## **Official Transcript of Proceedings**

## **NUCLEAR REGULATORY COMMISSION**

Title: License Renewal Draft EIS

Fort Calhoun Station Evening Public Meeting

Docket Number: (not applicable)

Location: Omaha, Nebraska

Date: Wednesday, February 26, 2003

Work Order No.: NRC-793 Pages 1-44

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MR. CAMERON: Well, good evening everyone. My name is Chip Cameron, and I'm the special counsel for public liaison at the Nuclear Regulatory Commission. And I'd like to welcome you to our public meeting tonight. And our subject is the draft environmental impact statement that the NRC has prepared on the request from the Oklahoma (sic) Public Power District to renew the operating license at the Fort Calhoun Nuclear Power Station.

And I'm going to serve as your facilitator tonight, and hopefully help all of you have a productive meeting and to meet the objectives that we have for the meeting tonight. One of which is to clearly explain what the NRC's process for evaluating a request for license renewal, and also to explain what findings are in the draft environmental impact statement that has prepared -- we've prepared. And the most important objective, of course, is to listen to any comments or suggestions that you have in terms of process or the findings in the draft environmental impact statement.

The format is fairly simple. We're going to have a number of brief NRC presentations. And

we'll be going out to you to see if there's any questions on the material in this presentation.

And then the latter part of the meeting is going to be devoted to giving any of you who want to make a formal comment to us, to come up to the podium, or I'll bring you this microphone and you can make your comment.

Ground rules are simple. If you want to talk, give me a signal and I'll bring this microphone to you. And please tell us who you are and what your affiliation is, if appropriate. And I would just ask you to only have one person speaking at a time so that we can get a clear transcript. Camie is our stenographer. We are taking a transcript of the meeting that will be available on the NRC's web site, and we can get you a hard copy if you need a hard copy.

Please try to be concise in your comments.

Again, like this afternoon, I don't think that

we're going to have a problem with that, but there

may be more people coming, so we'll see what

happens.

The agenda is -- starts with John Tappert, who is right here. John is going to give you a -- an official welcome from the NRC and tell you a

little bit about license renewal. And he is the chief of the environmental section in the office of Nuclear Reactor Regulation at the NRC, and it's the license renewal and environmental impact program. And John and his staff prepare the environmental reviews for all activities that happen in the office of Nuclear Reactor Regulation, including all environmental impact statements on a license renewal application.

John has been with the agency about 11

years, and he was a resident inspector for the NRC

at one point. He has a bachelor's from Virginia

Tech in oceanographic and aeronautical

engineering, and a master's degree in

environmental engineering from Johns Hopkins

University.

After John gives you a welcome, we're going to go to the project manager -- the environmental project manager who's responsible for overseeing the preparation of the environmental impact statement, and that's Mr. Jack Cushing, who is right here. And Jack is going to let you know what the environmental review process is on license renewal. But actually, before we go to Jack, we're going to have Butch Burton -- William

Butch Burton, who is the safety project manager on the Fort Calhoun license renewal application -- he will tell you about the safety evaluation and about what the process is generally for license renewal. And then we'll focus in on the environmental evaluation.

In terms of Mr. Burton's background, he was the project manager -- safety project manager for the plant Hatch down in Georgia, license renewal application. He's been involved in emergency operations work at the NRC, and also developing performance indicators for the review of nuclear power plants. And Butch has a bachelor's in science nuclear engineering from Rensselaer Polytechnic Institute.

And jumping back to Jack in terms of what his background is, he's been with the NRC for five years. And before that he was a licensed reactor operator working for Maine Yankee. And he has a bachelor's in marine engineering from the Mass.

Maritime Academy.

So we're going to give you some process presentations and then we're going to go to the -- to the heart of the environmental impact statement. We're going to go to Dr. Ken Zahn,

who's right here who's going to talk about the findings in the draft environmental impact statement.

And Ken is with Lawrence Livermore Lab.

And they're the leading laboratory that's helping the NRC prepare this environmental impact statement. And he is the -- the group leader of the environmental evaluation group at Lawrence Livermore Lab in Livermore, California. And they not only do work on Department of Energy projects in terms of environmental evaluation, but also for the NRC like this license renewal application.

And he has a Ph.D. in chemistry from the University of Illinois. He'll tell you about the draft findings.

And then we're going to ask Jack Cushing to come back to talk about something called "severe accident mitigation alternatives," and that is also part of the environmental impact statement. He'll tell you about that, what the overall conclusion is, and the draft environmental impact statement and how to submit comments.

And I would just thank you all for -- for coming out tonight. And I'm going to turn it over to John.

