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Pages 1-2

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION  
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PUBLIC MEETING ON  
ENVIRONMENTAL ISSUES PERTAINING TO  
COOPER NUCLEAR STATION LICENSE RENEWAL

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Wednesday, April 7, 2010  
Auburn City Council Chambers  
1101 J Street  
Auburn, Nebraska

7:00 p.m.

MEETING FACILITATOR:

Andy Imboden

PROJECT MANAGER:

Bennett Brady

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P-R-O-C-E-E-D-I-N-G-S

(7:00 p.m.)

MR. IMBODEN: Good evening, everyone. My name's Andy Imboden. I'm the Chief of the Environmental Review Branch and the Office of Nuclear Reactor Regulation in the Division of License Renewal.

And I'd like to thank everyone for coming out this evening to discuss. The NRC's here to receive public comments on our Draft Supplemental Environmental Impact Statement for the License Renewal of Cooper Nuclear Station, so, what are the environmental impacts of extending the license of Cooper Nuclear Station by 20 years.

This meeting is one way to participate. We have also -- we're accepting written and e-mailed comments as we'll hear later, the details on that. This meeting will be in three parts. The first part is a presentation by the NRC staff, Bennett Brady, the project manager. And the second part will be open to the public to receive comments that you want to say on the record. The meeting is being transcribed, so please come up to the podium, state your name, your organization, if you represent one, so that way we can get a clean transcript.

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1           After the public comment period is over,  
2 we're going to stop the transcript and then we're  
3 going to hear a presentation from Greg Pick. He was a  
4 team leader for the inspection team at Cooper, and  
5 he's based out of our Arlington office. And he'll  
6 present, you know, what they found at the inspection.

7           I don't believe anyone has signed up to  
8 speak, but we'll open the floor anyway. And just as a  
9 matter of business, the restrooms are right through  
10 here. Please silence your cell phones. And there are  
11 feedback forms provided. Postage is free. Give us  
12 your comments so we can improve our public meetings.  
13 Pop them in the mail or hand it to one of the NRC  
14 staff. There's also copies of the presentation, too,  
15 as well. If anyone needs one, raise your hand and  
16 I'll give it to you.

17           With that, I'd like to invite Bennett  
18 Brady to come up. Thank you.

19                           BENNETT BRADY

20           Good evening. As Andy told you, I'm  
21 Bennett Brady, and I was the Environmental Project  
22 Manager for the Cooper Nuclear Station license  
23 renewal. My role as the Environmental Project Manager  
24 was to coordinate the environmental review. We have a  
25 lot of environmental engineers in the NRC to review

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1 the various aspects, the impacts that might be  
2 associated with license renewal. I've gathered their  
3 comments and completed this document, which is the  
4 analysis that we did on the site-specific impacts.

5 Why do we do this? The National  
6 Environmental Impacts (sic) Act, NEPA, as we call it,  
7 requires that all federal agencies making certain  
8 decisions must evaluate the impact of those decisions  
9 on the environment. They have a very systematic  
10 approach for doing this and the NRC follows that in  
11 doing their review for license renewal.

12 As Andy also mentioned, at the end of my  
13 presentation, I would welcome comments to you. Of  
14 those of you who don't want to give oral comments,  
15 written comments -- there are several ways I'll talk  
16 about where you can input your written comments.

17 Just to give you an outline of my -- of  
18 the meeting today, I'll try to be very brief in my  
19 comments and telling you something about the license  
20 renewal process, the two types of reviews we do. I'll  
21 give you a summary of our environmental findings, our  
22 findings related to various aspects like the air,  
23 water, surface issues. I'll give you the schedule  
24 that we have for producing our final Environmental  
25 Impact Statement. This is a draft now. And then I'll

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1 also explain how you can provide written comments to  
2 us. Next slide, please.

3 The NRC's regulatory responsibility is to  
4 manage all civilian uses of nuclear materials, and  
5 this, of course, includes licensing and monitoring of  
6 nuclear power plants. We conduct the license renewal  
7 reviews as a safety review and environmental review.  
8 Tonight, we're talking about the results of our  
9 environmental review. But in all of these aspects,  
10 the NRC's mission is threefold. First, to protect  
11 public health and safety. Promote common defense and  
12 security. And to protect the environment. Next  
13 slide, please.

14 This slide presents a very high level  
15 diagram of license renewal process. It begins, of  
16 course, when the licensee submits their application.  
17 As I mentioned, there are two parallel reviews that  
18 are going on at the same time. The upper part of this  
19 diagram shows the safety review. The lower part is  
20 the environmental review, which I will speak more  
21 about on the next slide.

22 During the safety review, we have on-site  
23 inspections. Greg Pick will be talking about one of  
24 those at the end of this meeting. We also have audits  
25 in which we visit the Cooper Nuclear Station to look

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1 at their Aging Management Programs and the scope of  
2 license renewal at their plant. We review the  
3 application in depth and then we do an independent  
4 review of practically all aspects of the application.

5 And then, at the end of this top level process, we  
6 publish our Safety Evaluation Report. The Draft  
7 Safety Evaluation Report was just produced yesterday.

