Public Hearing Transcripts - Comment Numbers H-6 & H-7
Argonne - Afternoon and Evening Sessions

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ORIGINAL

UNITED STATES
DEPARTMENT OF ENERGY

ENVIRONMENT IMPACT STATEMENT
FOR SITING, CONSTRUCTION, AND OPERATION
OF THE NATIONAL SPALLATION NEUTRON SOURCE

ARGONNE AREA PUBLIC SCOPING MEETING

Monday, January 25, 1999
1:30 p.m. - 4:00 p.m. and
7:00 p.m. - 9:00 p.m.
Argonne National Laboratory
Building 401- Advanced Photon Source
Room A1100
9700 South Cass Avenue
Argonne, IL 60439

PANEL:

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P R O C E E D I N G S

MODERATOR HAAS: Good afternoon. Welcome to the Public Review Meeting concerning the Draft Environmental Impact Statement for the Spallation Neutron Source. Translator services are available. And for those requesting translator services, a row of seats have been reserved at the front of the meeting room. Those are immediately to my right.

My name is John Haas. I am Associate Professor and head of the Department of Speech Communication at the University of Tennessee, and I have been asked to serve as Moderator for today's meeting. The goal of today's meeting is to solicit comment on the Draft Environmental Impact Statement for the Spallation Neutron Source.

In addition to providing public comment, there are other methods of commenting on the draft report for this Environmental Impact Statement for the Spallation Neutron Source. Comment forms are available at the information desk outside the meeting room. In addition, comments can be provided by mail to Mr. David Wilfert, U.S. Department of Energy, Post Office Box 2001, Oak Ridge, Tennessee, 37831; by phone at 1/800/927-9964; by fax at 423/576-4542; by electronic mail at nsnseis@ornl.gov. All of that information concerning

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addresses and phone numbers and electronic mail addresses are available on the comment forms outside of the meeting room.

Copies of the Draft Environmental Impact Statement are available in local and Department of Energy Headquarter public reading rooms. For the Argonne National Lab, the Draft Environmental Impact Statement is available at the Documents Department at the University Library, University of Illinois at Chicago. In addition, that information is also available at the DOE NEPA home page.

I want to briefly review the procedures we'll follow for today's meeting. Each individual wishing to speak on the Environmental Impact Statement for the Spallation Neutron Source will be allotted five minutes to make his or her presentation. And we ask that each individual sign in prior to making that presentation. If time allows, individuals will be allowed additional time to speak.

The meeting will open with a presentation from Mr. David Wilfert. Mr. Wilfert will be speaking to us today on the need and purpose of the Spallation Neutron Source, as well as discussing the EIS process. Mr. Wilfert wears two hats involving this project. He is the

Deputy Project Manager for the Spallation Neutron Source, and he is also the EIS Document Manager. So, I'll now turn the meeting over to David Wilfert.

MR. WILFERT: Thank you for your attendance, interest in this meeting, this process and in this project. As John said, my name is David Wilfert. I am both the Deputy Project Manager for the Spallation Neutron Source, as well as the Document Manager for this Environmental Impact Statement. That is a marriage by choice in that it provide to this process some continuity between the evolution of the technology that this EIS is evaluating, as well as if in the evaluation of that Environmental Impact of this facility, it turns out that there are mitigation actions required as we ultimately design and construct the Spallation Neutron Source, then I am in a very good position to assure that those commitments and those corrective actions or mitigating actions are, in fact, incorporated into the facility.

I'd like to speak for a few minutes about the Office of Science, in particular the Office of Basic Energy Sciences, within the Department of Energy. The Department of Energy is one of the five top agencies in the Federal Government providing advanced research or supporting advanced research across the country. And for

the Department's purpose, the primary reason for this is fueling the nation's future in terms of efficient and clean, affordable energy, exploring in particular matter energies, building blocks. One of the key tools or one of the key missions of the Department of Energy in this area is to provide the tools necessary -- i.e., the big, scientific research machines necessary -- to support broad-based research over many areas of science, which I'll touch on in just a moment. But the fundamental and the bottom line is basically to enable this country the capability to provide world-class evolution and development of science.

Within the Department of Energy, within the Office of Science, the Office of Basic Energy Sciences has two fundamental missions. And these are actually established by Congressional language in the enabling legislation which created the Department of Energy. And one of those activities is to plan, construct and operate major scientific user facilities, again, to provide these very expensive, very large tools that will allow individual scientists to come in and perform their piece of research, get their data and go out and produce their new science.

As I mentioned, the areas that Basic Energy

Sciences focuses on are the areas of material and chemical sciences, geo sciences, bio sciences, engineering science, and all again towards the purpose of helping the United States be competitive in the scientific and commercial markets of the future.