1 MR. CUSHING: Thank you, Chip, and 2 good evening and welcome. As Chip said, my name 3 is John Tappert, and I'm the chief of the 4 environmental section in the office of Nuclear 5 Reactor Regulation. On behalf of the Nuclear Regulatory Commission, I want to thank you for 6 7 coming out here tonight and participating in our process. Chip said there's several things we'd 8 9 like to cover today, and I'd like to briefly go over today's -- the purpose of today's meeting. 10 11 First of all, we're going to give you a brief overview of the entire licensure of the 12 This includes both the safety review as 13 14 well as environmental review, which is the 15 principal focus of today's meeting. Last we're going to give you the 16 17 preliminary results of our review, which necessitate environmental impacts associated with 18 19 extending the operating licenses for Fort Calhoun's stations for an additional 28 years. 20 21 Then we'll give you some information about 22 the balance of our review schedule and how you can 23 continue to participate in that process. And most 24 importantly, at the conclusion of our presentation, we'll be happy to receive and 25

questions and comments that you may have today.

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But first let me provide some general contacts of the license renewal program. Atomic Energy Act gives the Energy the authority to operating licenses to commercial nuclear power plants for a period of 40 years. Before becoming a station, that operating license will expire in Our regulations also make provisions for extending that operating license for an additional 20 years as part of our license renewal program, and OPPD has requested license renewal for Fort As part of NRC review of that Calhoun. application, we sent a team of environmental experts out here to review the site last summer. We also held public meetings to get your input early in that process. As we indicated at that earlier scoping meeting, we've returned here now today to provide you with preliminary results in our environmental impact statement. And again, the principal reason for the meeting here today is to receive your questions and comments on that draft.

And with that, I'd like to ask Butch Burton to give us a brief overview of the safety portion of license renewal.

MR. BURTON: Thanks, John.

Good evening, everyone. As Chip and John indicated, my name's John Burton. I'm the project manager for the safety review for the license renewal application for Fort Calhoun. Before I talk about the license renewal process and the staff's safety review, I'd like to talk a little bit about the NRC, the Nuclear Regulatory Commission. As was mentioned, the Atomic Energy Act in 1954 authorizes the NRC to regulate the civilian use of nuclear material. commission is threefold to insure adequate protection of public health and safety, to protect the environment, and to provide for common defense in security. The Atomic Energy Act provides for a 40-year license term for power reactors, but it also allows for license renewal. That 40-year term is based primarily on economic and anti-trust considerations, rather than safety limitations.

As John indicated, the Omaha Public Power District has applied for license renewal under 10 CFR PART 54 and request authorization to operate Fort Calhoun for up to an additional 20 years. The current operating license, as John mentioned, will expire in 2013.

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Now I'd like to talk a little about the
license renewal process, which is governed by the
requirements of PART 54, which we call the
"License Renewal Rule." This rule defines the
regulatory process by which a nuclear utility such
as OPPD applies for a renewed operating license.
The rule incorporates 10 CFR 51 of the
environmental rule by reference. Part 51 provides
for the preparation of an environmental impact
statement, or EIS. The license renewal process
defined in PART 54 is very similar to the original
licensing process, in that it involves the safety
review and environmental impact evaluation, plant
inspections, and review by the advisory committee
on reactor safeguards for the ACRS. The ACRS is a
group of scientists in nuclear industry experts
who serve as a consulting body to the commission.
The ACRS performs an independent review of the
license renewal application and the staff's safety
evaluation. And they report its findings and
recommendations directly to the commission.
The next slide illustrates two parallel
processes. The safety review process, which you

processes. The safety review process, which you see at the top of the slide, and the environmental review process at the bottom of the slide. These

processes are used by the staff to evaluate two separate areas of license renewal. The safety review involves the staff's review of the technical information and license renewal application to verify with reasonable assurance that the plant can continue to operate safely during the period of extended operation.

The staff assesses how the applicant proposes to monitor or manage aging of certain components that are within the scope of license renewal. The staff's review is documented in a safety evaluation report, and the safety evaluation report is provided to the ACRS for review. The ACRS then generates a report of its own to document their review of the staff's evaluation.

The review process involves two or three inspections which are documented in the NRC inspection reports. These inspection reports are considered with the safety evaluation report and the ACRS report in the NRC's decision to renew the nuclear unit's operating licenses.

If there is a petition to intervene and sufficient standing can be demonstrated, then hearings may also be involved in the renewal

process. These hearings will play an important role in the NRC's decision on the application as well.