8 A month from now on May 5<sup>th</sup>, we will have another  
9 public meeting with one of our advisory counsels to  
10 review the -- what we call the Draft SER.

11 There's also, on occasion, there may be  
12 hearings associated with the license renewal process,  
13 and that provides input into our final decision. We  
14 don't anticipate or expect that there will be any  
15 hearings related with the Cooper Nuclear Station. Next  
16 slide, please.

17 This is a more in depth review of the  
18 bottom part of the previous diagram in which it shows  
19 the environmental review process. All of the yellow  
20 boxes there are parts where we welcome input from the  
21 public in our process. When the license applicant  
22 submits their application for renewal, part of that  
23 application is their environmental assessment. The  
24 NRC reviews that, and then we begin our environmental  
25 review in which we may have a meeting in the local

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1 area to meet the public officials, talk to the public  
2 there, and learn more about the plant. And then we  
3 have another meeting, a scoping meeting. Some of you  
4 may have attended that, in which we try to define the  
5 scope of the environmental review and get public  
6 comments on that.

7 We also conduct a site environmental audit  
8 with our environmental reviewers. All of this goes  
9 into what we call the Draft Supplement to the GEIS.  
10 I'll use the word Draft SEIS several times,  
11 supplement. I'll explain that a little bit more in  
12 the next slide. We're now at the middle yellow box  
13 here in which we get comments from the public on our  
14 Draft SEIS. These comments, written or oral, are then  
15 -- all of them are considered by our staff and they  
16 could change our findings that we've published in the  
17 draft.

18 At the end of the comment period, which is  
19 May 5, we produce our final supplement to the GEIS.  
20 And this is one of the inputs that goes into the NRC's  
21 decision on applications. Next slide, please.

22 I've been mentioning what we call the  
23 GEIS, G-E-I-S. That is short for Generic  
24 Environmental Impact Statement. This was a document  
25 prepared by the NRC that looks at all of the

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1 environmental areas that might be impacted by license  
2 renewal. They, then, divided the issues, impacts,  
3 into two categories. Category 1 are the issues that  
4 respect to be applicable to all plants that have the  
5 same impact at all plants. And the staff, in the  
6 GEIS, categorized these issues according to the  
7 environmental impact, either if they were small,  
8 moderate, or large. And then -- that was the Category  
9 1. Then there were the, what they call the Category 2  
10 issues that were expected to be site-specific that  
11 might depend on -- the environmental assessment might  
12 be different for different plants. And those are the  
13 issues that the NRC focuses in on in this volume of  
14 the site-specific issues that apply to Cooper Nuclear  
15 Station.

16 And again, when staff looks at these site-  
17 specific issues, they determine whether they should be  
18 small, moderate, or large. Next slide, please.

19 This slide shows all the, what we call  
20 site-specific issues that apply to Cooper Nuclear  
21 Station. These -- we analyze these in depth and our  
22 conclusions are there on the right. We found that all  
23 the issues, site-specific issues related to Cooper,  
24 that their impact on the environment would be small.  
25 Next slide, please.

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1 Here is an example of some of the site-  
2 specific issues that relate to Cooper's cooling  
3 system. As you likely know, the Cooper withdraws  
4 water from the Missouri River, through the plant,  
5 heats it, and then puts it back into the Missouri  
6 River. This has impact on the small fish and  
7 shellfish. In particular, there are three impacts.  
8 The first two being entrainment and impingement of  
9 fish and shellfish. By entrainment, which is primary  
10 the smallest type of fish, they may be sucked in and  
11 dragged through the plant. The impingement for larger  
12 fish refers to pinning them on the intake structure of  
13 the plant. We analyzed this. We noted that NPPD has  
14 taken measures to reduce entrainment and impingement  
15 with equipment they're installing. They have plans to  
16 do more. And NRC staff concludes this would have a  
17 small impact on entrainment and impingement and maybe  
18 even a positive impact.

19 The other environmental impact here is the  
20 heat shock, that is, the impact of thermal discharge  
21 on fish and shellfish. We also reviewed a lot of old  
22 studies. We've looked at the permits that NPPD is  
23 using. We read a lot of old field studies and our  
24 conclusion from this was that this also would have a  
25 small impact. Next slide, please.

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1           To this point, I have been discussing what  
2 the impact of relicensing Cooper would have on the  
3 environment. In addition to looking at the impact of  
4 license renewal, we also examine what we call the  
5 cumulative impacts, that is the impact over time and  
6 over all other actions, not necessarily license  
7 renewal. What of other federal decision, what other  
8 people are doing, and we try to determine what is the  
9 environmental impact. And this, when you talk about  
10 the past, present, and future, by the past, we mean  
11 the time when Cooper began operation. The present,  
12 the current operation. And then the future activities  
13 go through 20 years of license renewal. Again, this  
14 is looking at all impacts on the environment, not  
15 necessarily license renewal. All the aquatic  
16 resources, as I just mentioned, in the last slide, as  
17 far as license renewal is concerned, the impact is  
18 small on aquatic resources. However, when you look at  
19 everything that is going on to the Missouri River, our  
20 license reviewers found that the Missouri River is in  
21 an unstable state and possibly degraded beyond the  
22 thought of return. And so our conclusion is that that  
23 would be large cumulative impacts on aquatic  
24 resources.