The Office of Basic Energy Sciences funds a series of activities around the United States, some eighteen user facilities indicated by the stars on this map, of which five of these are high-flux neutron sources for the kinds of science that require neutrons as interrogating devices to learn about the fundamentals of matter, crystal structure, and the behavior of materials under various conditions.

It gave us many, many, many locations where there are research projects and institutions funded, but there are eight currently. Including the Spallation Neutron Source, there would be eighteen major scientific user facilities.

The science -- and, in particular, the science associated with the Spallation Neutron Source, that of neutron scattering -- originally evolved following World War II, actually in the late 1940's, early 1950's, when Cliff Schull and Brockhouse (phonetic), Schull and Brockhouse, developed this concept of using neutrons as

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an interrogating tool to understand molecular and crystal structures of materials. And it was out of that work that eventually they received a Nobel Prize in 1994.

The science that Office of Science, Basic Energy Sciences supports in terms of research activities over the years has actually resulted in a total of 71 Nobel Prizes out of that research and some 450 Iowa 100 awards. So, it is a very productive scientific research program that Offices supports.

In this proposal for the Spallation Neutron Source, the new instrument that is being supported by the Office of Science, Basic Energy Sciences, is again a neutron investigating tool that uses an accelerator to produce short pulses of neutrons for the materials evaluation. It's a collaborative machine involving five national laboratories involved in this project, beginning with the ion source on the front end of the machine which is being designed and the material, the components to be provided by Lawrence Berkeley National Laboratory.

There's a linear accelerator that accelerates the protons up to about 80 percent the speed of light. And, again, the design, construction of components to deliver that capability is being managed by Argonne National Laboratory. As these protons are accelerated in

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pulses to this one GEV, meaning the 80 percent speed of light, they are then collected in a storage ring to accumulate a larger number of protons so that once the ring is filled in a one-microsecond burst, we in fact can release all of those stored protons onto a target. The ring, incidentally, is being managed for design construction of components by Brookhaven National Laboratory. And the one microsecond release of the protons onto a target -- the target is the responsibility of Oak Ridge National Laboratory.

We are delivering all of these protons onto a mercury target, liquid mercury target. The target needs to be a high-z material -- i.e., one that has a large neutron to proton ratio -- so that when impacted by these high-energy protons, there is a release of neutrons which, because of the pulse nature of the protons onto the target, you get a pulse of neutrons out of the target.

These pulses of neutrons are then slowed to energies of interest to the researchers who then have instruments located around the facility. The development of these instruments, the manufacturer of these instruments, is a collaborative effort between Oak Ridge National Laboratory and Argonne National Laboratory,

here, to provide these instruments for this machine. There will be an initial complement of about ten instruments, though the target station will be capable of housing eighteen.

What we're here for today is part of the National Environmental Policy Act or NEPA. We are preparing an Environmental Impact Statement on this proposed action, this proposed facility. That determination to prepare the EIS was made back in February of 1995. Martha Krebbs issued a determination letter at that time. We then went into the conceptual design of the facility and completed that in May of '97. And then, once we had that information basis of the Conceptual Design Report, that is when we began the Environmental Impact Statement process formally by issuance of a Notice of Intent in June of '97.

We then went into a roughly two-month comment period to define the scope of this document. What are the things we should cover? What are the things we should address? What do we have to analyze in order to adequately understand the potential impacts of this facility on the environment? Following that input, we were then in a process of actually developing the draft document which we issued just before Christmas in

December of '98.

We are currently in the comment period between December 24 and February the 8th, where we are collecting public comment on the content of that document. Did we analyze things as we said we would? Did we, in fact, come up with the right kinds of data and conclusions? Is this document an adequate source of information that would lead to a reasonable decision or knowledgeable decision with regards to whether to build this facility and where to build the facility?

The events that will occur are that we will then take these comments that we collect; we'll prepare a final Environmental Impact Statement, hoping to issue that by April of this year, leading to a record of decision in May of this year. The decision authority on this document is, in fact, the Secretary of Energy.

The proposed action that we are addressing in this Environmental Impact Statement is to construct and operate a state-of-the-art, short-pulse Spallation Source that has an initial power level of one megawatt of proton energy onto the target, but that it can be economically upgradeable at a later time to four megawatts.

The alternatives that are evaluated in this document are, first, the location of the facility. Oak

Ridge National Laboratory in Tennessee was identified in the beginning of the process with the determination of preparing a document as the preferred location for the facility. But NEPA requires evaluation of alternatives to be sure or to understand whether or not there are locality variations and environmental impact. We are also evaluating as potential alternate sites for the facility, Argonne National Laboratory here in Illinois; Brookhaven in New York; and Los Alamos in New Mexico.