At the bottom of the slide is the other parallel process, the environmental review, which involves scoping activities, preparation of the draft supplement to the generic environmental impact statement, solicitation of public comments on the draft supplement and then the issuance of a final supplement to the generic environmental impact statement. This document also factors into the agency's decision on the application. During the safety evaluation, the staff assesses the effectiveness of the existing or proposed inspection and maintenance activities to manage aging effects applicable to a defined scope of passive structures and components.

PART 54 requires the application to also include the evaluation of time limited aging analyses, which are those designed analyses that specifically include assumptions about plant life, usually 40 years.

Current regulations are adequate for addressing active components, such as pumps and valves, which are continuously challenged to

1	reveal barriers and degradation, such that
2	corrective actions can be taken. Current
3	regulations also exist to address other aspects of
4	the original license such as security and
5	emergency planning. These current regulations
6	will also apply during the extended period of
7	operation.
8	At this time, if anyone has any questions
9	I'd be happy to take them.
10	MR. CAMERON: Any questions on the
11	overall review or the safety review for Butch?
12	MR. BURTON: All right. Thank
13	you, Chuck.
14	MR. CAMERON: Great. And I have
15	one clarification that I'd like to make. I guess
16	that I said it was the Oklahoma Public Power
17	District, and it isn't. As we know, it's Omaha.
18	And, Camie, if I say "Oklahoma" again, would you
19	just type in Omaha, 'cause that'll take care of
20	the problem. I'm likely to do that again.
21	And let's have Jack Cushing talk about the
22	environmental review.
23	MR. CUSHING: Thank you, Chip.
24	Well, welcome, everybody. I'm glad you could make
25	it tonight. My name is Jack Cushing, and I'm the

environmental project manager for the Fort Calhoun license renewal project. I'm responsible for reporting any of the efforts of NRC contacts to conduct the document the environmental review associated with OPPD's application for license renewal at Fort Calhoun Station. I'd like to discuss NEPA, the National Environment Policy Act. NEPA is one of the most significant pieces of environmental legislation ever passed requiring all federal agencies to use a systematic procedure to consider environmental impacts during certain decision-making procedure regarding major federal actions. NEPA requires that we examine the environmental impact as proposed and consider mitigated measures, which are things that can be done to decrease the environmental impact when the impacts are severe. NEPA requires that we consider alternatives to proposed action and that the impacts of the alternatives are also evaluated.

Finally, NEPA requires that we disclose all this information and that we invite public participation to evaluate it. The NRC is determined that it will pay our environmental impact statement associated with the license

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renewal for additional 20 years. Therefore, following the process required by NEPA, we have prepared a draft environmental impact statement that describes the environmental impacts associated with the operation of the Fort Calhoun Station for an additional 20 years. That draft environmental impact statement was issued last month in a meeting today to receive comments on it, which is a copy of draft environmental impact statement. We do have copies of it available in the lobby if you're interested.

environmental review. Simply put, we are trying to determine if the license renewal for Fort Calhoun is acceptable from an environmental standpoint, if license renewal is a viable option, whether or not that option is exercised. Whether or not the plan's actually to operate for an additional 20 years will be determined by others, such as OPPD and state regulatory agencies and will depend on the results of the NRC's safety review.

This slide shows in a little more detail the environmental review process associated with license renewal for Fort Calhoun Station Unit 1.

We received the application last January. The notice of intent was published in the Federal Register in the May of 2002 to inform the public that we are going to prepare an environmental impact statement and invite the public to provide comments in the scope of the review.

In June 2002, during the scoping period, we held two public meetings here in Omaha to receive public comment on the scope of the issues that should be included in the environmental impact statement for Fort Calhoun Station. Also in June, we went to the Fort Calhoun Station site to combine time of NIC staff and personnel from four national laboratories with expertise in the specific technical and scientific disciplines required to perform this environmental review. familiarized ourselves with the site, met with staff from OPPD to discuss the information submitted in support of the license renewal application, and reviewed the documentation maintained at the plant, and we examined OPPD's evaluation process.

In addition, we contacted federal, state, and local agencies, as well as local service agencies to obtain information on the area and

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Fort Calhoun Station. At the close of the scoping period, we gathered up and considered all the comments that we received from the public, state, and federal agencies. Many of them contributed significantly to the talk that we are here today to discuss.

