
13 recycling options and the last two are open fuel cycle
14 alternatives that use fuels or reactor technologies that
15 are different from the existing U.S. nuclear fuel cycle
16 but do not recycle the nuclear fuel sources.

17 I will briefly discuss these alternatives
18 later. For more details about these alternatives, I
19 encourage you to visit the posters around the back of the
20 room and ask questions to the technical folks that are
21 here tonight.

22 The structure and content of GNEP PEIS is
23 shown on the slide. The draft GNEP PEIS consists of a
24 stand alone summary and the main volume, which contains
25 the documents as well as analyses and technical appendices

1 that support the analyses, along with additional project
2 information. Chapters 1 and 2 present a background of the
3 GNEP program, a brief history of spent nuclear fuel
4 recycling in the U.S., the purpose and need for DOE
5 action, an overview of the PEIS, and a detailed
6 description of the alternatives.

7 Chapter 3 provides information on the aspects
8 of the environment that may be affected by any decisions
9 on the alternatives addressed in the GNEP PEIS. Chapters
10 4 and 5 discuss the potential environmental impacts,
11 including cumulative impacts of all of the alternatives.

12 Chapter 6 includes the statutes, regulations,
13 Executive Orders, DOE orders, and other regulatory
14 requirements that may affect implementation of any of the
15 GNEP alternatives. And Chapter 7 addresses the
16 international initiatives under GNEP.

17 There's several additional chapters and
18 appendices that include supporting technical information,
19 as well as a summary of scoping comments and responses.

20 The purpose and need, DOE's underlying purpose
21 and need is to support expansion of domestic and
22 international nuclear energy production while reducing the
23 risks of nuclear proliferation and reducing the impacts
24 associated with the disposal of future spent nuclear fuel
25 or other radioactive wastes, for example, reducing the

1 volume, thermal output or radiotoxicity of waste requiring
2 geological disposal. This purpose and need has not
3 changed since the public scoping meetings.

4 To meet its nonproliferation goals with regard
5 to spent nuclear fuel recycling, DOE will assess, as
6 reasonable alternatives, only those technologies that do
7 not separate or use pure plutonium.

8 As part of the PEIS, we looked at a number of
9 alternatives; some met the purpose and need and some
10 didn't. For example, there's been a lot of talk about
11 interim storage. DOE does not have legislative authority
12 to accept commercial spent nuclear fuel for interim
13 storage at this time. Because of that, DOE is not
14 analyzing interim storage in this PEIS. However, this
15 should not be interpreted that DOE is taking a position
16 against interim storage. Storage alone doesn't meet the
17 purpose and need and, therefore, is not a viable option or
18 alternative being evaluated under this PEIS. On the other
19 hand, process storage at a recycling facility site which
20 provides inventory to support recycling operations is
21 considered as part of this PEIS.

22 A little on the basics of nuclear power. In
23 order to better understand the alternatives, this is a
24 little cartoon of how nuclear power works. I think,
25 really, the main reason for what nuclear fuel provides is

1 really the heat source, the heat source for providing
2 energy to boil water which, in turn, produces steam and
3 drives a turbine. Except for the fuel source, the process
4 is the same as generating electricity at a coal plant.
5 But in looking at this, there are 104 operating commercial
6 nuclear power plants in the U.S. today that operate on the
7 same basic principle.

8 As shown here, nuclear power provides about 20
9 percent of the electricity in the U.S. After completing
10 an operating cycle, which lasts between 18 and 24 months,
11 some uranium fuel is considered used up, which we refer to
12 as spent fuel. After the fuel is spent, it must be
13 replaced with fresh fuel. There are two approaches to the
14 management of spent fuel. The current approach is the
15 open cycle or a once-through cycle that is referred to in
16 the GNEP PEIS as the No Action Alternative. I'll talk
17 more about that a bit later. The other approach is a
18 closed fuel cycle, which would mean recycling the spent
19 fuel for additional use.

20 Let's look briefly at the alternatives
21 explored in the PEIS. The GNEP PEIS assesses alternatives
22 that would reduce the volume, thermal output, or heat, and
23 radiotoxicity of spent nuclear fuel and wastes requiring
24 geological disposal. None of the alternatives in the GNEP
25 PEIS changed the need or planning for Yucca Mountain.

1 In addition to any new alternatives, NEPA
2 regulations require an assessment of continuing with the
3 existing situation. This is known as the No Action
4 Alternative. For purposes of this PEIS, No Action means
5 to continue a current open nuclear fuel cycle using light
6 water reactors and uranium fuel.

7 Two additional open cycle alternatives were
8 explored in the PEIS. Thermal reactors are so named
9 because they use a moderator, such as water or graphite,
10 to slow down or thermalize the neutrons. The light water
11 reactors that are used in the U.S. today, heavy water
12 reactors that are used in Canada today, for example, and
13 gas-cooled reactors that are modified by graphite or
14 described in the PEIS are considered thermal reactors.

15 This PEIS examines three closed fuel cycle
16 alternatives that include recycling used fuel in thermal
17 reactors, fast reactors, and a combination of the two
18 reactor types. Each of the alternatives are described in
19 detail within the PEIS and the basics for each alternative
20 are available on the posters that are displayed in the
21 back.

22 This is a depiction of the No Action
23 Alternative. Currently, all commercial nuclear reactors,
24 as I mentioned before, in the United States that are used
25 for electricity generation use an open fuel cycle. This

1 is a process where a mine of uranium ore is enriched to
2 increase the proportion of fissionable material, 235, make
3 light water reactor fuel out of it, and it's used in the
4 reactor. Following use in the reactor, the fuel is
5 characterized as spent.

6 You make light water reactor fuel out of it,
7 use it in a light water reactor to produce, generate heat,
8 to heat up water and generate steam, which in turn, turns
9 the turbine and you generate electricity, and then that
10 light water spent fuel is stored for eventual geological
11 repository. That's the once-through cycle.

12 Under the Nuclear Waste Policy Act of 1982 as
13 amended, spent nuclear fuel and high level radioactive
14 waste must be disposed in a geologic repository at Yucca
15 Mountain in Nevada. DOE recently submitted a Nuclear
16 Regulatory Commission license or NRC license application
17 for the Yucca Mountain Repository that has been accepted
18 by the NRC for review.

19 Under the Nuclear Waste Policy Act, Congress
20 established the statutory capacity limit for the Yucca
21 Mountain Repository as 70,000 metric tons of heavy metal
22 of spent nuclear fuel and high level radioactive waste.
23 DOE estimates that the amount of spent nuclear fuel in
24 storage from commercial reactors around the country will
25 reach the statutory capacity limit for the Yucca Mountain

1 Repository by about 2010.

2 This is a depiction of one of the closed fuel
3 cycles that's discussed in the PEIS. This particular one
4 is called the Fast Reactor Recycle Alternative. This is a
5 continuous recycle of light water reactor spent fuel to
6 produce a mixed oxide uranium/plutonium fuel for use in
7 fast reactors. So the difference here, as the last slide
8 indicates, what happened was spent fuel from a light water
9 reactor would go to the repository. Here light water
10 spent fuel goes in and is separated. Some of the uranium
11 can go back, be re-enriched and go back into light water
12 fuel, or it can be used to produce transuranic fuel that
13 can be used to fabricate fuel that would go into an
14 advanced recycling reactor. And then that spent fuel can
15 then be recycled again, so you can have a continuous
16 recycle process.

17 Now to talk a little bit about the benefits of
18 a closed cycle, at this time, DOE's preference is to
19 support a closed nuclear fuel cycle, although a particular
20 alternative or option has not yet been selected. Closing
21 the fuel cycle meets the purpose and need objectives I
22 talked about a few slides earlier. It would support a
23 sustainable expansion of nuclear power, it would support
24 the United States' nonproliferation objectives. Recycling
25 would also improve waste management by reducing the

1 volume, toxicity, heat load of waste, as well as utilize
2 our uranium resources. Further, because nuclear power
3 plants do not emit greenhouse gases, such as carbon
4 dioxide, they would not contribute to climate change.

5 In addition to the domestic alternatives, the
6 GNEP PEIS addresses international initiatives that DOE
7 could support in the future. At this time, none of these
8 initiatives have risen to the level of a specific proposed
9 action.

10 Under the Reliable Fuel Services Program,
11 nations that agree to refrain from pursuing uranium
12 enrichment or reprocessing programs would be assured of
13 the availability of nuclear fuel for their electric power
14 generating reactors. The fuel would be provided by a Fuel
15 Cycle GNEP Partner. Spent nuclear fuel generated by the
16 recipient nation would be returned to the supplying nation
17 or another Fuel Cycle GNEP Partner for reprocessing,
18 storage, or disposal.

19 DOE also supports the development of
20 grid-appropriate reactors, which would be well suited to
21 the capabilities and needs of developing countries. These
22 reactors would be designed to achieve high standards of
23 safety and security and would be sized to suit those
24 countries with smaller and less developed power grids.
25 The successful deployment of these reactors, coupled with

1 the Reliable Fuel Services Program, would provide an
2 attractive solution to many countries and reduce the
3 incentive for them to develop the more sensitive fuel
4 cycle technologies that could be misused, specifically,
5 uranium enrichment and reprocessing.

6 The global partnership aspect of GNEP is now a
7 separate activity that has grown quite rapidly since the
8 scoping process. It now consists of 25 nations that have
9 signed a statement of principles that commits to safe,
10 secure nuclear power. It also has in place a management
11 framework that includes separate working groups on
12 infrastructure, development, and assured nuclear fuel
13 services. The analysis of these international initiatives
14 in the PEIS is very general and is not intended to support
15 any particular decision at this time.

16 Currently, we are only considering activities
17 that could impact how we manage the U.S. domestic fuel
18 cycle. If in the future we were to propose significant
19 international fuel cycle activities that could impact the
20 U.S. or American public, we would address that in a future
21 NEPA action.

22 This slide includes the resources and factors
23 assessed under the PEIS. Because this is a programmatic
24 level analysis, a number of the resources evaluated are at
25 a general level that does not provide significant

1 discrimination between the various alternatives.

2 If future project specific site action is
3 proposed, an Environmental Impact Statement for that site
4 would provide more substantial discrimination and you
5 would be provided an opportunity to comment on that
6 site-specific process.

7 Results for the domestic alternatives. Spent
8 nuclear fuel is hazardous and must be isolated and managed
9 to protect the public and the environment. Although all
10 of the alternatives addressed in the GNEP PEIS would
11 generate spent nuclear fuel and/or high level waste that
12 would require disposal in a geologic repository, the
13 closed fuel cycle alternatives could significantly reduce
14 future repository requirements. The fast and thermal/fast
15 alternatives provide the greatest potential to reduce
16 radiotoxicity, thermal load, and volume of waste requiring
17 geological disposal.