The no-action alternative is also being evaluated. Basically, are we gonna build this thing or not, to be able to make that knowledgeable decision on what are the environmental consequences of building versus not building. We also addressed in the document technology for the facility, but actually found that there is only one technology, what I've just described, as the facility that meet all of the criteria associated with the proposed action.

For the Argonne National Laboratory, a siting study was done. There were a series of candidate sites identified and using some evaluation criteria, best judgment by those knowledgeable of the circumstances on your reservation. This study was performed by Argonne National Laboratory.

The proposed site for the facility is over on the west end of the reservation just north of the APS where we are right now, and it does extend across the west entry road, which would have to be relocated around the facility were it to come here. But that's the proposed location for the evaluation of the Argonne National Laboratory.

Within the document itself, the process that we have been going through or we went through in creating this document is, first: We used the conceptual design report as a basis, a technology basis for this facility. There has been an ongoing evolution of the design since the CDR was issued so that things are changing. But what we find is that as the design is being refined, the items that have environmental consequence actually are improving, the circumstance or the consequences would likely be less, so that the conceptual design constitutes a good bounding set of information as to the impact of this facility.

After using the conceptual design report as a technology basis, then we went into this evaluation of site locations. We found a total series of candidates of 34 Department of Energy sites. We identified four evaluation criteria to narrow that field down. And that

criteria basically came down to the four sites that I've identified, which includes Argonne National Laboratory.

We then went about a process of collecting comparable environmental data from the sites. It is remarkable how much variation there is in the quality and content of data for each of these four different laboratories. We had to get this document to a point where it is an apples and apples comparison. So, we worked very hard to get this comparable data base for comparison of the alternatives.

Then we went into the analysis process to evaluate what are the consequences of this facility being located at each of these four locations. And in all cases, we adapted a philosophy of: We wanted to be conservative; that is, we wanted to make sure that whatever consequences we defined, that when the facility would be actually designed and built, it would be that or less in terms of consequence, not more. We wanted to make sure we bounded what the circumstances are.

At the same time, we tried to be realistic, meaning we're not going to pick arbitrary values for source terms that are way beyond reality. We tried to keep things real but conservative.

What we found as the principal findings:

Accelerator facilities have been built across the country over many years. They've been operated for many years. They tend to be generally very benign facilities in terms of environmental consequence. And the predominant environmental consequence that we find is that it involves land use as a facility footprint. This thing is gonna displace whatever's in that 110 acres, roughly, that we plan to build this facility in.

There may also be research, production, other kinds of activities that are on the perimeter, on the fence around this thing. And there may be some impact by the fact that we are there. So, it is simply the land use issues is the major consequence.

We also gave quite a bit of attention to the potentials for emissions and soil activation of both water in the ground, as well as air emissions, and evaluated those for both normal operations and for accident scenarios. It came to trying to find: What is the bounding condition of consequence for normal operation in terms of emissions from this facility, as well as accident scenarios?

And finally, the area of consequence that we spent a lot of time on was in waste in terms of differing facilities, the four potential candidates. There's

different capabilities for the treatment, storage, disposition of waste. So, we evaluated those in an equally comparable basis amongst the facilities. But these three areas constitute, really, where we found the bulk of the environmental consequences for the construction of this facility.

As I said, we are in the process right now of collecting public comment on the content of our Draft Environmental Impact Statement. We welcome your input, and we will value your input. So, I thank you for coming.

MR. HAAS: Thank you. We now move to the public comment phase of the meeting. Is there anyone present wishing to make comment on the Draft Environmental Impact Statement for the Spallation Neutron Source?

There being no one present indicating interest on speaking, I'll recess the meeting in just a moment. Prior to doing so, let me make it known that there are a number of individuals who are willing to speak on an informal basis with members of the audience concerning the project. Mr. David Wilfert and Mr. Clarence Hickey will be available to talk about NEPA, as well as the Spallation Neutron Source Project. Dave Bean and Bill

Fleming will also be available to talk about the Environmental Impact Statement document if you should desire. Until such time as anyone is interested in making comment, the meeting is recessed.

(Whereupon, a recess was had in this matter.)

MR. HAAS: Call the meeting to order. Let the record show that it is 4:00 p.m. Is there anyone present wishing to make comment on the Draft Environmental Impact Statement for the Spallation Neutron Source?

There being no one present wishing to make comment, the afternoon meeting is adjourned.

(Whereupon, the public hearing in this matter was adjourned at 4:00 p.m. and continued at 7:00 p.m.)