In July of last year, we issued a request for additional information to assure that any information that we relied on and had not been included in the original application was submitted on the docket so that it would be publically available. A month ago we issued the draft environmental impact statement for public comment. This is Supplement 12 to the generic environmental impact statement. Because we rely on findings in the generic environmental impact statement, we are proud of our conclusions. The report is drafted not because it's incomplete, but rather because we are at an intermediate stage in the decision We're in the middle of a second making process. public comment period to allow you and other members of the public to look at the results of our review, provide any comments you may have on the report. After we gather these comments on -and evaluate them, you may decide to change

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1 portions of the environmental impact statement. 2 And the NRC will then issue a final environmental 3 impact statement related to license renewal for 4 Fort Calhoun Station Unit 1. Are there any questions to do with the 5 6 process? 7 MR. CAMERON: Anybody? Okay. 8 Let's go on to the draft findings. Ken. 9 DR. ZAHN: Thank you, Chip. I'd like to tell you a little bit about the 10 11 information-gathering process and the composition 12 of the team that undertook the analysis. Then I'm going to speak briefly about the analysis process 13 14 itself, and then quickly step through the draft 15 results. As Jack had mentioned earlier, to develop 16 17 the supplemental environmental impact statement, we did review the information, OPPD's license, the 18 19 license renewal application, and then visited the Besides reviewing on-site facilities and 20 site. 21 documents, we also talked with representatives of 22 federal, state, and local agencies, including 23 permitting authorities and social service 24 agencies. Also discussed the cultural and

historic resources at the site and the issues

related to them at the State Historic Preservation office, the SHPA.

Following your submission of scoping comments after the public meetings last summer in June, the NRC staff and the National Laboratory Team reviewed the comments and considered the suggestions of the public. Responses to the public's comments on the original scoping meetings are included as Appendix A in the blue draft environmental impact statement supplement.

As noted earlier, to conduct the environmental review, we've established a team made up of members of the NRC staff supplemented by experts from four Department of Energy's national laboratories: Pacific Northwest Laboratory, Los Alamos National Laboratory, the Argonne National Laboratory, and again, Livermore National Laboratory -- the Lawrence Livermore National Laboratory. This slide gives you an indication and idea of the general areas that these experts on the team took a look at. These are more or less generic headings. They aren't specifically what you may find exactly worded in the document, but they're pretty close.

Just doing a brief background sketch on

some of these, if you start in the lower -- lower left, socioeconomic impacts, for example, considered such things as public services, tourism, recreation, public safety, housing aesthetics and economics. Environmental justice is actually a field or an issue which looks at the low income and minority populations within about 50 miles of the site. The need to evaluate environmental justice is derived from a fairly recent federal executive order.

Above on the left you see "atmospheric science" listed there. That's a term that we use really to capture the requirement to look at air quality. And for this we also look at the AQCR, that's the Nebraska Intrastate Air Quality Control Region involvement with the site.

On the right, "radiation protection." Here we looked at the potential for radiation exposures to both the public off site as well as to the work force, that would be occupational exposures for the workers.

On the lower right and in the center we see two ecology-related topics: "Terrestrial ecology" and "aquatic ecology." And here the issue is both that related to the impacts to

potentially sensitive species, those especially that are federally threatened and endangered. Those that live on land, terrestrial, and those that live in water, aquatic. And again, we look at nuclear safety issues and land use issues. And the land use issues carry a number of different topics with it to include looking at the on-site transmission line impacts.

Discussions of the site background and the potential impacts of these environmental-related topics as well as of postulated topics are found throughout Chapters 2 through 5 of the draft report.

Next I'd like to discuss the analysis approach used and preliminary results of the review as reflected in the draft.

The generic environmental impact statement for license renewal under -- which is new reg, 1437, identifies 92 environmental issues that are evaluated for license renewal. Sixty-nine of these are considered generic or Category 1, which means that the impacts are common to all reactors or common to all reactors with certain features, such as plants that have cooling towers.

You'll notice the Category 1 designation on

the upper left of that -- the left side of that upper box. Flowing down from that is the chain for considering Category 1 issues. But for 23 other issues, those are referred to as Category 2. The Nuclear Regulatory Commission found that the impacts were not the same at all sites.

Therefore, a project-specific or site-specific analysis was needed. And you'll notice Category 2 in this upper box on the right hand side.

Only certain issues addressed in the generic environmental impact statement are applicable to Fort Calhoun Station Unit 1 because of the design and location of the plant. For those generic issues that are applicable to Fort Calhoun we assessed if there were any new information. If there was any new information related to the issue that might change the conclusion of the generic environmental impact statement. And you'll notice a box there that says "New and Significant" on the slide.

If there were no elements of new information, then the conclusions of the generic environmental impact statement are adopted. If new information is identified and determined to be significant, then a site-specific analysis would

be performed. For the site-specific issues that are related to Fort Calhoun, a site-specific analysis was performed.