18 The closed fuel cycle alternatives allow for
19 the recovery of energy-bearing materials, such as uranium
20 and transuranics, which can be made into new nuclear fuel
21 to generate more electricity, where these materials would
22 just be disposed under open fuel cycle alternatives.

23 In general, the closed fuel cycle alternatives
24 would require a greater number of shipments and miles
25 travelled than the open fuel cycle alternatives.

1 Radiation exposure to workers and the public
2 under any of the alternatives would be very low and well
3 within all regulatory limits. Estimated impacts from some
4 theoretical accidents that may be evaluated through a
5 design and licensing process are also comparable between
6 the alternatives.

7 Finally, land use would be comparable for all
8 alternatives, since the total land use is primarily driven
9 by the reactor sites, and all alternatives include nuclear
10 reactors.

11 The Record of Decision and Implementation. At
12 the conclusion of the GNEP PEIS process, DOE will make a
13 decision to support any of the domestic programmatic
14 alternatives addressed in the document, including the No
15 Action Alternative. The decision could be to support any
16 one of the alternatives or some combination of the
17 alternatives. The decision could influence the direction
18 and scope of future government research activities.

19 Ultimately, any decision based on the GNEP PEIS assume
20 that the U.S. utility industry will ultimately pursue
21 similar nuclear fuel cycles for the generation of
22 electricity. DOE could influence the decisions of the
23 commercial utility sector by providing proposals for
24 grants, contracts, or other financial arrangements to
25 implement approaches supported by the DOE.

1 In making its decision on which alternative or
2 combination of alternatives to select, DOE will consider
3 the potential environmental impacts along with other
4 relevant information, such as the agency's mission,
5 national objectives, technical feasibility, and costs.

6 DOE will publish in the Federal Register a
7 detailed Record of Decision documenting any decisions
8 based on the GNEP PEIS and the supporting rationale. The
9 Record of Decision would be issued no sooner than 30 days
10 following the publication of the final GNEP PEIS.

11 Now, how can you help us make a sound
12 decision? Here's what you can do. First, you can provide
13 comments on the PEIS and identify any issues that are
14 significant and should be considered in the final PEIS and
15 any other additional information that should be
16 considered. You can also continue to be involved and
17 informed about the status of the GNEP PEIS and what DOE is
18 doing. DOE has established a GNEP website, shown here,
19 www.gnep.energy.gov, which we will continue to update.
20 You can also sign up to receive the final PEIS when it is
21 issued.

22 You can make your comments on the GNEP PEIS
23 orally or in writing at this or any other public hearing.
24 You may also submit a written comment at this hearing by
25 using the comment sheets provided or any other paper you

1 would like. You may submit your written comment to any of
2 the DOE representatives here tonight, there's some in the
3 back of the room, or leave it in a box that will be placed
4 back there or at the reception desk. If you choose to
5 submit your written comment by mail, please send it to the
6 address shown on the slide. You may also submit written
7 comments through the Internet or by fax. All comments are
8 considered equally, regardless of how they are submitted.
9 Please bear in mind that the closing date for comments is
10 December 16th, 2008.

11 As I mentioned earlier, there's been a request
12 to extend the comment period and consider additional
13 locations for public hearings, and we're in the process of
14 considering both of those requests. This concludes my
15 presentation and thank you for your attention.

16 MR. BROWN: Thanks very much.
17 We're now going to recess for a few minutes to allow us to
18 set up to take your public comments and also to allow you
19 to talk with available DOE staff at the posters. If you
20 have any questions regarding the posters or the
21 presentation that you just heard, again, we will be
22 reconvening in just a few minutes.

23 I will make an announcement when we are about
24 to resume the formal portion of the meeting and begin
25 taking oral comments. If you would like to make a comment

1 and haven't yet signed up to do so, please go to the
2 registration table and add your name to the list. So,
3 again, we'll take a brief recess and our next portion will
4 be for formal comment. Thanks.

5 (Recess.)

6 MR. BROWN: If you'll take your seats,
7 we'll begin the formal comment period portion of this
8 meeting. It's now time to receive your formal comments on
9 the draft PEIS. This is your opportunity to let DOE know
10 your response to the draft PEIS and to offer other
11 suggestions or additions. The court reporter will
12 transcribe your statement. Our reporter for tonight is
13 Patricia Bute.

14 Let me review a few ground rules for the
15 formal comments. They're listed on the sheet which is
16 part of your participant's packet. Please step up to the
17 microphone over there when your name is called, introduce
18 yourself, providing an organizational affiliation where
19 appropriate. If you have a written version of your
20 statement, please provide a copy to the court reporter
21 after you've completed your remarks. Also, please give
22 the court reporter any additional information that you
23 would like to see included and wish entered into this
24 transcript. Each will be labelled and submitted for
25 inclusion in the formal record.

1 I will call two names at a time. The first
2 will be the speaker and the second would be the person to
3 follow. In view of the number of people who have
4 indicated an interest in speaking this evening, please
5 confine your initial statement to five minutes. A staff
6 person will hold up a sign with a one-minute sign on it,
7 he's sitting in the front row, which will be your
8 indication to please try and wrap up your remarks within
9 the one minute remaining.

10 Mr. Furstenau will be serving as the hearing
11 officer for the Department of Energy during the formal
12 comment period. He will not be responding to any
13 questions or comments during this session.

14 Our first speaker is Ron Skinnarland, and he
15 will be followed by Claude Oliver.

16 So, Ron, you're first. Welcome.

17 MR. SKINNARLAND: Thank you. I am Ron
18 Skinnarland with the Washington State Department of
19 Ecology. And we are here just basically to reiterate some
20 of the questions we had on the programmatic EIS at the
21 scoping meeting about a year ago.

22 At the Washington State Department of Ecology,
23 our role with facilities associated with the GNEP would be
24 to look at permitting, look at environmental impact. And
25 the questions we had last year were particularly focused

1 at the time as the Department of Energy was considering a
2 number of facilities and a number of sites. The sites
3 included Hanford and sites like Hanford, possibly building
4 reactors, fuel processing facilities, and we had a number
5 of questions in our letter before and will be submitting
6 some of those questions again at this time focused, in
7 particular, on what the nature of the facilities are that
8 would do the work.

9 We do have some information in the current
10 proposal in the diagrams in the back. You see some of the
11 ideas that are being proposed, both kind of reactors, what
12 the fuel reactor cycle would look like, the waste
13 generated, so we do have more information than we do
14 before, but we were particularly interested in the
15 site-specific impact and the affect on the local
16 community, transportation, and the Hanford clean-up as
17 well, and this proposal doesn't really address that level.

18 This is like a programmatic EIS, looking at
19 kind of a national policy question, so most of our
20 questions are still things like what kind of facilities
21 would be involved, where would they be located, what kind
22 of transportation impacts would be, what would be the
23 environmental impacts and, in particular, as a regulatory
24 permitting agency, we're interested in understanding what
25 the permitting process would be for that.

1 So as I say, we will be submitting a written
2 comment on the proposal. We're reviewing the EIS right
3 now, trying to understand more fully the information
4 provided on the alternative facilities and on the wastes
5 that are generated, and we're very interested in that.
6 We're also really interested in hearing your comments,
7 hearing what people think in this community and the other
8 meetings about the proposal, what questions you have, and
9 try to make sure that those get answered.

10 And I think the other thing we're also
11 encouraged by in this proposal, if we do go to more
12 specific ideas about this kind of facility, there would be
13 further EISs that would look in more detail of what is
14 going on at each of the sites, what waste is generated and
15 how they're regulated.

16 So the only other thing I think I wanted to
17 mention, in terms of looking at the information provided
18 here, we had asked questions about what the life cycle
19 costs were, and I don't think there are a lot of life
20 cycle costs in this particular EIS and we think those
21 would be helpful, looking both at the life cycle, what
22 wastes are generated, the life cycle facilities and costs
23 associated with that.

24 So as I say, we will be submitting questions
25 and looking forward to hearing what questions and comments

1 you have tonight. Thanks.

2 MR. BROWN: Claude Oliver is next and
3 Robert Beach will follow.

4 MR. OLIVER: Under your alternatives, I
5 would encourage that you add a couple of alternatives.
6 One is that the U.S. financial economic collapse, by not
7 having a good national energy program, and that's a
8 national security issue, and the other is a collapse when
9 political IOUs bail and we're all done spending money and
10 decide we're going to go take energy from someone else and
11 that creates a war.

12 So I really think, in light of what's happened
13 in the world the last 220 days, you need to add some
14 variable to the alternatives that aren't being factored
15 that are in fact happening to this nation.

16 Tonight, in prepared words, I would like to
17 offer that during my July 2, 2008 address at the National
18 Rainbow Push Convention in Chicago, Illinois, I predicted
19 the collapse of the U.S. and world economies. I've
20 attached page two, paragraph two, that did in fact
21 underscore that at the national conference in Chicago on
22 July 2.

23 Now before I proceed any farther, I would like
24 to give credit to the Chicago speech contributions from
25 Mr. Gary Troyer and Mr. Carl Holder with the Bill Stokes

1 Columbia Basin Consultant Group as contributors to that
2 speech.

3 As you're all well aware, the financial
4 collapse of the U.S. and world economies became more
5 obvious after the July 2008 world record price for oil,
6 which registered at \$146 dollars a barrel. Titanic impact
7 ripples shot through nearly every energy and consumer
8 commodity sector. The Dow Jones Industrial Average peaked
9 in September of 2007 at \$13,895; November 17th, 2008 Dow
10 closed at \$8,273.

11 Throughout 2007 and 2008, hundreds of billions
12 of dollars that consumers had been spending on housing and
13 other debt obligations were suddenly diverted to pay for
14 skyrocketing energy and consumer commodities like food and
15 gasoline. Today, November 17th, 2008, the price of a
16 barrel of West Texas crude closed at \$55.49, down from
17 \$146 a barrel peak of last July, but certainly indicative
18 of the volatility and the ramifications created by the
19 volatile swing in an unstable U.S. energy program.

20 In the last 120 days, Hedge funds, derivatives
21 and home mortgage fund groups strained but could not find
22 substitute income or credit service for market operations,
23 causing massive credit defaults. Detroit and all major
24 U.S. municipalities are now lining up as the recession
25 worsens.

1 We need to pray we are not reaching the last
2 political option for U.S. energy, which is war. Serious
3 rational energy options continue to languish while people
4 clamor to spend more taxpayer money. Wouldn't we all be
5 better off for the United States to use our talents and
6 know how to increase real U.S. energy production? Hanford
7 300 Area and 400 Area facilities, while not the total
8 solution, are still available.