MR. HAAS: Good evening. Welcome to the Public Review Meeting concerning the Draft Environmental Impact Statement for the Spallation Neutron Source. Translator services are available, and seats have been reserved at the front of the meeting room immediately to my right for those requesting translator services.

My name is John Haas. I'm Associate Professor and head of the Department of Speech Communication at the University of Tennessee. And I have been asked to

moderate tonight's meeting. The goal of tonight's meeting is to solicit comment on the Draft Environmental Impact Statement for the Spallation Neutron Source.

Additional methods of providing comment are also available. Comment forms are available at the information desk immediately outside the meeting hall, and comments can also be provided by mail to Mr. David Wilfert at the U.S. Department of Energy, Post Office Box 2001, Oak Ridge, Tennessee, 37831. Comments can be provided by phone at 1/800/927-9964; by fax at 423/576-4542; or by E-mail at nsnseis@ornl.gov. All of that information that I've just provided you with is available at the information desk on the comment form.

Copies of the Draft Environmental Impact Statement are available in local and Department of Energy Headquarters public reading rooms. For the Argonne National Lab, that Draft Environmental Impact Statement is available in the Documents Department at the University Library at the University of Illinois at Chicago.

In addition, information about the Draft Environmental Impact Statement is available at the DOE NEPA home page. I want to spend a minute or two reviewing with you the procedures that will be used for

tonight's meeting. Each speaker will be allotted five minutes to make his or her presentation, and we request that speakers sign in prior to making the presentation. Tonight's meeting will begin with a presentation from Mr. David Wilfert. He will be speaking to us tonight about the purpose and need for the Spallation Neutron Source.

In addition, he will discuss the Environmental Impact Statement process. Mr. Wilfert is the Deputy Project Manager for the Spallation Neutron Source, as well as the Environmental Impact Statement document manager.

I will now turn the meeting over to Mr. Wilfert.

MR. WILFERT: Thank you. I appreciate your turning out for this meeting, your interest in this project and this proposed facility. As John mentioned, I do wear two hats as both the Deputy Project Manager and the EIS Document Manager, which was not a random occurrence. There is methodology in that madness in that by being in a key position on the project, I have been able to provide the continuity of information about this project, about this facility and its potential for impact on the environment.

I am responsible for the development of the

Environmental Impact Statement to utilize that information to develop the analyses to evaluate the impacts, and then if in that evaluative process, there were to be items identified in terms of mitigating actions that have to be included ultimately in the facility in order to control the impacts on the environment, I remain in a very key position to assure that those commitments and those needs that are identified in the Environmental Impact Statement get carried forward into the design and construction of the facility.

I'd like to speak a little bit about the Department of Energy and its role in science, science and America's future. The Department of Energy is one of the top five agencies in the United States and the government for sponsoring, promoting and performing research, the development of new science and new technology, predominantly to fuel America's future, having to do with clean, available energy resources, effective utilization of those energy resources, and expanding that technology out into other parts of our economy and our society, whether that be in the development of materials that improve our lifestyle, via more fuel-efficient automobiles, whether that be for medical advances,

medical technology, understanding disease processes and treatments and those kinds of things.

One of the predominant areas that the Department provides to the scientific community across the country is the providing of tools, major, large research facilities like the proposed Spallation Neutron Source, whereby scientists from industry, from universities, from other DOE laboratories, can come to and utilize these very high-capital cost facilities to do their research and extend the science and technology, the bottom line being to enable the scientists of the United States to help the United States remain competitive in our world economic markets.

Within the Department of Energy, the Office of Science, and sub to that, the Office of Basic Energy Sciences, there are two Congressionally mandated missions for that entity, for Basic Energy Sciences, the second of which -- and it's the reason why we're here tonight -- has to do with the planning, construction and operation of major scientific user facilities. Congress has directed and asks, wants this kind of an activity to go on for the promotion of excellence in basic research, relevance to the nation, stewardship to the economy, and the promotion of science.

In this area, the Office of Basic Energy Sciences has eighteen user facilities, as indicated by the stars on this map, across the United States for scientists, engineers to come and utilize these major tools to help in the development of their new technologies. The eighteen number includes the proposed Spallation Neutron Source. In addition to that, there are a number of other research projects and institutions that are supported by the Office of Basic Energy Sciences.

One of the areas of science which has proven to be very valuable to the United States is in the area of neutron scattering research. Neutron science in the Department of Energy has promoted the development of, as I say, many advanced materials. Lightweight, high-strength, temperature-resistant materials, again, make automobile use more efficient. Lighter aircraft. Better energy utilization, whether that be in electric motor magnets; the developments in high-temperature super-conductivity; understanding many of the biological processes that go on in the body, whether they be normal or errant in terms of identifying disease processes and promoting the development of treatment for those kinds of diseases.