Finally, during the scoping period, the public was invited to provide information on potential new issues. And also the team -- during its review -- looked for new issues to see if there were other such new issues that needed evaluation. For each issue identified in the generic environmental impact statement, an impact level is assigned. These levels are described in Chapter 1 of the draft report. And these levels are consistent with the definitions and guidelines in the federal executive branches, environmental -- federal executive branches counsel on environmental guality guidelines.

For a small impact, the effect is not detectable or too small to destabilize or noticeably alter any important attribute of the particular resource being looked at. For example, if a plant may cause some loss of adult or juvenile fish of the intake structure, and if the proportion of fish loss is so small that it can't be detected in relation to the total population in the river, for example, the impact would be

characterized as small.

For a moderate impact, the effect is sufficient to alter noticeably, but not destabilize, important attributes of the resource. Using the fish example again, if losses at the intake would cause the population to decline and then stabilize at a lower level, the impact would be characterized as moderate.

And finally, for an impact to be considered as large, the effects must clearly be noticeable and sufficient to destabilize important attributes of the resource. Soft losses of the intake cause the fish population to decline to a point where it cannot be stabilized and it continually declines, the impact could be considered large.

Let me briefly address what is covered in several of the environmentally important chapters of the draft, especially Chapters 2 and 4.

In Chapter 2 we describe that the power plant's systems generally, and discuss the general environmental setting around the plant, the environmental baseline conditions, if you will.

In Chapter 3 you'll note that the licensee had not identified any plant refurbishment activities that were necessary prior to the period

of extended operation. So no analysis of potential environmental impacts of refurbishment needed to be conducted.

In Chapter 4 we looked at the potential environmental impacts of an additional 20 years of operation at the Fort Calhoun Station Unit 1 plant. The site-specific issues the team discussed in detail in Chapter 4 include: potential impacts of operating the cooling system and transmission lines, land use impacts and radiological impacts of normal operations, impacts related to water use and water quality and potential impacts to sensitive, aquatic and terrestrial natural species, such as federally and threatened and endangered species.

I'll take just a few minutes to identify some of the highlights of our review, and if you have additional questions on our draft results,

I'd be glad to try to answer them or to refer them to one of the members of our team who may be with us this evening.

One of the topics we looked at closely in discussing some depth in Chapter 4 is the potential -- is the potential impact of operating the cooling system for Fort Calhoun Station Unit 1

reactor. Fort Calhoun Station has a once-through heat dissipation system which uses water from the Missouri River to condense the steam used to produce electricity, then releases the cooling water back to the river. We didn't identify any new and significant information for any of the Category 1 issues related to the cooling system, either through the scoping process or by the applicants or by the staff during its visit as well as our information reviews to include review of OPPD's National Pollution Discharge and the Elimination System Permit issued by the state on the Clean Water Act.

With respect to those Category 2
environmental issues related to the cooling
system, the staff found that the potential impacts
of heat shock, impingement or entrainment of a
fish or shellfish on a cooling water intake screen
are small.

Radiological impacts are Category 1 issues in the generic EIS, but because it's often a matter of concern to the public, I wanted to take just a minute to briefly discuss it here.

During the site visit, we looked at the effluent release and monitoring program

documentation. We looked at how the gaseous and liquid effluents are treated and released, as well as how the solid wastes are treated, packaged and shipped. This information is outlined in Chapter 2 of the draft EIS. We also looked at how the applicant determines and demonstrates that they're in compliance for the release of radiological effluence. This slide shows you the near-site and on-site locations that the applicant has monitored for airborne releases and direct radiation. are other monitoring stations beyond the site boundary, including locations where water, fish, milk and food products are sampled. Releases from the plant and resulting off-site potential doses are not expected to increase on a year-to-year basis during a 20-year license renewal term.

No new and significant information was identified during the staff's review of public input during the scoping process or the evaluation of other available information.

Last issue I'd like to discuss among those evaluated in Chapter 4 is that of federally threatened and endangered species. A description of the terrestrial and aquatic ecology of the area and the potential for endangered and threatened

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species at the site is given in Chapter two.

Although the bald eagle is originally listed as federally endangered, it's status was lowered to threatened in 1995 and is being considered by the Fish and Wildlife Service for the complete delisting due to the level of its -- the high level of its recovery in the U.S. There are no known bald eagle nesting sites at Fort Calhoun Station, although the birds use areas near the site for foraging, most commonly along the Missouri River.

Other federally threatened or endangered terrestrial species that were considered included least tern and piping plover, both bird species, and the western prairie fringed orchid, a flower species. These species have not been found at Fort Calhoun Station, and the potential for impact to them from license renewal is, again, considered small.