9 I would like to quote to you from the July 2
10 speech in Chicago, and it's kind of the hallmark for
11 setting my words up tonight.

12 "Since our White House visit, all food stocks
13 so essential for our world masses are experiencing similar
14 market base price increases from the June 2002 bench
15 mark," that's when we went to the White House and pitched
16 juice of our local facilities, by the way, "with corn and
17 wheat up 300 percent and 233 percent respectively. No
18 sector of all world economies will avoid real adverse
19 economic impact of incredible dimension. Market pricing
20 collapse can occur, even in the U.S. economy, with
21 consumption sectors unable to keep up with skyrocketing
22 commodity price increases.

23 However, there is one energy sector that
24 stands in a very positive light. Nuclear power kilowatt
25 hour cost, from 2004 to 2008 per kilowatt hour went down

1 dramatically. Market price decreased from 3.63 cents a
2 kilowatt to 1.68 cents per kilowatt hour," which meant
3 that nuclear power cost to the consumer went down by a 54
4 percent drop from its previous levels. "No other sector
5 of energy did that."

6 MR. BROWN: You have about a minute left,
7 please.

8 MR. OLIVER: Thank you, very much.

9 "We are in an energy crisis of epic
10 proportions that has been building for 30 years.
11 Reasonable people recognize that alarm bells should be
12 sounding in Washington, D.C., from the White House to the
13 Halls of Congress and our U.S. Senate. A few wake up
14 calls offer a small flicker of concern and hope.
15 Unfortunately, a concerted national call for action has
16 not been sounded and acted upon."

17 President Obama certainly seems to be doing
18 that and we are optimistic and hopeful that in fact he
19 will. "With this backdrop, let me offer that we as a
20 nation must overcome defeatist thinking of 'We can't,'
21 but, rather, 'We can and we must.'"

22 "Now imagine the Fast Flux Test Facility in
23 Washington State helping turn on the critical test bed to
24 advance all of this. I ask you to join us to help make
25 this happen. Dependence on foreign oil can only be broken

1 if we are willing to bring on meaningful energy
2 alternatives like nuclear. The clock is ticking and right
3 now. America's energy and health care future are as
4 bright as we want them to be, so let's get going."

5 Thank you, very much.

6 MR. BROWN: Thank you.

7 Robert Beach, and Phil McGuinness will be next.

8 MR. BEACH: I am Robert Beach. I live in
9 Kennewick. I've worked in the nuclear field for almost 50
10 years now, with naval reactors, commercial reactors, and
11 now with DOE reactors and clean-up programs. I would like
12 to say that at no time in my career have I seen a truly
13 unsafe condition in the operation and maintenance of these
14 plants.

15 I would like to make the following comments.
16 DOE may not like them, but I'll make them anyway. It is
17 heartwarming to see DOE almost say that the plan for
18 storage at Yucca Mountain should be halted and the funding
19 transferred to reprocessing the spent fuel. I had given
20 up on DOE ever promoting the useful implementation of the
21 nuclear technology that we developed so many years ago.

22 My concern with this study is that it's still
23 bound by the non-proliferation tactics that have been used
24 for the past 25 years or more to stifle progress in the
25 use of nuclear energy within our country. We set rules

1 that no one else follows.

2 When we took the stand that commercial
3 reprocessing of nuclear fuel was to be precluded in the
4 United States in the name of non-proliferation and that
5 all other nations would follow our example, we
6 demonstrated a complete lack of understanding of the human
7 being. The other countries haven't followed our lead, and
8 as a consequence, we've actually drifted out of the
9 mainstream of the peaceful use of nuclear technology.

10 The economic health of our country is based on
11 the ready supply of cheap energy for our factories, farms,
12 businesses, and homes. For the fixed structures, our
13 largest energy source is electricity; for transportation,
14 the largest is oil. It's apparent we need to develop
15 alternatives for generating electricity due to global
16 warming concerns and the continuing use of coal and
17 natural gas as power sources. Oil is basically not used
18 for electricity generation, but natural gas has recently
19 become a major fossil fuel source, along with coal.
20 Nuclear power is one alternative that has the brightest
21 potential for our country's future.

22 The events of the past one or two years should
23 be a very convincing display of the weakness of our energy
24 programs and our economy. We can no longer afford to
25 waste money in studies like this one that yield no viable

1 product. We cannot afford exotic reprocessing solutions
2 that will be developed tens of years from now and probably
3 impose sharply higher costs than current technology, if
4 they're even implemented then.

5 The question of avoiding proliferation
6 concerns by developing new technology should be closed.
7 We cannot afford and really do not need the engineering
8 solution. A political solution is the only one that will
9 work. No other countries will follow our lead and we will
10 further penalize our great country. We need prompt
11 decision to proceed with today's technology to complete
12 the fuel cycle.

13 Most of you, not most, many of you will say
14 that alternative renewable energy sources, such as wind,
15 solar, and biofuels are the way forward. They are
16 tempting and useful but have major drawbacks. When it's
17 dark and the wind doesn't blow, this happened in Texas
18 last fall, these sources quickly disappeared, with
19 potentially disastrous consequences. The use of renewable
20 energies is necessary, but must be carefully planned and
21 not rushed as a godsend. We cannot afford to create
22 another cascading problem, such as the unplanned costs of
23 ethanol production from corn. These renewable energies
24 can only provide a small percentage, ten to twenty
25 percent, of our electrical power supply.

1 Nuclear power is a clean, reasonable source
2 for base electric power generation. The Government is
3 pushing to prioritize the construction of new plants.
4 This must be coupled with an immediate start of fuel
5 reprocessing and reuse of the uranium and plutonium
6 content. The time is now to end the false reasons for
7 delay and proceed with the most economic process.

8 It's too bad that political, rather than
9 factual, decisions have been made in the past. We've
10 continued to waste our resources, both financial and
11 natural, due to short-sighted political decisions and
12 poorly managed work. The application of priority should,
13 once again, bring forth the truly talented people to
14 effectively meet the country's needs. Thank you.

15 MR. BROWN: Thank you.

16 MR. MCGUINESS: My name is Phil McGuiness,
17 I spoke here a year and a half ago also. At that time, I
18 was speaking more in favor of FFTF being possibly used,
19 but I'll not speak about that tonight, it's gone too far
20 probably.

21 The main point I wanted to make was not a
22 technical one, but to thank DOE or the administration or
23 whoever it was for coming up with the wonderful idea to
24 close our fuel cycle. I found a wonderful site on the
25 web, probably written by Argon, judging by what I read, in

1 1977, when Jimmy Carter made the administrative decision
2 mostly as a fallout from, pun intended, from Three Mile
3 Island to shut down the nuclear fuel cycle here in this
4 country, he pulled the rug out from -- terrible things.

5 Jim Carter was a wonderful president whom I
6 love because of his humanitarian efforts, his Nobel Peace
7 Prize. He was also a wonderful and expert peanut farmer,
8 but he was not a nuclear engineer and he was not an expert
9 in nuclear energy, and he pulled out the rug from the
10 nuclear industry in this country and gave to it the
11 French, Japanese, Russians and the British. And there was
12 a nuclear reprocessing facility in West Valley, New York
13 at the time, which had been shut down for other reasons,
14 and in limbo. Of course, that was the death mill for that
15 facility, which was a successful commercial facility which
16 operated for many years, until 1972, reprocessing fuel
17 from the early reactors in this country.

18 If you remember back that far, Yankee Row and
19 Big Rock, Consumers Power Company in Michigan, and it also
20 pulled out the rug from a multi-million dollar facility in
21 the process of being built in Barnwell, South Carolina. I
22 can't remember the name of the facility that was the
23 primary contractor. Westinghouse, however, who I worked
24 for at that time, was a minor contractor.

25 It was a terrible decision for America and I

1 thank God that DOE, somebody in the administration has
2 decided to turn it around and try to close the fuel cycle.

3 I support DOE in their efforts and hope they
4 are successful. And I don't care so much about the site
5 now or the method, but I thank God they're doing it and I
6 hope they pursue it.

7 I do have sort of a technical comment that in
8 order for DOE to help sell this, there's a dark mark on
9 their chart that says underground repository or geologic
10 repository. They need to change that and come up with a
11 politically correct word. I hope, based on Mr. Ferguson's
12 or Mr. Furstenau's comment, that they haven't completely
13 killed the non-retrievable storage option. I don't want
14 to speak too long about that as an option because that is
15 not the purpose of this PEIS. Let's talk about ways of
16 disposal.

17 Of course, all of these options reduce the
18 volume, as we know, and makes a monitor retrievable
19 storage system much easier to sell, remember the days in
20 the consideration. It may not be a consideration anymore,
21 but it shouldn't be. I hope that DOE isn't closing all
22 options for what is a small amount of waste that will come
23 out of this cycle.

24 I notice that there is no PEIS schedule for
25 Nevada. I guess I can't blame DOE. It would be a

1 terrible mess. All they would want to talk about is Yucca
2 Mountain and it would become a political hard sell. It
3 will help DOE be successful in selling this concept to the
4 American people if they don't show a geological repository
5 as the end state because it doesn't have to be. If DOE
6 decides to consider a retrievable storage system, it's a
7 much easier sell. They don't have to show the amount.
8 It's good for hundreds of years because you can always
9 move it, and you can always monitor it, you can always
10 change it, take it out of one cast and put it in another.

11 And I don't want to go into the details of why
12 it's a good proposal, just a suggestion that DOE consider
13 politically looking at a more user friendly name for that
14 geologic repository. I want to sell this idea. I want
15 this idea to work, whichever concept, but it's a hard
16 sell. People will say, we can't do it until we have a
17 safe, politically, someone is going to say that we can't
18 do it until we have a safe place to put the waste that's
19 generated, even if you reduce it. And we don't have to
20 have a geological waste repository. There are other
21 options for spent fuel, the residue left over from
22 reprocessing.

23 That's all I wanted to say and thank whoever
24 in the administration got this going again. Thank you.

25 MR. BROWN: Thanks very much.

1 David is next and Gary Troyer will follow.

2 MR. WOYHLWEND: I'm David Woyhlwend. I
3 have about 25 years in the nuclear field and the rest of
4 my experience was mostly in hyropower.

5 I wanted to answer his question about the
6 storage out at Hanford. We have what's called a canister
7 storage facility where all the spent fuel that comes out
8 of the K Basins is safely stored there in canisters. The
9 same facility could very easily store the waste out of a
10 vitrification plant, which will be similar to whatever
11 waste that would come out of a civilian reprocessing
12 plant. So we already have the facility out there. It's
13 an underground vault. It has natural air flow through it.
14 It can't, it's not going to cause any harm to anybody.
15 It's safely stored there, can stay there forever.

