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**NUCLEAR REGULATORY COMMISSION**

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Pages 1-20

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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

1:30 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

(1:30 p.m.)

MR. IMBODEN: Good afternoon, everybody. My name's Andy Imboden. I'm the Branch Chief of the Environmental Review Branch in the Division of License Renewal. And I'd like to thank everyone for coming out today and signing in, if you haven't yet. We're here to discuss and collect comments on the Draft Supplemental Environmental Impact Statement for the License Renewal of Cooper Nuclear Station. It was published not too long ago and we'll be accepting public comments from now until the 5<sup>th</sup> of May, as opposed to what it says in the document. So, this is one way for the public to comment on this document. We're also accepting written and e-mailed comments up until midnight on the 5<sup>th</sup> of May.

This meeting's going to be in two parts. The first, there's going to be a brief presentation by the NRC staff to discuss the license renewal, Supplemental Environmental Impact Statement, or EIS. And then there will be a period of time you could ask some questions about the presentation. But, if there aren't any, we'll go right on, open up the floor to receive comments from the public on the record on the Environmental Impact Statement. And it's important to

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1 help get comments on the record. We can't change the  
2 Environmental Impact Statement unless there's a  
3 written record of it. And so that's why we have a  
4 transcriptionist, and that's why the sign-in sheet and  
5 the cards. And when you get up here, please state  
6 your name clearly and the organization you represent,  
7 if you do represent an organization.

8 Nobody's really signed up to speak, so I  
9 don't think there's going to be a time constraint. I  
10 don't think that will be necessary. And just a matter  
11 of business, the restrooms are right through here.  
12 Please silence your cell phones. And there's NRC  
13 feedback forms that we handed out. Postage is free.  
14 Write your comments, drop it in the mailbox, or hand  
15 it to one of the NRC staff. We'll take it back and it  
16 will help us improve our public meetings in the  
17 future. There's also copies of the presentation, as  
18 well, and I believe most people got as they went in.  
19 If you need one, raise your hand and I'll hand it out  
20 to you.

21 I would like to introduce the NRC's main  
22 speaker today. Bennett Brady is the project manager  
23 for this little operation, and she's from the Division  
24 of License Renewal in the Office of Nuclear Reactor  
25 Regulation. So, does anyone need a copy of the

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1 presentation or any other materials before Bennett can  
2 start?

3 (No response.)

4 Go ahead.

5 BENNETT BRADY

6 MS. BRADY: Good afternoon. As Andy  
7 mentioned, my name is Bennett Brady. I'm the  
8 Environmental Project Manager of the Cooper License  
9 Renewal at the NRC. As project manager, it was my  
10 responsibility to coordinate the reviews of our  
11 environmental engineers. We have an excellent staff  
12 who's looked at all the different environmental  
13 issues, provided me their reviews, and we've used this  
14 to publish the document that we're talking about  
15 today, the Draft Supplement to the Environmental  
16 Impact Statement for License Renewal for Cooper  
17 Nuclear Power Plant.

18 The National Environmental Policy Act of  
19 1969, which we refer to as NEPA, says that all federal  
20 agencies before they make certain decisions have to  
21 analyze the environmental impact of that decision.  
22 And the decision, of course, we're talking about today  
23 is whether or not to renew Cooper's Nuclear Station  
24 license renewal. We have completed our review, and at  
25 this phase, we have published it for comment on

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1 February the 18<sup>th</sup>, and we are here to briefly describe  
2 what it presents and to get your comments.

3 Today I'm going to talk -- I'll try to be  
4 very brief, about what our document covers. I'll  
5 describe the license renewal process, and then I will  
6 summarize our findings and issues related to the  
7 environmental impact, and also then tell you about our  
8 schedule for producing the final Environmental Impact  
9 Statement. And then, the remaining time will be for  
10 your comments.

11 Although we're taking comments today, I  
12 should mention, like Andy, we also take written  
13 comments. People who prefer to send them in, we're  
14 happy to take them. They receive the same  
15 considerations as the oral comments.

16 The NRC was established to regulate  
17 civilian uses of nuclear materials, including  
18 licensing of nuclear power plants. NRC licenses  
19 plants to operate for 40 years with the option to  
20 renew their license for an additional 20. This is  
21 part of the process as a safety review NRC uses, and  
22 then there's also the environmental review license  
23 renewal.

24 But in all aspects of our work, we have  
25 three primary missions. Number one is to protect

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1 public health and safety. To promote common defense  
2 and security. And to protect the environment. Next  
3 slide, please.

4 This is a very high-level diagram of the  
5 license renewal process. Along the top is our safety  
6 review, and along the bottom is the environmental  
7 review, which I'll talk more about on the next slide.