Based on the information available to the staff, it was concluded that the continued operation of the station may affect, but is unlikely to adversely affect the bald eagle, and would have no affect on the other three threatened or endangered terrestrial species that I just

mentioned. There is one federally endangered aquatic species, pallid sturgeon, which is also discussed in the report. Occurrences of the sturgeon have been reported in the Missouri River, both upstream and downstream at Fort Calhoun Station. And extensive habitat restoration projects have been implemented in Missouri by the U.S. Fish and Wildlife Service ever since the mid 1970s.

Based on information available to the staff, it was concluded that the continued operation of the station, again, may affect, but is not likely to adversely affect the pallid sturgeon. The NRC is currently in consultation with the Fishing and Wildlife Service under Section 7 of the Endangered Species Act as it relates to these species.

For all of the Fort Calhoun Station environmentally-related issues that the team reviewed, we found that there was no new and significant information that was identified, again either scope process, by the licensee during the development of environmental review documentation, or by the staff during our visit or analysis.

We also looked at issues for the uranium

fuel cycle and solid waste management systems, as well for decommissioning. These two issues are discussed in Chapters 6 an 7 respectively in that report.

They are both Category 1 issues and were evaluated generically, again, in the 1988 generic environmental impact statement. We also found that there were no new and significant information that was identified for either of these issues.

In Chapter 8 of the draft report we evaluated the potential environmental impacts associated with the alternatives to continuing operation of the Fort Calhoun Station Unit 1. The continuing operation be considered the proposed alternative. Discussed in Chapter 8 are the potential environmental impacts associated with Fort Calhoun Station not operating. This is the "no action alternative." And it's a scenario in which the NRC would not renew the operating license for the Fort Calhoun Station Unit 1 reactor. And when the plant ceases operation, OPPD would decommission the facility.

We also looked at other alternatives: New electrical power generation from coal-fired or gas-fired plants or a new nuclear plant, a

purchased power alternative. And the application of alternative technology such as wind, solar and hydro power, and finally, a combination of these alternatives.

For each alternative, we looked, again, at each of the same issues -- those same environmental issues, those such as land use, ecology, and socioeconomics, et cetera, that whole list. And that we -- same issues that we looked at for the proposed action, that is Fort Calhoun Station's 20-year license renewal option. looked at delayed retirement of other existing facilities, as well as utility-sponsored conservation, and then looked at a combination of these alternatives. For each alternative, we looked at whether the technologies -- I'm sorry -and for each alternative we looked at whether the technologies could replace the generating capacity at Fort Calhoun Station Unit 1, and we looked at whether or not it could be a feasible alternative to renewal of the current plant's license.

The preliminary conclusions were that the alternatives, including the "no action alternative" in which the license would not be renewed, may have environmental effects. And in

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1 at least some of the categories, they may range 2 all the way from small to large. On the other 3 hand, you'll recall that our conclusion was that 4 the impacts for the proposed action were small on 5 all of these environmental issues. This concludes my presentation, and I'll be 6 7 glad to entertain any questions. 8 MR. CAMERON: Great. Thank you, 9 Ken. 10 Are there questions on the -- the findings 11 in the draft environmental impact statement? 12 Okay. Let's go to the final part of the draft 13 14 environmental impact statement and this is the 15 Severe Accident Mitigation Alternatives. 16 MR. CUSHING: Thank you, Chip. 17 Chapter 5 of the report is entitled "The Environmental Impacts of Postulated Accidents." 18 There are two classes of accidents: 19 Design-basis 20 accidents and severe accidents. Design-basis 21 accidents are those accidents that both the 22 licensee and the NRC staff evaluated to ensure 23 that the plant can withstand without undue risk to 24 the public. The environmental impacts 25 design-basis actions are evaluated during the

initial licensing process. And the ability of these plans to withstand these accidents has to be demonstrated before the plant is granted a license.

Most importantly, a licensee is required to maintain an acceptable design and performance capability throughout the life of the plant, including any extended-life operation. Since the licensee has to demonstrate acceptable plan performance for design-basis accidents throughout the life of the plant, the commission in the generic environmental impact station determined that the environmental impact of design-basis accidents are of small significance because the plant was designed to successfully withstand these These are -- the licensee nor the NRC is aware of any new and significant information on the capability of a plant to withstand design-basis accidents associated with the renewal of the Fort Calhoun Station Unit 1 license.

Therefore, the staff concludes that there are there no impacts related to the design-basis accidents beyond those discussed in the generic environmental impact statement.