16 And I agree with him that that right there is
17 the answer to your storage facility. I've seen on
18 television the same facility in France, similar to the
19 canister storage building, where France disposes of their
20 waste from civilian fuel reprocessing.

21 I'm in favor of the reprocessing because the
22 United States is a failure because we don't have any
23 decent energy policy, our total failure in having any kind
24 of a coherent energy policy. Nuclear fuel is a solution,
25 nuclear power generation. We need to build, if we

1 reprocess, we can get rid of the coal fire plants and
2 build, we need to build additional nuclear plants.

3 On television this morning, there was on the
4 Today Show, Al Roker, he's visiting Iceland. He went up
5 there towards, Iceland has a lot of big glaciers on it,
6 they had a steel post where the glacier was last year, way
7 off in the distance, probably about a third of a mile.
8 That's how much the glaciers have receded, just in this
9 last year.

10 Greenhouse gases are a serious problem and
11 they haven't been addressed by our nation. The
12 reprocessing will shrink the, like someone said earlier,
13 the repository in Nevada, it will fill up by 2010, it
14 would be full if they took all the spent fuel down there.
15 By reprocessing, you're shrinking it down so that it would
16 save a lot of space, and you would also produce about half
17 of the uranium and the plutonium, which comes out of the
18 spent fuel as reusable. So you're throwing billions of
19 dollars away if you store the spent, send the spent fuel
20 down to Nevada, and you're just wasting energy there.

21 As far as designing a plant to process the
22 waste, we're building the Hanford vitrification plant out
23 there right now. It's being built. A similar facility
24 could very easily take care of the waste from reprocessing
25 plant. And then we have out there, we have the PUREX

1 plant is sitting idle. Possibly it could be retooled and
2 you could probably process the civilian spent fuel right
3 there and build an additional vitrification plant because
4 the one they're building at Hanford will only take care of
5 the tank farm waste, which is a major problem to get rid
6 of because we've sat on the problem all of these years and
7 never dealt with the problem till now.

8 France and Japan, they've been reprocessing
9 civilian spent fuel for 30 some years or more and disposal
10 is very easy, it's not a serious problem. It's a
11 political problem in this country because people are
12 scared of the nuclear word. I've worked in glow boxes out
13 in Hanford, held plutonium right in your hand. If it
14 escapes, it's no worse than breathing some dust from lead
15 or something. It's just a heavy metal. It's all blown
16 out of proportion. Some claim that the world is going to
17 come to an end if a little bit of plutonium gets out.

18 MR. BROWN: You're at five minutes now, if
19 you can wrap your remarks up. Do you have a final
20 comment?

21 MR. WOYHLWEND: Oh, okay. Anyway, it's
22 blown way out of proportion. There's more hazards right
23 here along the freeway with big tanker trucks of chemicals
24 go by here every day. Nothing is ever said about it.
25 Your hazard is more from those chemical trucks than out at

1 Hanford, you know. It's a very safe process. Thank you.

2 MR. BROWN: Thank you.

3 Gary Troyer, and Richard Smith will follow
4 Gary.

5 MR. TROYER: Thank you. I'm Gary Troyer,
6 here representing Citizens for Medical Isotopes and
7 nuclear energy in general. I much appreciate the
8 opportunity to discuss the PEIS. When it first came out,
9 the preceding AFCI or advanced fuel cycle initiative was
10 quite exciting for me, having worked in the industry for
11 about 40 years, to see a plan that really made some sense
12 about how we can solve our energy issues for the United
13 States.

14 We've demonstrated the ability to perfect
15 nuclear energy from a military effort into a safe, clean,
16 reliable, and economically domestic energy source.
17 However, on the pathway to the safest form of industrial
18 and domestic base load energy with over a 91 percent
19 capacity factor today, somewhere along the way, we lost
20 sight of that compared to contemporary countries.

21 Over the last decade, we have seen energy
22 costs in all sectors but nuclear increase from 20 to 500
23 percent. Only nuclear has gone down by 54 percent in the
24 last four years, making it competitive with hydro and below
25 coal.

1 This supply of petroleum will continue to be a
2 nemesis for the U.S., since 70 percent of its use is in
3 our transportation sector. As we convert our fleet to
4 non-petroleum fuels, we will need huge increases in other
5 fuels. Most expect that our transportation will become
6 electrified in some manner, both in mass transit as
7 electrified rail systems and battery-boosted light
8 transportation -- somehow get our cars with soccer moms
9 into something that doesn't use petroleum. That's the
10 answer.

11 The huge energy shift cannot be solved by soft
12 energy sources since a third of our nation's energy is in
13 this sector. Expectations for up to a fifth of our total
14 energy from conventional renewables simply does not
15 compute as the complete solution. Therefore, large base
16 load economical systems are needed which requires the
17 expeditious implementation of the AFCI/GNEP programs and
18 plans.

19 The perceived issues against it usually are
20 safety, waste streams, and proliferation. These are
21 simply unfounded, in my view. Safety has been solved by
22 showing the nuclear power fleet to have the safest
23 industrial record due to aggressive efforts in both
24 Government, thanks to NRC and the DOE, as well as
25 self-regulation. The AFCI/GNEP and demonstrations by

1 contemporary countries show that spent nuclear fuel is a
2 recyclable commodity. Recycling is the best real solution
3 to current stagnated attempts to permanent single pass
4 storage. There we would have our waste stream solved if
5 we elect to use this.

6 The proliferation issue is an outdated
7 argument for nuclear power. Even the opposing Federation
8 of American Scientists states that, and I quote,
9 "... physical characteristics make reactor-grade plutonium
10 extremely difficult to manipulate and control and
11 therefore explain its unsuitability as a bomb-making
12 ingredient." Those of us in the nuclear industry
13 understand that power reactors don't make useful
14 plutonium, even though they are 50 percent of the burn-up
15 in a power reactor.

16 A well-managed nuclear power program does not
17 proliferate weapons, period. The GNEP program is designed
18 to enhance control among participants with U.S. approaches
19 as a cornerstone of the policy.

20 A significant advantage to the AFCI/GNEP is in
21 the area of spin-off domestic technology. Members of
22 Citizens for Medical Isotopes recognize the significant
23 advantages practiced by nuclear medicine with medical
24 isotopes. The advanced reactors that are part of the GNEP
25 plan bring an opportunity for producing unavailable

1 special short-lived isotopes for medical diagnosis and
2 cures. Production of these special isotopes and
3 resurgence of nuclear power research and deployment brings
4 opportunity to offset expected demise of foreign sources.
5 The foreign sources are suffering from loss of aged
6 reactors and refurbishment with known instances in the
7 past twelve months affecting over 40,000 procedures on a
8 daily basis in the United States, therefore, the AFCI/GNEP
9 program must go forward.

10 MR. BROWN: Thank you.

11 MR. SMITH: My name is Richard Smith. I'm
12 a retired nuclear engineer and I'm representing myself
13 tonight. My remarks will be focused primarily on the PEIS
14 as opposed to some of the other things that have been said
15 earlier. I don't necessarily disagree with what's been
16 said. Conceptually, I support the closed fuel cycle in
17 whatever form works. It's obvious that we don't know
18 which form is the best one yet. DOE has indicated they
19 have a couple of likely candidates.

20 The one thing that I felt was missing from
21 this EIS draft was any mention of the cost associated with
22 these various alternatives. I couldn't find a dollar sign
23 anywhere in the whole damn thing, and if you're going to
24 compare approaches to a problem, solving a problem, you
25 need to have an understanding of the economics of the

1 thing as well. This EIS has not done that. I think
2 before you can put it out and say we've really analyzed
3 this question, you've got to look at the cost associated
4 with each approach.

5 Now having said that, the other side of the
6 coin is that this particular approach is in competition
7 with other energy production techniques and, there again,
8 the cost for kilowatt hour delivered to the customer is
9 going to be the thing that controls which one is
10 successful. We may need a bunch of them and we have a
11 bunch of them today and they'll all cost different amounts
12 of money, but you have to know the cost you're getting
13 into before you instigate a huge program of this sort.

14 Having worked on the 1998 report to Congress
15 that looked at transportation of and recycling of spent
16 fuel materials, one important question is, aside from the
17 cost, is the schedule on how long is it going to take you
18 to get there. We're talking about building some rather
19 large, expensive facilities to implement such a program.
20 First of all, we don't have a reprocessing plant in this
21 country that could be licensed to operate today. You have
22 to eventually build it from scratch, and having watched
23 the building going on at WTP, that may take forever.
24 So you've got a schedule problem, and not only that, you
25 also have large areas of uncertainty in some of the

1 knowledge areas.

2 For example, we don't really know how well the
3 various reprocessing schemes that are proposed here for
4 implementing the recycle and the reuse of fuel materials
5 from light reactors, how those are really going to work.
6 They've been experimented on and demonstrated at least the
7 bench level and so forth in Idaho. It's not clear that
8 they can be scaled up successfully or economically, and
9 those things have to be answered, and that's another
10 time-consuming effort.

11 So I'm guessing it would take at least 20
12 years before you would have anything in place to operate
13 in this scheme. In the meantime, we've got some serious
14 problems, and I'm not sure how we're going to deal with
15 them, other than continue the way we're going. I would
16 urge, though, that DOE take into account or consider
17 displaying the cost that they should have developed for
18 these various alternatives so that they will be available
19 to compare against alternative energy sources later on
20 when those kinds of decisions have to be made. Thank you.

21 MR. BROWN: Carl Holder and George
22 Hutchison will follow.

23 MR. HOLDER: I'm Carl Holder from Pasco,
24 Washington, and I just wanted to state, I'm a pro-nuclear
25 power advocate and I support closing the nuclear fuel

1 cycle, and I believe that nuclear power is only
2 sustainable with recycling of spent nuclear fuel.

3 I do want to direct my comments to the draft
4 EIS document. At the very beginning, Section 1.3,
5 relevant National Environmental Policy Act documents,
6 there's a glaring omission. In December 2000, the
7 Department of Energy published the Programmatic
8 Environmental Impact Statement for accomplishing civilian
9 nuclear research and development and isotope production
10 missions in the United States, including the role of the
11 Fast Flux Test Facility. That's your document DOE-0310.

12 That is not apparent in the document and as
13 the previous programmatic decision document that has been
14 published by the Department, I find that to be
15 unacceptable.

16 There is another omission, and I found that
17 all of the site studies that were done after and during,
18 the scoping period before should have at least been
19 mentioned. The site study that I had a participation in
20 was with the TRIDEC Siting Study for Hanford Advanced
21 Fuels Test and Research Center. I give the citation here
22 where it's on the website.