The area of neutron science was created back just in the late 1940's at the graphite reactor in Oak Ridge. Schull and Brockhouse in 1994 were awarded the Nobel Prize for the development of neutron scattering as a technique for investigating the crystal structures, molecular structures of materials and how those structures are changing under differing environments to better understand the properties of the overall material.

Beyond just this Nobel Prize, other work that the Department of Energy has sponsored has fostered the total of 71 Nobel Prizes over the years, along with 450 R&D 100 awards. With regards to the area of neutron science, it is recognized as a very important area, one that needs support from the Department for the benefit of the nation.

The facility that we are proposing, the Spallation Neutron Source, consists of a linear accelerator system that provides high-energy protons that are accelerated to a velocity of about eight-tenths the speed of light. These protons are accumulated in a ring so that in a single pulse extending one microsecond, we can release all of those stored protons onto a target, a liquid mercury target. And through a process of spallation -- hence, the name, "Spallation Neutron Source

Project" -- where through the process of spallation, you have a high-Z material, high atomic number material which has a very high neutron to proton ratio. And when impacted by high-energy protons, spallates or splatters out, basically, neutrons, which are then slowed to more usable energies and provided down beam tubes to individual instruments for scientists to perform their work.

This project, as proposed, is a collaborative effort amongst five national laboratories across the country. We have given responsibility for the ion source, the creation of the protons for the acceleration process, to Lawrence Berkeley Laboratory in California.

Los Alamos National Laboratory is responsible for the linear accelerator. And when I say these laboratories are "responsible for," that means they are responsible for the design, fabrication and delivery to the site of the technical components necessary to perform this mission.

After we get the protons out of the "lin acc", they go into the storage room, which is the responsibility of Brookhaven National Laboratory, for the design, fabrication, delivery of components.

Oak Ridge National Laboratory is responsible

for the target and its systems. And a joint effort between Oak Ridge National Laboratory and Argonne National Laboratory is responsible for the development of the additional complement of instruments which we believe to be ten instruments. The target station will be designed to house up to eighteen. The initial complement of ten instruments is a joint effort between Oak Ridge and Argonne National Laboratory.

The reason that we are here tonight has to do with the National Environmental Policy Act, whereby the Congress has declared that before proceeding with major federal action, that a knowledgeable decision be made of the impact of that action on the environment. Along these lines, back in February of '95, Martha Krebbs, the Director of what is now the Office of Science, then the Office of Energy Research, made the determination that we would, in fact, prepare an Environmental Impact Statement on this project. In the following approximately two years, we developed the conceptual design for this facility. That conceptual design is an information basis to define the technology, the source terms, the emissions from the facility, to serve as a basis for information for the creation of an Environmental Impact Statement.

Following completion of the conceptual design,

in May of '97, we immediately began the actual EIS process by issuance of the Notice of Intent in June, '97, followed by a comment period which was July through September -- we were here in August, I believe -- to collect input from the public on what should the scope of this document be, to assist us, to make sure that we were covering the things that were of interest to the public.

We then went off in the process of the following little over a year to actually create the Draft Environmental Impact Statement which was issued just before Christmas of '98 on December the 24th. We are now in this public comment period beginning December 24th and going through February the 8th to collect input from the public of: Did we do an adequate job in assessing the impacts of this facility? Are there things we missed? Is there more work that we need to do to make sure that we have a document that will serve as a good basis for a decision on whether to build the facility and where to build the facility.

The information base as modified by the comments that we get through this process will be incorporated in the final Environmental Impact Statement which we hope to issue in April of this year. Then that will lead to the record of decision -- this decision of

do we build, where do we build -- in May of this year. That's kind of the target of our schedule. The decision authority in this instance is the Secretary of Energy, and he will be the one who will make that decision.

The information that we are developing for this decision process initiates with a proposed action. The proposed action by the Department is to construct and operate a state-of-the-art, short-pulsed neutron research facility that has the capability of providing one megawatt of proton power onto the target at its initial operation with the potential for economically upgrading the facility to four megawatts of proton power under the target. The significance of the one megawatt, four megawatt has to do with how many neutrons can be provided to the researchers, that more neutrons allow them to do better, quicker and in some instances research that cannot be done otherwise without the greater number of neutrons.