The second category of accidents evaluated

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in the generic environmental impact statement are severe accidents. Severe accidents are, by definition, accidents that are more severe than design-basis accidents because they could result in substantial damage to their active core.

environmental impact statement that the consequences of a severe accident are small for all plants. Nevertheless, the commission determined that the alternative to mitigate severe accidents must be considered for all plants that have not done so. We refer to these alternatives as "severe accident mitigation alternatives," or SAMAs for short. The SAMAs review for the Fort Calhoun Station is contained in Section 52 of the environmental impact statement.

The purpose of doing a SAMAs evaluation is to ensure that plant changes with the potential for improving severe accidents safety performance are identified and evaluated. The scope of the potential improvements that were considered include hardware modification, procedure changes, training program improvements -- basically a full spectrum of potential changes.

The scope included SAMAs that would prevent

1 core damage, as well as SAMAs that would include 2 containment performance. For the SAMAs analysis, 3 we first quantify overall plant risk. 4 identify potential improvement, and then quantify 5 the risk reduction potential and the implementation cost for each improvement; and 6 7 finally, determine if implementation is justified. In determining whether or not 8 implementation is justified, the NRC staff looks 9 at three factors: First is whether the 10 11 improvement is cost beneficial. In other words, 12 is the estimated benefit greater than the estimated implementation cost of the SAMAs. 13 14 The second factor is whether the 15 improvement provides a significant reduction in total risk. 16 17 The third factor is whether the risk reductions are associated with the aging effect 18 19 during the period of extended operation. 20 was, we would be looking at implementation as part 21 of the license renewal process. 22 This slide summarizes the preliminary results for Fort Calhoun's Station SAMAs 23 24 evaluation. The end result of the evaluation was

that seven SAMAs were found to be cost beneficial.

The cost beneficial SAMAs include procedural and training enhancement and use of commercially available equipment during potential transients. The seven cost beneficial SAMAs are not required to be implemented at Fort Calhoun Station as part of license renewal because they do not relate to managing the effects of aging.

However, OPPD currently plans to implement the seven cost beneficial SAMAs.

Turning now to our overall conclusions, we found that the impact to license renewal are small in all impact areas. We also concluded that the alternatives, including the "no action alternatives," may have environmental effects, at least some impact categories, that reach moderate or large significance. Based on these results, our preliminary recommendation is that adverse environmental impacts of license renewal for Fort Calhoun are not so great that preserving the option of license renewal for energy planning decisionmakers would be unreasonable.

Quick recap of our current status; we issued the draft environmental impact statement for the Fort Calhoun Station license renewal on January 6th. We are currently in the middle of a

1 public comment period that is scheduled to end on 2 We expect to address the public's April 10th. comments, including any necessary revisions to the 3 4 draft environmental impact statement, and issue a 5 final environmental impact statement in August. This slide provides information on how to 6 7 access the draft environmental impact statement 8 for Fort Calhoun. You can contact me directly at 9 the number provided. There are a number of copies 10 out in the lobby, and you can pick one up on your 11 way out. In addition, the Blair and the Clark 12 Public Libraries have copies for you to look at. And the document is available on the Web at the 13 14 address given. 15 This last slide provides details on how to 16 submit comments on the draft. The comment period, 17 as I said before, goes until April 10th, 2003. You can submit comments by writing directly to the 18 19 address given. You can send them to the e-mail 20 address here, Ft\_Calhoun\_EIS@nrc.gov, or you can 21 bring them in person to our headquarters in 22 Rockville. 23 Chip. 24 MR. CAMERON: Okay. Thank you, 25 Jack.

How about questions on the ultimate conclusion that was reached by the -- in the draft. I want to emphasize "draft" because it won't be final until, as Jack pointed out, all the comments are evaluated. Any questions on that or on the issue of the SAMAs, the mitigation -- "Severe Accident Mitigation Alternative"? Okay.

Thank you -- thank you very much, Jack.

And let's go to the formal comment part of the meeting. And first of all, we're going to hear from -- from the Omaha Public Power District. We have Gary Gates with us who is the vice president for Nuclear Operations there.

Gary.

MR. GATES: Thank you. My name's Gary Gates. I'm the vice president of OPPD that's responsible for the operation of Fort Calhoun Station. I'd like to acknowledge at this time any of the OPPD staff that's here tonight. They've put in a lot of work and a lot of effort to get to this point in the license renewal process. They definitely have the appreciation of the district, as well as myself. I'd like to also acknowledge two individuals that are here: Mr. Chuck Elderd, who's the chief financial officer at OPPD, who's,

here representing the City Management Team, as well as myself. And Director, Anne McGuire is here. She's part of the OPPD board, and currently serves as the chair of the Nuclear Oversight Committee.