23 And from the executive summary, it says: "The
24 Fast Flux Test Facility is a 400 megawatt, fast spectrum,
25 sodium-cooled reactor. It is uniquely designed to test

1 nuclear fuels and materials in a fast spectrum
2 environment. Such fuels and materials testing and
3 qualification is a necessary precursor to the development
4 of the sodium fast reactor technology selected by DOE for
5 the advanced fuel cycle reactors necessary to close the
6 nuclear fuel cycle.

7 And it goes onto say that the reactivation of
8 the Fast Flux Test Facility complex and the Fuels Material
9 Examination facility represent an opportunity for DOE to
10 accelerate a commercially viable, sustainable closed fuel
11 cycle by at least a decade. DOE will gain a substantial
12 reduction in programmatic risk through a cost effective
13 test program using existing facilities and realize a
14 multi-billion dollar savings compared to the cost of
15 constructing new test or prototype facilities.

16 The impacts may not become apparent until
17 after a nation is committed to the selected path of these
18 facilities are constructed and have begun operations. So
19 that being said, I appreciate that both of those
20 references be included in the final document. Thank you
21 very much.

22 MR. BROWN: George Hutchison, and Gordon
23 Sturrock is after.

24 MR. HUTCHISON: George Hutchison. I sat
25 in a car a long time today and we burned a bunch of fuel

1 getting here. I think our country needs a comprehensive
2 energy program. I think what I've learned tonight is that
3 recycling nuclear fuel is a hell of a lot better idea than
4 just sending it off to Yucca Mountain, but I'm not one to
5 say I'm a pro-nuclear advocate, I'm not. I'm highly
6 skeptical of the health affects of this entire industry.

7 As a school teacher who studied a lot of
8 American Economics and American Policy, American Political
9 Science, American Government, American History, I'm really
10 concerned with specifically one of the by-products of the
11 nuclear mining process, of the fuel enrichment process,
12 it's the creation of stuff called U-238 or depleted
13 uranium. We have generated literally 1.5 billion tons of
14 this stuff and it is radioactive for over four billion
15 years.

16 The DOE has decided that one of the best ways
17 to get rid of the stuff is give it away to the emissions
18 industry who has made artillery shells out of it and tank
19 plating because it's a good dense metal and it protects
20 our guys from their bullets, but it goes through their,
21 our enemy's bunkers, tanks, buildings, bedrooms, barns,
22 everything. And the stuff atomizes and we now have tens
23 of thousands of soldiers who are suffering from the
24 affects of this radiation poisoning. Over 400,000 of our
25 military men have been exposed to it.

1 Now I'm speaking now as a member of the
2 Veterans for Peace, Corvallis Chapter. When I say that
3 this is a concern of mine, it's not a baseless fear. I
4 think this depleted uranium is going to be viewed in the
5 future as evil, perhaps more persistent and long-term a
6 problem than any as the nerve gas, buster gas that was
7 used in World War I or the agent orange that we used in
8 the Vietnam War.

9 It's something that the DOE has to figure out
10 what to do with, how not to bury it, how not to give it
11 away, how not to sell it, how not to turn it into weapons,
12 how not to poison all of us, our own troops, much less the
13 people in the countries where we are using it, which are
14 now Bosnia and Iraq and perhaps in the near future other
15 countries.

16 So now I have more questions though than I
17 have anything else about the PEIS. It's quite a big
18 document. Those of you who may have seen it, it's a
19 phonebook out there. I bet most of you haven't read it.
20 I haven't. I've got a lot to learn. Some of the speakers
21 here tonight have been really good. I've learned some
22 things. I've learned we have economic choices to make.

23 We really do need to know the dollar signs
24 attached with all of this technology. I know there are
25 political costs. Somebody usually wins and somebody

1 usually loses when we make political choices and this is a
2 political choice. I am most concerned about the
3 environmental cost, the human health cost on not only just
4 depleted uranium, but on all aspects of transporting,
5 milling, mining, burning, using, storing, radioactive
6 fuel, radioactive material.

7 And I have a question about how much will this
8 program and policing and monitoring of its implementation
9 cost us. I understand that it's very difficult to make
10 weapons-grade plutonium out of fuel rods and yet we're
11 worried as hell that the Iranians are doing that. We will
12 have to, if we are spreading this around the globe, more
13 than we are doing now, be monitoring it. It's going to
14 cost us.

15 How much more energy, how many more jobs and
16 what is the economic multiplier effect created if this
17 amount of funding that we are proposing, which we still
18 don't know how much it is, invested in cleaner alternative
19 sustainable energy rather than nuclear energy. I've been
20 reading about Dr. Helen Caldicott, a wise woman and a
21 concerned human being, as you all are. I think we all
22 want to do what's best for our country, what's best for
23 our health. A lot of you guys are probably union members.
24 I am. I want the good, high paying, sustainable jobs for
25 me and you.

1 MR. BROWN: You're at about the
2 five-minute mark.

3 MR. HUTCHISON: And I'm about done. We're
4 on the same page.

5 And my last question about energy production
6 generally is how much more democratic is it? Might it be
7 when millions of us and world citizens are able to
8 generate electricity with solar panels on our roof than if
9 a few corporations at a few large industry conglomerates
10 control the power distribution of our country and our
11 planet. Those are my questions today. Thanks.

12 MR. BROWN: Thanks, George.
13 Gordon is next and Jack Dresser will follow Gordon.

14 MR. STURROCK: My name is Gordon Sturrock,
15 speaking on behalf of myself tonight. And I'm a member of
16 Veterans for Peace and I'm the co-founder of Veterans
17 Against Torture.

18 The greatest feats of mankind have always been
19 and always will be prone to unforeseen conditions which
20 cause cataclysmic failures -- the Titanic, Hindenburg, the
21 New Orleans levy failure, Apollos 1 and 13, Space Shuttle
22 Challenger and Columbia, the Union Carbide Plant in
23 Bhopal, the Exxon Valdez and Chernobyl and Three Mile
24 Island and many more.

25 In each of these disasters, highly talented

1 and skilled humans crafted technology to be used as to be
2 as foolproof and safe as possible. And in each of these
3 events, they ultimately failed due to human error.

4 Do Hanford scientists think they are so much
5 better that they can guarantee no nuclear disasters will
6 occur as a result of directing nuclear waste through our
7 highways and railways to its containment and reprocessing
8 sites? Do they have so much confidence in themselves that
9 they are willing to put millions of people and many future
10 generations at risk if the unforeseen should happen? I
11 sure hope not. War crimes and crimes against humanity
12 have been committed on an unprecedented scale.

13 I strongly suspect that most Americans are not
14 being informed. Is the media telling us the truth, the
15 whole truth, and nothing but the truth? Should we trust
16 our Government and our media? Absolutely not, and I'll
17 give you a firsthand reflection of why, an example that I
18 hope will make you run to your computers when you get home
19 to check it out.

20 One might think that 200 mostly combat
21 veterans from World War II, Korea, Vietnam, Afghanistan
22 and Iraq converging from all over the country onto the
23 White House to demand the arrest of George W. Bush and
24 Dick Cheney would make some headlines, don't you think? I
25 do. This did in fact happen this year on March 19th at

1 the White House. You can see videos of this event by
2 searching You Tube for "arrest warrant," look for my name
3 Gordon Sturrock. Many videos are posted covering that.

4 This event was completely blacked out by the
5 mainstream media, nor was there any mention made of the
6 previous day's testimony by dozens of Iraq and Afghanistan
7 veterans who had also come to Washington, D.C., to tell
8 the world the war crimes they had witnessed and
9 participated in. Go to ivaw.org to hear these testimonies
10 yourself.

11 I've heard people say that they're
12 disappointed that America doesn't have a coherent energy
13 policy. I absolutely disagree. We do have a coherent
14 energy policy. We're energy addicts and it has to stop,
15 if it's not already too late. The English scientist,
16 James Lovelock, environmental scientist, has predicted as
17 many as 6 billion people will be dying of unnatural causes
18 over the next 90 years. Fidel Castro predicts 3 million
19 people will die as a result of unnatural causes over the
20 next few decades. I happen to agree with these horrible
21 predictions. They're going to occur because of widespread
22 disruptions in food delivery, the loss of fuel, the soul
23 critical to everything that we do.

24 Please stop creating nuclear waste. Let's use
25 our human resources and limited fossil fuel supplies to

1 create a sustainable economy that puts humans before
2 corporate profits. Just say no to nucs. Thank you.

3 MR. BROWN: Thanks, Gordon.

4 Jack Dresser, and Tom Carpenter will follow
5 Jack.

6 MR. DRESSER: Well, I'm also up from
7 Eugene and co-founder of Veterans for Peace and Veterans
8 Against Torture. And I also want to talk about this Obama
9 nation called depleting uranium and one of the things that
10 is notably absent from this report here. I don't know how
11 thick it is, but according to the outline even given, it's
12 totally ignored. What is done with the leftovers, the 99
13 percent of uranium that is left over as U-238 that has to
14 go somewhere? And it is given or sold very, very cheaply
15 to weapons manufacturers and, thereby, comes under the
16 authority of the DOD and, in addition to that, it is being
17 sold to 17 different countries now.

18 This armor penetrating metal has been dumped
19 -- it was first used by Israel against the Egyptians in
20 1967. It was used in Bosnia -- a thousand tons of it were
21 used in the attack on Afghanistan, twenty two hundred tons
22 of it were used in the initial shock and awe campaign in
23 Iraq. Between those two current wars we have going on,
24 there's probably about four thousand tons of depleted
25 uranium that have been dumped on the Middle East.

1 Now 70 percent of the depleted uranium in
2 these weapons is atomized upon impact, producing enormous
3 heat, which fragments into particulates that are
4 distributed by the wind everywhere. They're in the air
5 they breathe, they're in the soil, they're in the water,
6 they're in the food supply, they're in the crops, and the
7 health affects have been horrendous.

8 Depleted uranium has been identified clearly in
9 research as mutagenic. It changes DNA. In 1988, a Bozra
10 hospital, before we attacked Iraq the first time, Bozra
11 hospital reported about three dozen cancer deaths. Ten
12 years later, seven years after our first unprincipled
13 attack upon Iraq, they had over 400 cancer deaths. There
14 are all kinds of health effects because these particles
15 are breathed in, they can go in, ingested through food,
16 they can go to any organ, settle in any organ of the body,
17 including the semen, producing horrendous birth defects.

18 I happen to have a series of pictures of some
19 of these birth defects in Iraqi babies, if any of you
20 would like to see me a little later to see what our
21 depleted uranium is doing. Four and a half billion years
22 is the half life of this stuff. We have made one of the
23 oldest civilizations on earth uninhabitable forever.