The alternatives that are evaluated in this report are, first, the facility location. Oak Ridge, Tennessee was identified at the inception of this process as the preferred location for the facility. But it is required under the National Environmental Policy Act to evaluate alternatives to your proposed action; and

alternative siting is one of the issues that has to be evaluated to determine whether or not there are significant variances impact for this facility based upon its location and placement. So, the alternate locations are Argonne National Laboratory here in Illinois; Brookhaven in New York; and Los Alamos in New Mexico.

Another of the alternatives we evaluated was the no-action alternative -- i.e., what if we don't build the thing -- and the impacts that are associated with that as compared to building the facility.

The third alternative that we investigated was one of technology. What is the right machine to perform this research mission? And, in fact, though, what we found was: There was only one technology, the one I've described with the linear accelerator storage ring target, that met all of the criteria necessary in the proposed action.

For Argonne National Laboratory, there was a siting process done that identified the candidate location for the facility on the western edge, northwestern edge of the overall reservation. The siting evaluation that was done here -- I think there were four specific sites that were given consideration. And based upon a study done by Argonne National Laboratory with

those people who are knowledgeable about this site, tried to identify a location which met the mission parameters of the facility and at the same time, to the extent possible, avoided environmentally sensitive areas.

What we found in the document as we prepared it -- well, the process that we went through in preparing the document -- as I mentioned earlier, the Conceptual Design Report constituted the basis for the preparation of our Environmental Impact Statement that it provided a common basis of information even though conceptual design activities and advanced conceptual design activities have continued, and we know more about this facility today than we did back in the middle of 1997 when we started the EIS process. Essentially, everything we know about this facility has had the effect of reducing impacts on the environment. But what we're trying to accomplish with this document is to be sure that we have bounded the worse-case or what is the most impact this facility could have on the facility [sic].

Having the Conceptual Design Report as the basis, the next step was to identify the alternate sites. And we looked at a potential universe of 34 Department of Energy sites for the placement of this facility; defined criteria having to do with availability of power, space

requirements, buffer zones to surrounding population, whatever. And we narrowed the 34 down to 4 candidate locations, the four I mentioned: Oak Ridge, Argonne, Los Alamos, Brookhaven.

Within each of those candidate locations, we had a study done at each of the sites, whereby we identified a specific site at the location that would best serve the needs of the facility and at the same time provide minimal impact on the environment.

Our next challenge -- indeed, was a challenge-- was the collection of comparable environmental data amongst the four sites. There seems to be an awful lot of differential in the way data is collected and managed at all the Department of Energy laboratories, and we had to come up with a means of coming up with an apples and apples comparison of the facilities, again, since this document is to serve the purpose of a decision resource for the Secretary in his record of decision.

Having developed that comparable data, we then went into the analysis that is contained in the document, and we adopted a philosophy of: be conservative but realistic -- i.e., we are trying to be sure that we have absolutely bounded the impacts on the environment, but at the same time not drawn the box so big that it has no

basis in reality. We wanted to be sure that we were showing the extent that the impacts could be without overstating those impacts.

The basic results, the principal findings that we have identified and documented in the Draft Environmental Impact Statement is -- actually, not surprising to those in the business -- is that land use is the predominant impact for the facility. Accelerator facilities have been designed, built and operated across the United States for many years, and they tend to be very benign facilities. So, it's basically the clearing away of the 110 acres that we need for this facility and the displacement of whatever is there, as one of the major impacts and the satellite impacts of the activities that might be going on immediately around the facility and how we might impact that.

Another area that we paid very careful attention to was the emissions and soil activation of the facility, how might this facility put something out that would impact the environment, the surrounding communities, those kinds of things, both in air and water-borne transport mechanisms, and both under normal operations and conceived accident scenarios.

The third area that we focused attention on was

in the process of waste -- waste handling, waste treatment, disposition -- because the capabilities for handling and treating waste varied amongst the four different locations.

So, these were the areas that we spent most of the effort on in this document, and they are the areas that provided the greatest insight into the impacts of this facility. As I said earlier, we are here tonight to collect comments on this draft document. We seek your input, we value your input and ask that you provide comments. And we'll honor them accordingly. Thank you.

MR. HAAS: Thank you. We now proceed to the public comment phase of the meeting. I believe Mr. Russ Zizek is the individual who has registered to speak first.

Mr. Zizek, would you please approach the front of the room and, for the record, state your name and spell that if you would, please.

MR. ZIZEK: My name is Russell Zizek. I'm a homeowner. I live on Kearney Road directly outside this facility, second house outside the facility. Being situated there, I dare to object on record against this project being put in this location. There are several criteria which you mentioned, and I've read them in your

vast information here. And it seems like there's a lot of criteria brought up by the Department of Energy that's been either overlooked or ignored. Perhaps you operate by leaving this go 'til after this particular part of the function and then taking a name off the table. However, I would hope that with all of the criteria failing, Argonne would have already been taken off.