25           Similarly, for terrestrial resources, when

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1 we look at license renewal for Cooper, it was small,  
2 but when we look at the cumulative impacts, it's  
3 moderate impact.

4 In all the other environmental areas that  
5 we considered, we found that the cumulative impact was  
6 small. Next slide.

7 NEPA also requires that when a federal  
8 agency is making a decision that might have an  
9 environmental impact, that we also consider what  
10 alternatives to our decision could we possibly make  
11 and what are the environmental impacts of these  
12 alternatives. And then the federal agency must  
13 compare these alternatives to the alternative they are  
14 considering.

15 The NRC staff began with 19 possible  
16 alternatives to meeting the energy needs that Cooper  
17 now provides. You see some of these would be to build  
18 another coal- or gas-fired plant at the site, to  
19 purchase power from other companies, to build a new  
20 nuclear site, wind power, solar power, hydroelectric  
21 power. Some of these were dismissed because they  
22 couldn't meet the current nuclear needs. Some of  
23 them, obviously, have a higher environmental impact.  
24 But in the end, we selected three alternative energy  
25 sources that we analyzed in depth to determine what

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1 their impact was. These were the supercritical coal-  
2 fired power plant, natural gas-fired combined cycle  
3 unit, and then a combination alternative that would  
4 include one combined cycle gas-fired unit, 250 wind  
5 turbines, and energy conservation, that's cutting back  
6 on the energy use.

7 When we -- And there was also another  
8 alternative, which was -- I guess it's not really an  
9 alternative. It's what we call the no-action  
10 alternative. That is, NRC takes no action on the  
11 application and Cooper has to shut down on or before  
12 2014. This would not meet the energy needs now served  
13 by Cooper. Next slide, please.

14 Our preliminary findings from this review  
15 of alternatives was that the coal-fired alternative is  
16 the least environmental friendly due to the air  
17 emissions and construction impact. The gas-fired  
18 alternative has little slightly less environmental  
19 impacts due to air emissions and construction. The  
20 combination alternative that we talked about would  
21 have large impacts due to construction costs. And  
22 thus, all other alternatives capable of meeting the  
23 energy needs served by Cooper have greater impacts  
24 than the proposed action of license renewal. Next  
25 slide, please.

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1           So, this is our preliminary conclusion  
2 from our review of the impacts, the cumulative  
3 impacts, and alternatives, the staff concludes in this  
4 report that the environmental impacts of license  
5 renewal for Cooper Nuclear Station are not so great as  
6 to make license renewal unreasonable. However, this  
7 is our preliminary conclusion with still more to be  
8 done. Next slide.

9           This shows our schedule for the  
10 environmental review. We're down here now, April 7,  
11 holding the Draft SEIS Public Meeting. We've been  
12 receiving comments and will continue to receive  
13 comments until May the 5<sup>th</sup>, when our comment period  
14 closes. The staff will then consider all of these  
15 comments that could possibly change our conclusions  
16 that we have in this document. And we will publish  
17 our final SEIS in July of this year. Next slide,  
18 please.

19           Here is some information about how you can  
20 reach me, e-mail me, call me. Also, our Safety PM,  
21 Tam Tran, who could not be here because he was getting  
22 out the final SER report that I mentioned. The Draft  
23 SEIS, there's copies over here, there are copies on  
24 some CDs that we have here, it's also available at the  
25 Auburn Memorial Library, and it's online at the NRC

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1 website, and that is the address. You can go there  
2 and get it. Next slide, please.

3 As I mentioned and Andy mentioned, we also  
4 welcome written comments. Here's the address where  
5 you can send them to us by -- either by e-mail or by  
6 regular mail, our address. And also there is a new  
7 website, regulations.gov that has all of the documents  
8 and rules that the federal government is proposing.  
9 And you can go to this site and get documents and  
10 submit comments, and check back and see that your  
11 comments are there and see comments that other people  
12 are making. And, finally, you can come see us and  
13 bring it to us in Rockville, Maryland.

14 That concludes my comments now, and I'll  
15 turn it back over to Andy for comments people may  
16 have.

17 MR. IMBODEN: Thank you, Bennett.

18 So, just to recap, there's a typo in the  
19 Supplemental Environmental Impact Statement. It's in  
20 -- In the written one, it says that comments are due  
21 by April 6<sup>th</sup>, so I just want to reiterate the point  
22 that they're really due May 5<sup>th</sup>.

23 So, does anyone have any questions to  
24 Bennett on her presentation? Or, if not, we could go  
25 to accepting general comments from the public. Nobody

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1 signed in indicating that they would like to make a  
2 statement, so I would just open the floor. Raise your  
3 hand and I'll invite you up here.

4 Thanks everyone for coming out. And I'm  
5 going to close the formal part of the presentation and  
6 then we're going to hear from Greg Pick and what he  
7 found on his inspection and his team's inspection.  
8 Thanks.

9 (Whereupon, at 7:25 p.m., on April 7,  
10 2010, the public meeting was concluded.)  
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