24 Now there's two criteria that define illegal
25 weapons. One is that it causes unnecessary cruelty or

1 suffering. The other is that it is indiscriminate in its
2 impact, combatants and non-combatants like. This is the
3 most indiscriminate and cruelest weapon ever designed by
4 the evil mind of man. These are war crimes that are
5 forever. And our country, as a result of the use of this
6 stuff, I would say has inflicted the greatest war crimes
7 in the history of mankind. This stuff has to stop.

8 There are many other sources of energy that
9 are clean, both for the air and for the water and for the
10 soil. There's absolutely no reason that we need nuclear
11 power whatsoever. Most of the European countries are
12 doing quite well. There's only one European country,
13 France, which has gone heavy into nuclear, the others are
14 using solar, wind. Denmark is a net energy exporter now
15 relying very heavily just on wind power. This stuff is
16 absolutely demonic and absolutely unnecessary. Thank you.

17 MR. BROWN: Tom Carpenter is our next
18 speaker and Meredith Crafton will follow.

19 MR. CARPENTER: My name is Tom Carpenter
20 and I drove down from Seattle, although I'm out here quite
21 a bit, about once every week, week and a half or so,
22 working a lot with sick and ill Hanford workers, working
23 with folks on mistakes that happen at places like Hanford.
24 And I'm here to comment about the GNEP plant and the
25 policy of what has been called recycling here, which I

1 always knew as reprocessing so I'm not sure what the
2 difference is, but it looks like it's the same.

3 And it's a little ironic to be up here talking
4 about the negative affects of reprocessing at a place
5 where it is so apparent. Forty-five years of reprocessing
6 of nuclear fuel here has produced one of the most
7 contaminated facilities in the western hemisphere and it's
8 right here. We are spending lots and lots of money and
9 lots of people power to try to get our hands around this
10 problem and we're not that close to solving it.

11 Nationally, we've spent over \$30 billion and
12 have managed to secure only one percent of the nuclear
13 waste that the defense industry has created, for instance,
14 largely through reprocessing. So I'm concerned when I
15 hear that there is a plan afoot to reprocess spent nuclear
16 fuel from commercial nuclear reactors. As contaminated as
17 Hanford is, and most of you know the facts and figures, 53
18 million gallons of high level nuclear waste stored in
19 underground tanks, all of which have reached the end of
20 their design life, many of which have leaked an estimated
21 million gallons threatening the ground water.

22 I mean, folks know this, and there's really no
23 disposition path for a lot of this waste. We are building
24 a waste treatment plant, yes. It is behind schedule, it
25 is over budget, and many engineers and physicists fear

1 that this plant is not feasible and won't work. In fact,
2 this is our fourth attempt to build such a facility. So
3 until we actually do it, I would like to see it done and
4 then I'll believe in this technology. I support it, but I
5 want to see it happen. I want to see a pilot project that
6 actually succeeds in doing this. Which brings me to why
7 would you want to bring a lot more nuclear waste to
8 Hanford to reprocess. It's in a compact, manageable form
9 now perhaps, but reprocessing involves dissolving it in
10 acid and the environmental consequences of that is just
11 phenomenal. You're going to have a lot of cesium and
12 strontium 90 and estimated 20 million curies that's going
13 to have to go into the shallow land disposal. Here, in
14 Hanford? The entire inventory at the Hanford site now of
15 curies is about half a billion.

16 So it's just, again, unfathomable that you
17 could both clean up the site and add a new mission here,
18 new nuclear mission, especially one of this scope and
19 consequence. And it has already been pointed out, this is
20 probably decades away. It's a very complicated and
21 expensive scheme. The National Academy of Scientists
22 looked at this same scheme in 1996 and then again two
23 years ago and concluded that it would cost as much as \$700
24 billion. Now that's a familiar figure.

25 I'm not sure we want to come up with another

1 \$700 billion dollars to bail out an iffy industry. I'm
2 not sure we can. I don't know if we have the money for
3 it. The National Academy of Scientists says there's no
4 economic justification for going forward with this program
5 at anything approaching a commercial scale.

6 So I think we ought to step back and think
7 about what we're doing. At some point, there may be a
8 path forward for the stuff, but right now, I think we need
9 to focus on clean up, on conservation, which is going to
10 enable us to meet a lot of our energy demands just by
11 being more efficient with what we've got, and yes, solar
12 and wind, which our technologies have great promise. And
13 I think a lot of that work can be done right here. So I
14 would stop turning your back on this technology and
15 actually start embracing it. That's where the money is
16 going to be, that's where the excitement is and that's
17 where the instant payoff is going to be for the energy.
18 Thank you.

19 MR. BROWN: Meredith Crafton, and Gene
20 Kinsey will be next.

21 MS. CRAFTON: Good evening. I'm Meredith
22 Crafton and also work at Hanford Challenge. And I have a
23 few comments based specifically on kind of this process.
24 And one is reiterating the request for an extension of the
25 comment period due to a number of factors. One being that

1 DOE has failed to provide any non-proliferation analysis
2 within this draft PEIS. And, in addition, there needs to
3 be more, like I said, more time. We're recommending a
4 120-day extension of the comment period, and this would
5 allow for more time, specifically due to the elections
6 being in the first month of this comment period so,
7 basically, we're allowing the public to get more
8 information and requesting that DOE also post more
9 information on the cost benefit analysis, which is not
10 involved. And it's unrealistic to ask the public to
11 comment without knowing what the true costs and other
12 options are.

13 In addition to the lack of a cost analysis,
14 the PEIS does not fully address the environmental and
15 security concerns. And there's a failure to select a
16 specific site for reprocessing complex and unsubstantiated
17 claims that reprocessing reduced the need, for example,
18 for a geological repository. As a matter of fact, it does
19 create more waste, just different types of waste for us to
20 deal with.

21 And, finally, in response to the kind of
22 climate change argument, in reality, nuclear power is not
23 actually emissions-free. While the reactor is not a huge
24 emitter of greenhouse gases, the process to create this
25 fuel is. For example, the Paducah Plant requires the use

1 of two coal-fired power plants to run its operations. It
2 is a huge emitter of greenhouse gases, and the pipes and
3 processes at Paducah are also known releasers of very high
4 levels of chloro-fluoro-carbons, one of the most known and
5 recognized greenhouse gases. So it is very inaccurate to
6 say nuclear energy is even emissions-free.

7 So while we do need a comprehensive energy
8 policy, specifically, this proposal is likely not the
9 greatest solution and hopefully the Government can go back
10 to the drawing board and try to include some of these
11 other alternative technologies, as well as giving the
12 public more time to comment.

13 And, finally, based on the commenting, it also
14 seems important that other cities and places be able to
15 participate in these types of hearings. For example, a
16 hearing in Seattle or Portland would have been appropriate
17 because, as we know from past Hanford operations, as well
18 as France's struggles at La Hague, that this stuff doesn't
19 just stay where the waste is created. It spreads. And
20 something we could possibly learn from that is currently
21 Denmark, Norway, and Ireland are suing France and Great
22 Britain for radioactive waste washing up on their shores
23 due to their reprocessing facilities.

24 So, hopefully, from this we can take away the
25 goal of extending the public comment period, as well as

1 more meetings throughout the country because this greatly
2 affects all of us. Thank you.

3 MR. BROWN: Gene Kinsey, and Gary Petersen
4 will be next.

5 MR. KINSEY: Hello, my name is Gene
6 Kinsey. I'm a retired Hanford worker and I appreciate
7 this opportunity to share with this audience and those
8 representatives from our Government a very brief statement
9 of my views and opinions. Thank you.

10 First, I would like to say that I have the
11 greatest respect for the political figures on this side of
12 Washington. Many of them have seen Hanford in action and
13 understand the potential for positive nuclear energy
14 development. Like me, they have seen nuclear transform to
15 the production of electricity for public energy usage. It
16 has been recognized that a potential exists for the
17 production of isotopes for use in medicine.

18 Second, I would like to applaud the Hanford
19 workforce. The scientists and engineers are like no other
20 in the world. Remote operations and the safety challenges
21 that go with nuclear and chemical processing surpass the
22 dreams of many and have been expanded for use in many
23 other industrial applications. The Hanford craftsmen in
24 both the building and in maintenance work deserve to be
25 recognized both for workmanship and for their safety

1 record.

2 Third, the Hanford Reservation has 500 square
3 miles to work with. Hanford could be the new beginning
4 and the backbone of a nuclear industry for the United
5 States of America. The land area is waiting to be
6 developed. The workforce has integrity, ingenuity, and
7 ambition like none other in the world. We can be the
8 leaders of the world for the development of new, useful
9 and safe nuclear energy. We can do it. Thank you.

10 MR. BROWN: Gary Petersen, and Chris Orton
11 will be next.

12 MR. PETERSEN: Thank you. My name is Gary
13 Peterson. I represent TRIDEC, and I was the project
14 manager for the GNEP study that was conducted here in the
15 Tri-Cities. The GNEP grant was awarded in January of
16 2007. On that team was Columbia Basin Consulting Group,
17 AREVA, Washington Group International, and Battelle. And
18 I'm very proud of the fact that we completed that study
19 within 90 days under budget and on schedule, so that's
20 pretty good.

21 TRIDEC is one of the oldest economic
22 development organizations in the state of Washington,
23 having been formed in 1963. TRIDEC has consistently
24 worked with the Department of Energy and its predecessors
25 for the past 45 years to successfully development new

1 missions for Hanford and to support congressional funding
2 for Hanford clean-up.

3 I preface my remarks today, again, by stating
4 for the record that TRIDEC has consistently said that
5 Hanford clean-up does come first. It's on both TRIDEC and
6 the Tri-Cities Community Agenda, but TRIDEC also has an
7 obligation to the community to look for new industries and
8 even new Hanford missions that can take advantage of
9 existing DOE facilities and our highly educated and
10 trained nuclear workforce. And we feel very strongly that
11 GNEP can actually reduce waste and help Hanford clean up.
12 This includes reducing the over 520 tons of spent fuel at
13 Energy Northwest from Columbia Generating Station.

14 I'm here today to put forth the Hanford site
15 as a leading candidate location for new GNEP facilities,
16 to include a nuclear fuel recycling center and an advanced
17 recycling reactor. We hope that Washington State, all of
18 Washington State, will enter into this discussion and
19 conversation about energy self-reliance, global warming,
20 and nuclear waste reduction.

21 Our study clearly showed that this community
22 and our state can bring technical, scientific, and
23 educational expertise to the establishment of these
24 facilities and will leverage a workforce that is already
25 skilled in safe nuclear plant and nuclear power operations

1 and in nuclear waste reduction.