Brings me to the question I asked myself: Why are we even here? The first criteria: There's a one-mile buffer around the site that's your criteria. There's no way 1500 acres of land, which it states in here somewhere, that Argonne possesses can create a one-mile buffer around any point on the facility. Can't do it.

Another point I object to is the possible contamination of ground water. In your EIS Statement, it says that drinking water is taken not from the upper ground water which is, I believe, 65 feet; and that's the point at which you believe the contamination will get down to. Below that, you don't believe -- again, according to the EIS -- that it will reach the lower level of about 165 feet due to the clay and so forth above it.

However, you do state that it's not a hundred

percent sure that that won't happen due to the various types of materials in the ground. So, in a way, you're saying it won't happen. But you're saying you can't be sure of that. I drink well water. There's 35 homes -- I live in the area between I-55 and Argonne and between Lemont Road and Cass Avenue. In that area, there's 35 original houses, I'll call them. Let's say they're 30 years old or better.

In addition to those houses, there's a project which is going to be located 750 feet from the site of this SNS, which is gonna contain 115 townhouse units, 64 condominium units, a hotel, and a gymnasium. They are on Lake Michigan water, as you are. So, I guess as far as the water issue is concerned, they're protected from that. But those of us who have wells, the only way we can get Lake Michigan water is to genuflect in front of the Mayor of Darien and ask him if we can please have some Lake Michigan water. They tried that with Argonne; and Argonne, I guess, told them they would take other ways. And they got it directly from the County. We all would appreciate Argonne using that same maneuverability to get Lake water for us without going through Darien since we are in this no-man's land of water situation.

The other impact is on human health. I went

through all the tables as comparisons of the different laboratories. And it's shown on one page, "Operation would result in 1.3 LCF's." I don't know what "LCF" meant. But, anyway, it would result in something in the offsite population attributed to the SNS.

On the next page, it showed, "Anticipated effects to offsite population would be 1.3 excess LCF's over 40 years." And then it addresses one anticipated accident resulting in 2.1 LCF's. Well, this I read in a summary, and the summary didn't contain the definitions for the acronyms. But then later, I got the full manual, and I discovered "LCF" means latent cancer fatalities. Well, I don't know -- You know, there's a lot of tradeoffs in life. And I imagine the community that you people live in maybe feel this is not a significant number. But I'm sure if you were one of the two LCF's, it would be rather significant.

MR. WILFERT: You are absolutely correct.

MR. ZIZEK: As far as the water, I quite frankly don't trust the water anymore. I've been buying water in the store for 20 years. Feel like sending the bills to Argonne for that. But the LCF's don't thrill me to any means. I think it would be enlightening and maybe a little more neighborly if in any future charts of this

type, maybe once a page you would spell out what these acronyms mean. A lot of people, they read things -- and especially laymen like myself -- you read something, you don't understand it, you say, "Well, it can't be too bad." It just means something. Inside joke. So, you go over it.

It sums up on Page S62 that there is a potential for adverse radiological impacts on human health from normal operations. I take that to mean just what it says, "normal operations." Nothing out of the unusual. And the main thing which makes me wonder why we're here is this, seems to me, total disregard of the DOE's own criteria. I've already stated the one-mile buffer; no way you can meet that. And that's been overlooked. And it seems to me that should have been an initial move to pull Argonne out of the mix.

And then later on, there's another, a criteria of 500 meters to any existing occupied structure. Well, I'm not a scientist, but I think 500 meters is 1500 feet. And 1500 feet from the current crossroads of -- I wouldn't say the current crossroads -- from your map showing where this site ends, the northerly portion of the site, is 1300 feet to occupied residents. And I'll even go so far as not to lie to you. It's not occupied

right now. In fact, the house is empty because it's been sold. And it's already been rezoned to build thirteen single-family houses there. So, they're gonna be within your 500-meter lower criteria.

MR. WILFERT: Yeah.

MR. ZIZEK: 750 feet from the northwest corner of your footprint is where the 115 townhouses, 64 condominiums and so forth are located.

Kearney Road has three, four houses along it between the forest preserve property and frontage road. And there's a new house built there, which is now in Darien. They get city water, however. There's another street to the west. Ruth Drive has about ten houses. They all have well water. And they're within the same, within the 1500-foot criteria.

In addition, between our houses is the forest preserve. And the forest preserve has a designated hiking, riding, recreation pact which is 250 feet only from your fence. And your fence would be maybe, I would guess, 400 feet from the end of this footprint to your new facility. So, it seems like you set up these criteria, and you stumble over them, but you never recognize them. I hope you're gonna recognize them now sometime in the very near future and agree that this

1 shouldn't be built here at Argonne.