I spoke at your June meeting in Omaha concerning the license renewal application, and I welcome the opportunity to speak this evening in support of the conclusion reached by the NRC, but there are no environmental impacts that preclude the renewal of the operating devices of the Fort Calhoun nuclear plant.

OPPD provides electricity to more than 300,000 customers in a 13-county area in southeast Nebraska. It must be noted that about 30 percent of the power that's used by our customers on a daily basis is generated by the Fort Calhoun Station. Fort Calhoun is a single-unit plant located between Blair and Fort Calhoun, Nebraska. It was declared commercial in 1973, and has been operating safely ever since. I am proud to have been a part of Fort Calhoun since the initial construction. We feel that over the last 30 years we have demonstrated a high level of safety and environmental stewardship in all our programs and

operations.

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In fact, the continued safety operation of Fort Calhoun Station remains the number one priority of OPPD. OPPD maintains its facilities and conducts its operations based on a strong commitment to the environment and monitoring and the management of those policies. Our policy is to conduct operations, not just in compliance with all applicable government laws and regulations, but over and beyond minimum requirements of those regulations. This ensures our ability to protect the environment and to serve in the best interest of our employees, our customers and the surrounding communities. We feel the NRC staff recommendation, which is the subject of today's meeting, is a testament to the effectiveness of our approach.

OPPD will continue, what we believe, is a comprehensive, environmental monitoring program, hopefully for an additional 20 years, beyond 2013.

Furthermore, we will continue to develop and implement ways to enhance the operation of Fort Calhoun Station. In other words, we are committed to conducting our operations in an environmentally responsible manner as we have done

in the last 30 years.

Let me take a few minutes to say something about the employees that work at Fort Calhoun Nuclear Station.

These men and woman take pride in being able to safely operate a clean source of dependable power. They do so not only as workers, but as residents of the area we serve. Besides having homes and families in the area, they are valued members of the community, often serving as volunteers and social leaders in the area. They also know that the effective operation of Fort Calhoun Station for another 20 years will contribute economic benefits to that area. That includes jobs for not only plant employees, but for many of the area businesses with whom we work.

The point is that we all have a stake in continuing to operate the plant in a safe and strong commitment to the environment.

One other note, OPPD's concern for the environment goes beyond Fort Calhoun Station. We have invested in other green power sources, such as wind and biomass.

In closing, let me thank you for this opportunity to speak on a very important issue and

1	in support of the staff's recommendation. Thanks
2	for your time.
3	MR. CAMERON: Okay. Thank you
4	very much, Gary.
5	Our next speaker is Mr. Rob Hall. And Mr.
6	Hall is with the Omaha, Nebraska, and Southwest
7	Iowa Building Trades.
8	Do you want to come up here or wherever
9	you feel comfortable.
10	MR. HALL: I'm fine right here.
11	MR. CAMERON: Okay. Good. Go
12	ahead.
13	MR. HALL: My name is Rob Hall,
14	and I represent the Omaha Greater Omaha,
15	Nebraska, and Southwest Iowa Building and Trade.
16	We're the construction unions that support the
17	inside construction/maintenance at Fort Calhoun
18	facility. My tenure in the industry goes back 28
19	years. I worked 18 months for OPPD, most of that
20	time was at Fort Calhoun. And when I think
21	back of course I was a little bit younger
22	then but I realized now that was probably one
23	of the premiere atmospheres that I've ever worked
24	in.
25	Today we are working hand in hand with OPPD

to come up with some new innovative ways to -- for labor to help them and for them to help labor in the community. It's a great tribute to the leadership and management at this facility. And that goes from the managers to the planners to the training department. It's unbelievable the ground we've covered and the issues we discussed.

One of them, of course, is safety. And

we're working on several issues there. I can speak from my trade union, which is the Asbestos Workers and the Piping Slayers, and we've dealt with asbestos within the OPPD system for years. And we've never ever had any problems, any complaints. They're a group that is so well organized and so well planned, we've never had any problems with any type of removal project. great place to work. It truly is. And again, that's attributed to the leadership and So without repeating myself, I thank management. you for the opportunity to address the NRC. again, OPPD is an important part of our industry. MR. CAMERON: Okay. Thank you,

Rob.

Is there anyone else who wants to make a comment or ask a question about any issue

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1	connected with license renewal or NRC's oversight?
2	Okay. Great. Thank you all for coming out
3	tonight and thanks to Camie for the stenography,
4	and I think we're adjourned.
5	(The hearing was concluded at the
6	hour of 8:03 p.m.)
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