2 The existing infrastructure present at Hanford
3 site offers enormous cost and logistics benefits to the
4 Government for new energy production and fuel recycling
5 activities. This infrastructure spans highly unique
6 existing buildings, but that haven't been tapped for
7 missions at this point, such as, and we've mentioned them
8 before, the Fuels and Materials Examination Facility
9 called FMEF, the Materials and Storage Facility called
10 MASF, and the Fast Flux Test Facility, one of our nation's
11 only sodium-cooled reactors. The site also encompasses an
12 NRC licensed and operating power reactor, as well as
13 roads, railroad lines, utilities, and other infrastructure
14 designed for large-scale nuclear operations intended for
15 the Hanford site.

16 Our community has a familiarity and respect
17 for nuclear activities and a depth in science and research
18 development that will support all aspects of the national
19 energy strategy, including an expanded role for nuclear
20 power. This community is, after all, the home of the
21 world's first operating reactor, B Reactor. We need to
22 take advantage of the history of the people you see in
23 this audience who have spoken on behalf of the nuclear
24 industry. Those are my remarks. Thank you.

25 MR. ORTON: I'm Chris Orton. I represent

1 myself and all the other up and coming scientists and
2 professionals in engineering.

3 I just wanted to go on record saying I'm so
4 glad to see that this is happening. I hope that it
5 happens a little faster. I would wish and know many of my
6 colleagues wish it would be a little bit more expedited.
7 And so that's one of my suggestions, is to expedite this
8 process to be able to spend more time actually developing
9 science and developing solutions to these problems that
10 have been put forth.

11 And I think there's many valid questions and
12 concerns that people have and we need to be able to
13 address those. But I also think we need to take advantage
14 of what's already been done. I'm a third generation
15 Hanford worker. This is my home, this is what I've grown
16 up knowing, and I understand about the consequences of
17 nuclear power and I live with it every day.

18 And I think one of the things that I run into,
19 as I've gone to school across the country, is many people
20 don't understand the difference DOE has between civilian
21 nuclear power and the Department of Defense and the things
22 that they've done, and I think that's something that needs
23 to be addressed as we go forward, to let people know the
24 difference between those, the problems that have come from
25 research that happened, that it was very preliminary, and

1 the advances that we have done to correct the mistakes
2 we've made in the past.

3 One of the other things that I wanted to point
4 out was that GNEP, one of their big focuses is to do
5 separations in such a way that is non-proliferate in that
6 we don't separate plutonium out completely. The problem
7 is that, the fact is that we're a proliferated nation.
8 It's already something that we do. And so I wonder if
9 it's not a better idea and a suggestion to go look at
10 alternatives to start a reprocessing plant that's
11 functioning now, one that we can build to current specs
12 and current environmental practices and that will be safer
13 than the things that we have done in the past and address
14 these concerns.

15 And I think it needs to happen now, otherwise,
16 we're going to be left behind. I think some great points
17 were made about Japan, France, China even, Russia, they
18 realize the potential that exists in being good stewards
19 over the resources that they have. And I think that we
20 need to all take advantage of that and not get left
21 behind. And I think that's a great economic stimulus
22 plan. Instead of spending all of this money researching
23 something new, when you can stimulate the economy to wean
24 yourself from energy dependence off other countries and
25 focus on what we can do for ourselves, and as we work

1 together, we can provide ourselves with a wonderful base
2 load energy system.

3 And so that's one of my suggestions, is to
4 expedite that process. And I think that's something
5 that's kind of been simmering among the GNEP program for a
6 little while. I attended the annual meeting a little over
7 a year ago, and that was brought up, that we need to take
8 advantage of the technology that we already have. And I
9 think that's about it. And I appreciate you giving me the
10 opportunity to comment. Thank you.

11 MR. BROWN: Thank you.

12 Marve Hyman.

13 MR. HYMAN: I pass.

14 MR. BROWN: Gerry Pollet is next, whom I
15 think is always prepared to speak. Gerry will be followed
16 by Kevin Hamilton.

17 MR. POLLET: I'm Gerry Pollet, and I'm
18 speaking on behalf of Heart of America Northwest, a
19 Hanford Clean-Up Watch Dog Organization.

20 And several people have talked tonight about
21 some of the issues that I was going to raise, but the cost
22 issue is rather astonishing. NEPA, the National
23 Environmental Policy Act, says that the EIS has to address
24 scarce resources. And I concluded, after reviewing the
25 impact statement, that the Department of Energy only

1 considers dollars to be a scarce resource when it comes to
2 funding Hanford clean-up. Otherwise, it appears to have
3 plenty of dollars for building 200 nuclear reactors at \$6
4 billion apiece, new reprocessing facilities and yet to be
5 imagined additional vitrification plants at \$12 billion
6 apiece.

7 The decision proposed by the Department of
8 Energy would greatly increase the quantities of liquid
9 high level nuclear waste in the nation, something we are
10 familiar with here. Reprocessing is the creation of
11 liquid high level nuclear waste.

12 This EIS needs to specifically address and
13 address in the summary the quantities of liquid high level
14 nuclear waste that will be produced, not simply jump ahead
15 and say, there are -- I love this in the EIS -- it says,
16 there are currently several options for encapsulating
17 liquid high level nuclear waste, such as borosilicated
18 glass. One of those options, of course, is the \$12
19 billion Hanford waste vitrification plant, which is eight
20 years behind schedule and \$8 billion over cost, and as has
21 been pointed out by Tom Carpenter earlier, may or may not
22 work in terms of especially the high level, high activity
23 waste and pretreatment portions.

24 To say there are several options is pie in the
25 sky, and the Department of Energy needs to be honest about

1 this and say we need to have one plant that actually works
2 and maybe one plant that works and is built on time and on
3 budget before we say we have options for dealing with the
4 liquid high level nuclear waste that will be produced
5 under this proposal.

6 Liquid high level nuclear waste is mixed
7 waste, which the Department does not acknowledge in this
8 EIS yet. As mixed waste, you have to have the treatment
9 capacity available before you start producing more waste
10 and storing it. What lesson should we have learned from
11 Hanford's history? The first lesson most people learned
12 is we should have been figuring out how in the world we
13 were going to treat and solidify those wastes before we
14 created more of them, put them into tanks.

15 The Department of Energy will not be allowed
16 anywhere in the nation to produce more liquid high level
17 nuclear wastes unless it can also simultaneously build and
18 permit a proven process to vitrify those wastes because
19 vitrification is currently the best available treatment as
20 recognized under RCRA.

21 If you can't do it here, don't tell us that
22 you've got several options, that you've just got them
23 under your hat somewhere, because we would like to see
24 them if you do. The Department of Energy admits in the
25 EIS that, and I think it's a very interesting admission,

1 that the proposal will use three to six billion gallons of
2 water annually per gigawatt of capacity. We need to
3 discuss the specific impact of that, even though this is a
4 generic EIS, for instance, on the Columbia River Plateau
5 and the use of Columbia River water, in the area that we
6 know that water is going to be scarcer.

7 What are the alternatives in terms of an
8 energy future when you have scarce water or ones that do
9 not, alternative futures that do not rely on six billion
10 gallons of water per year per gigawatt of capacity, plus
11 the water for reprocessing, plus the water for running the
12 vitrification plant, plus the water for the electricity to
13 operate the vitrification plant. The Department has
14 failed in the PEIS to graph for costs, has also failed to
15 even attempt to paint a picture of a system and disclose
16 the full waste streams for each step in the system.

17 Finally, let me note that the Department does
18 acknowledge that the increased quantity in greater than
19 Class C waste and low-level waste is five to ten-fold
20 under these proposals, a five to ten-fold increase in
21 disposal near the surface. Where does the Department of
22 Energy plan to dispose of that waste? It is disingenuous
23 and it is not in keeping with NEPA for you to fail to
24 disclose that the Department insists that it's already
25 chosen Hanford under 2000 Waste Management PEIS for the

1 sole disposal site in the nation for mixed radioactive
2 hazardous waste, which is greater than Class C wastes and
3 many of the other waste streams will be.

4 You've made that decision, you claim,
5 therefore, you need to disclose it in this EIS. Thirdly,
6 you need to disclose the impacts. And that means you need
7 to show what are the impacts of Hanford of adding that
8 curies quantity, the chemical weights, the total
9 cumulative impacts to our ground water and the Columbia
10 River from decisions you say you have already made because
11 Hanford was chosen as one of two regional mixed waste
12 disposal sites. You call them regional, you meant
13 national.

14 The Nevada test site mixed waste disposal site
15 will be closed. That leaves Hanford, and the Department
16 of Energy insists in Tank Closure Waste Management EIS
17 Scoping documents that Hanford has already been chosen to
18 be the national, regional, mixed waste dump, therefore,
19 NEPA requires you to disclose the full impacts of that and
20 the great, increase five to ten-fold increase, in wastes
21 that would be disposed at Hanford. Thank you.

22 MR. BROWN: Kevin Hamilton. And Chuck
23 Johnson will be after Kevin.

24 MR. HAMILTON: Hi. My name is Kevin
25 Hamilton, and I'm a resident of the Tri-Cities. I'm a

1 current Hanford worker. I've worked on Hanford clean-up
2 for a decade and a half now, and I see it happening and it
3 is happening, it is a reality. And for people who think
4 that it's not happening fast enough, they haven't seen the
5 vastness of the mess that is out there.

6 Granted, Mr. Pollet's addressing the issue of
7 how the waste was created out there is not how waste would
8 be created in a recycling, reprocessing of spent fuel.
9 The mission that was happening out there for decades, it
10 was for a need that our country's leaders felt was
11 necessary and it was a hurry up and get it done to make
12 this nation and this country secure, and that was a -- it
13 was poorly done in many aspects.

14 I sample ground water on a daily basis for all
15 kinds of different analyses, and I'm proud to be a part of
16 this clean-up effort, but I don't believe that any
17 reprocessing of spent fuel out there on site is going to
18 be treated and processed the same way that stuff was done
19 for the plutonium production for the security of this
20 nation.

21 The reason the vit plant is taking so long is
22 because so many regulations have been required of building
23 such a facility that we've kind of created that hindrance
24 of making that facility functioning in a prudent manner.
25 Those are all self-imposed regulations and that's what

1 we've agreed to deal with, but that work is going on and I
2 see that plant being built every day out there and I'm
3 excited to see when that thing starts and see the
4 processing of the tank waste that's out there.

5 It would be a shame, in my eyes, to see a
6 waste of the knowledge base, the technology that's
7 available for us, with companies such as Battelle and
8 AREVA out here, knowing what it takes to create or to
9 reprocess this stuff.