2 MR. WILFERT: If it's a good time just to make
3 a comment, it's clear you have read this document well.
4 I appreciate that. I appreciate your insight. Many of
5 the criteria were established from distances far away
6 with lack of knowledge of the facility. It is
7 geographically possible to place the facility here and
8 have the mild buffer kind of thing. And that criteria
9 was established and the choice made like two years ago.
10 Yes, a lot of information has been created. And that's
11 what we're trying to do, is to actually identify that the
12 realities of the situation were different than the
13 perception two years ago, and have that information for
14 the decision-maker. So, your input is very valuable; and
15 it will be included in the documentation as is provided
16 to the Secretary for his decision.

17 MR. ZIZEK: All right. Thank you for that. I
18 thank you for listening to me. I would also ask, though,
19 in the future -- I discussed with various neighbors in
20 the area. And no one, I don't believe, has received any
21 information on this. Maybe they refused it if they were
22 asked if they wanted it. But I would say a very small
23 portion of the 35, 40 houses in the area received any
24 information on this proposed project. I think it would

1 be far more correct if when Argonne was contemplating
2 anything that would change drastically their operation,
3 that the public around the facility be informed to
4 participate in meetings such as this. If they're not
5 informed, they can't participate.

6 MR. WILFERT: Certainly. We have a member of
7 the Public Information Office here at Argonne available.
8 They are our resource -- because I'm out of Oak Ridge --
9 as to the list of stakeholders for the area. And they
10 need to listen to that and be sure that the individuals
11 you're speaking to are included on the list of
12 stakeholders. And, certainly, if there's any of these
13 people who desire the documents, please, I'd ask, carry
14 to them one of those comment cards; have them call the
15 800-number, anything. Ask us for the documentation, and
16 we'll certainly get it to them as quickly as possible.

17 MR. ZIZEK: What I was speaking, though, was
18 prior to this meeting so that they would have a chance to
19 also participate. You know, maybe they don't have the
20 same view as I do. Maybe you would benefit from
21 something they might say, too. But in County procedures,
22 when a simple thing like zoning is changed, they have to
23 by law notify everyone in the immediate area that owns
24 property so that they know what's going on and

participate. And if I'm not mistaken, I believe some air and water permits from the EPA require large facilities to keep the public informed as to what's going on in their facilities. So, that might be an idea. I would hope it would be, that it would be more an automatic thing to give the information to the local people rather than make them seek it out. Thank you for your time.

MR. WILFERT: Sure. Thank you. Appreciate it.

MR. HAAS: Thank you. I believe we have a second speaker who has also indicated an interest in making comment. I would ask that individual to step to the table and identify himself or herself. Is that the case?

No one present wishing to speak about the Draft Environmental Impact Statement? Surely, then, I will recess the meeting. In the meantime, however, let me make you aware that there are a number of individuals here who will discuss the project on an informal basis. David Wilfert is available, as well as Clarence Hickey, to discuss NEPA as well as the Spallation Neutron Source Project.

David Bean and Bill Fleming are also available to discuss the Environmental Impact Statement document, and they'll be happy to speak with you during the recess.

There being no one present wishing to make public comment, the meeting is in recess.

(Whereupon, a recess in this matter was held.)

MR. HAAS: Call the meeting to order. Let the record show that it is 9:00 p.m. Is there anyone present wishing to make comment on the Draft Environmental Impact Statement for the Spallation Neutron Source? There being no one present, the meeting is adjourned.

(Whereupon, the public hearing in this matter was concluded at 9:00 p.m.)

C E R T I F I C A T I O N

CAROL DAWLEY hereby certifies that this is the transcript of the proceedings in the following matter:

In the Matter of: National Spallation Neutron Source - Argonne Area Public Scoping Meeting

Date: January 25, 1999

Place: Argonne, Illinois

That the foregoing public hearing was reported by her by means of electronic audio sound recording, was thereafter reduced to typewriting under the direction and supervision of AIM Reporting Service and constitutes a true and correct record of the above-referenced proceedings.

That said proceedings were taken before her at the time and place specified;

That the public hearing was adjourned as stated herein;

That she is not a relative or employee or attorney or counsel, not a relative or employee of such attorney or counsel for any of the parties hereto, not interested directly or indirectly in the outcome of this action.

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ANNE I. MAZIORKA
Notary Public, State of Illinois
My Commission Expires 2/21/2000

CAROL DAWLEY

SUBSCRIBED and SWORN to before me this 31st day of January, 1999.

Notary Public

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