10 I don't think it's going to be a huge
11 undertaking. It would be good for the Department of
12 Energy to show us what a batch would cost, a batch fee,
13 what it would take to bring in some fuel and to show what
14 the, through the cycle, and what the, what would happen
15 with the waste, what quantities of waste would be
16 generated in a typical cycle so that people would know one
17 way or another whether it is a viable concept.

18 But there is a workforce here I represent, and
19 I'm not formally representing, 12369, United Steel Workers
20 Union, but I can speak for thousands of workers out there
21 on site that would love to see this concept happen and for
22 Hanford being a viable contender for this work. Thank
23 you.

24 MR. BROWN: Chuck Johnson. And Carol
25 Moser will be after Chuck Johnson.

1 MR. JOHNSON: I'm Chuck Johnson. I'm from
2 Portland, Oregon, and I'm on the Board of Columbia River
3 Keeper. I feel like, coming here, I feel like I've
4 stepped into a different universe than the one I'm
5 normally accustomed to in terms of attitudes on this
6 particular issue, and it's fascinating and very
7 interesting to hear and to observe and to listen to the
8 different people talking about their faith in nuclear
9 technology.

10 And I guess if I had worked in that industry
11 my entire life, I probably would have similar attitudes,
12 so putting myself in your shoes, I can see how you might
13 see it that way. Nevertheless, for those of us who live
14 in other river communities, we're looking at it a little
15 bit differently. We see that the wastes that were created
16 during the development of nuclear weapons here, the
17 reprocessing that was done for that and the liquid waste
18 that's left in the tanks, which is leaking and is a great
19 threat to our Columbia River, along with all the other
20 contamination threats that have been created up here
21 during the many years of nuclear weapons development, and
22 would hate to see a repeat of that tragedy with a large
23 scale reprocessing facility for nuclear power wastes.

24 Now as I understand it, this greater than
25 Class C wastes that Hanford is now supposedly responsible

1 for, hopefully, we can prevent that from actually
2 happening, but it would include the remainder wastes of
3 the West Valley Reprocessing Plant, which is America's
4 only attempt of having a commercial nuclear power
5 reprocessing facility, and was a failure, had many
6 breakdowns and eventually was shut down and has been, at
7 this point, nearly all cleaned up, so to speak.

8 What that means is that they've packed it up
9 and moved it somewhere else, and what's left, the Class C
10 waste at the West Valley Plant, they're planning to bring
11 here to Hanford. So I guess it would be sort of, it would
12 make sort of an arc of completion to have all of the
13 reprocessing wastes here and all of the reprocessing being
14 done here if we decided to go with the GNEP option, as
15 proposed by the Department of Energy. But it doesn't seem
16 like a very wise way to go, it seems like a very expensive
17 way to go, and I think with a new administration coming
18 in, that this Bush administration inspired plan will
19 probably not proceed. It's not realistic.

20 So what would really be great for the Pacific
21 Northwest right now is if communities like Hanford, the
22 Tri-Cities area, Portland, Hood River, all the other
23 communities on the Columbia River, could agree on some
24 sort of energy development plan for the Northwest, one
25 that would include Hanford, would include some renewable

1 energy facilities here, research here, as you're doing
2 right now, as I understand, in biodiesel or other areas
3 that we could help you get money for, you know.

4 I mean, our congressional delegation has to
5 spend all of its time representing us fighting your
6 various plans here. That's a giant waste of energy. Why
7 don't we work together on a regional plan for energy that
8 we could all get behind and that would actually work,
9 instead of continuing to fight one another and get
10 nowhere, not get our waste cleaned up, have money siphoned
11 off waste clean-up to other parts of the DOE, including
12 this GNEP plan. And it just seems like an enormous waste
13 of time and energy for these communities to be at odds,
14 not to talk to one another, not to figure out some sort of
15 joint regional plan that actually would work.

16 So that's the main thing I really wanted to
17 say coming up here, is that I want to work with you and I
18 think that Oregonians and Washingtonians working together
19 can bring projects to the Northwest, particularly to the
20 Hanford, specifically to the Hanford area, that would be
21 beneficial to the economy and to the environment and that
22 we could all agree upon. Thank you, very much.

23 MR. BROWN: Carol Moser.

24 MS. MOSER: I'm Carol Moser, just a
25 civilian. I'm nearly a life-long resident of the

1 Tri-Cities. There's a period of ten years I was in
2 Seattle. And I have to admit that I signed up at the last
3 minute just because I wanted the Tri-Cities to have the
4 last word here tonight.

5 It was interesting to have people come from
6 outside our community and tell us what we want to be when
7 we grow up, but I can tell you, after just running in an
8 election of which, even though I didn't get elected, there
9 were 28,967 people that agreed with me that the Tri-Cities
10 should be a net exporter of nuclear energy and energy of
11 all types. So I think that we know what we're doing
12 around here when we say that we want to have nuclear
13 energy as a part of our economy.

14 Now my husband does work out at the site.
15 He's part of the central plateau clean-up, and it is
16 getting cleaned up. I do agree that we are making great
17 progress in cleaning up the Hanford site. And as we clean
18 up the site, we are looking for new economies to help us
19 get beyond the clean up of Hanford and promote our
20 community so that we can have a sustainable economy here,
21 so we're looking for all types of energy development,
22 including nuclear.

23 It makes a lot of sense to me. I used to go
24 to the Richland City Council and so I'm familiar with the
25 GNEP. The reprocessing of nuclear waste makes a lot of

1 sense to our region and it makes a lot of sense to the
2 scientists that are engaged day-to-day in this process of
3 Hanford clean-up.

4 So I'm an advocate of nuclear energy, I'm an
5 advocate of radioisotopes. I know that we have the
6 technology that can foster this process. I know that we
7 can handle it here in the Tri-Cities. I don't want us to
8 be ruled by people from outside our community telling us
9 what we can or cannot do, and I just wanted to have the
10 last word tonight to make that statement. Thank you, very
11 much.

12 MR. BROWN: At the risk of spoiling
13 Carol's plans, I have to ask if there's anyone else in the
14 audience who hasn't spoken yet who has anything to add.
15 If so, please raise your hand.

16 Okay, we have several here. I'll start with
17 you. If you could identify yourself.

18 MR. ALLEN: Sure.

19 MR. BROWN: If there's an organization
20 affiliation, you can add that as well.

21 MR. ALLEN: I'm Aaron Allen. I'm a
22 resident of Tri-Cities. I work for AREVA, and although I
23 do not do reprocessing of fuel, I do uranium recovery. I
24 do it using processes that are economical, environmentally
25 safe, mechanically, physically safe, and they're well

1 respected and secure.

2 I believe the GNEP proposal has great
3 potential. One thing I would really like to see in the
4 GNEP proposal is an opportunity for corporations to sign
5 up to get an opportunity to get licenses to perform the
6 recycling processes, to privatize the process of recovery
7 of fuel, just like the fuel is privately owned now. Thank
8 you.

9 MR. BROWN: Someone else want to add
10 anything?

11 Yes, please step forward.

12 MR. SMITH: My name is Bob Smith,
13 technically, Robert Lee Smith because there are a lot of
14 Bob Smiths. I was a radiation monitor and health physics
15 technician, whichever word you want to call it, for 35
16 years in the DOE project out here and another five years
17 between, used to be called Exxon, now it's AREVA and also
18 McDonald Douglas Labs, in the commercial end of it.

19 The reason we've got a bad reputation for the
20 waste around here is because we were trying to play catch
21 up with Hitler because he had a one or two-year headstart.
22 If we had waited around not to do that, we might be
23 speaking German by now.

24 So we do have the 53 million gallons of liquid
25 waste in the tanks, which they're going to turn into glass

1 logs, and we do have some tritium in the river right now
2 that, by the time it hits the river at 120,000 cubic feet
3 per second, it's diluted, but we still don't like to have
4 the tritium out there, so we too are glad to see the
5 vitrification programs come along.

6 True, it's going to be awhile before it's
7 done, it's only about 45 percent done. The first glass
8 log is not going to be made until about 2015, somewhere
9 between 2015 and 2019.

10 Yucca Mountain is not scheduled to be
11 completed either, until about 2015, but I think Hanford is
12 the best place for this program coming along here because
13 we've got the technical people around here to do it. And,
14 true, there's always hazards to things, and I can
15 understand the talk about depleted uranium. I read also
16 about the shells that use the depleted uranium to
17 penetrate the enemy's tanks, and it could be a possible
18 problem, although I worked with the depleted uranium out
19 at Exxon, uranium rods came in.

20 I took radiation measurements, and maybe in
21 one of those little fuel elements, you might get two,
22 three, four MR per hour which is quite low-level, but the
23 hazard there is airborne, then it can be a hazard, get in
24 your lungs. So there is a problem when it gets airborne.
25 But depleted uranium that I worked with was really very,

1 very, very low-level material. Uranium 238 is part of the
2 depleted uranium train.

3 So I think that we do need this vitrification
4 plant going out here and I think this new procedure of
5 reprocessing it is going to speed up the deal because our
6 glass logs, we're making two kinds. The low-level glass
7 logs will be four feet in diameter, seven-and-a-half feet
8 tall, glass in steel, buried out here in Hanford forever.
9 And the high level glass logs will be stored in our
10 vaults, anywhere from seven to fifty years, and the reason
11 they have to wait so long is because all the other
12 commercial reactors have priority over getting their spent
13 fuel down to Yucca Mountain.

14 So I really think this is the best place there
15 is, and I would like to see this new program go through.
16 This is a big democratic country, and I certainly suspect
17 people like these Veterans for Peace and Gary Pollet, even
18 though I'm diametrically opposed to it, we need to keep
19 everybody else on their toes. I do appreciate the
20 opportunity to be here and I hope we can get this stuff
21 here if we can.

22 MR. BROWN: Thanks very much.

23 Anyone else who would like to add comments at
24 this time?

25 (No response.)

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STATE OF WASHINGTON)
)
County of Benton)

I, Patricia E. Bute, do hereby certify that at the time and place heretofore mentioned in the caption of the above-entitled matter, I was a Certified Shorthand Reporter and Notary Public for Washington; that at said time and place I reported in stenotype all testimony adduced and proceedings had in the foregoing matter; that thereafter my notes were reduced to typewriting and that the foregoing transcript consisting of 82 typewritten pages is a true and correct transcript of all such testimony adduced and proceedings had and of the whole thereof.

Witness my hand at Prosser, Washington, on this _____ day of December, 2008.

Patricia E. Bute
CSR No. 2919
Certified Shorthand Reporter
Notary Public for Washington
My commission expires: 2-29-12