8 These two reviews are going along in parallel, and at  
9 the end, there, you see, they feed into our final  
10 decision on license renewal. Our process begins when  
11 the applicant submits their application. Then we go  
12 through -- going along the top there, the safety  
13 review, which looks at the application to see if it's  
14 complete and sufficient information for us to make our  
15 decision. We have a number of on-site inspections.  
16 After the evening meeting today, the regional  
17 inspector will be giving his presentation. We visit  
18 the site with a number of audits and then we, after  
19 that, the staff reviews the application in very great  
20 detail and comes out with their Safety Evaluation  
21 Report. We've just yesterday released that Safety  
22 Evaluation Report -- Draft Evaluation Report. We'll  
23 be presenting it to our ACRS Committee on May the 5<sup>th</sup>.

24 And all of these documents, inspection reports,  
25 environmental review, safety evaluation review, feed

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1 into NRC's decision. There is also optional hearing.

2 At this point, we haven't had any requests for  
3 hearings and we really don't anticipate in connection  
4 with Cooper's license renewal. Next slide, please.

5 This is the bottom half of that diagram I  
6 was just showing you. The yellow boxes there are  
7 points where the public can provide input to our  
8 process. When the license renewal application comes  
9 in, that's also an environmental report that's  
10 submitted as part of that and that's partly from what  
11 -- uses information that partly provides for our  
12 review on the environmental impact. NRC usually has a  
13 meeting in the area to talk to the local officials,  
14 meet the public, and get a background for the license  
15 renewal process.

16 We then begin our environmental review  
17 around the lower left, and we again have another  
18 public meeting to receive comments on the scope of our  
19 environmental review. Some of you may have attended  
20 that meeting that we held here back in February 2009.

21 We also have a site environmental audit to  
22 look at the site and learn about what may be impacted  
23 by license renewal.

24 All of these reviews then feed into what  
25 we call the Draft Supplement to the GEIS, the document

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1 here. I'll speak a little bit more about what I'm  
2 talking about, what the GEIS is and why this is a  
3 supplement on the next slide. And then we are right  
4 here in this process of the orange -- yellow box in  
5 the middle of where we have this meeting to present  
6 our results and to get comments on our draft SEIS. As  
7 I mentioned before, we'll be receiving hearings until  
8 May the 5<sup>th</sup>. We will then take into consideration all  
9 the comments that we receive. These comments could  
10 change our views on the environmental impacts, and  
11 then these will fit into our final supplement, which  
12 also, again, as I mentioned, goes into the NRC's  
13 decision on the application. Next slide, please.

14 A couple times I mentioned GEIS. That  
15 stands for Generic Environmental Impact Statement.  
16 This is a document that the NRC staff developed in  
17 1996 and 1999 which looked at all the impacts that  
18 relicensing a nuclear power plant might have. They  
19 looked at all the issues or impacts and they  
20 categorized them into two types, what we call Category  
21 1 issues are issues that -- very general and would  
22 apply to all nuclear power plants in the same way.

23 Then there was the Category 2 issues that  
24 we call the site-specific issues where the staff  
25 couldn't come to an agreement of the impact of those

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1 issues except by doing a site-specific study. And  
2 that's the main thing that we're focusing on this  
3 document and talking about today are the site-specific  
4 impacts.

5 The staff then reviewed the impacts and  
6 they assigned a level of environmental impact to each  
7 of the general issues, the Category 1 issues. Either  
8 they were categorized as small, moderate or large.  
9 But the SEIS, as I mentioned, they have certain issues  
10 that were site-specific and required the site to do a  
11 site-specific analysis. And these are the ones that  
12 are published in our draft. That's why we call it  
13 Draft Supplemental Environmental Impact Statement, the  
14 site-specific issues.

15 Although I say we're talking about site-  
16 specific issues, we also look at the general issues to  
17 see if there might be some new or additional  
18 information that might change our assessment on the  
19 assessments that were given when the GEIS was  
20 published. This we also, in addition to looking at  
21 the impacts, we look at what we call cumulative  
22 impacts which I'll talk about, and we also look at  
23 alternatives. How might the energy needs that Cooper  
24 now provides be met with alternate energy sources?  
25 All of this goes into the final review of our proposed

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1 action as I'll talk about later. Next slide, please.

2  
3 I mentioned that there was site-specific  
4 issues that required the staff to do more detailed  
5 analysis. This table here shows all of the site-  
6 specific issues related to Cooper Nuclear Station that  
7 our staff analyzed in depth. For all of these issues,  
8 as you can see on the right, the staff determined that  
9 the environmental impact of license renewal would be  
10 small. I'll talk a little bit more about some of  
11 these issues on the next slide, please.

12 These are the site-specific issues that we  
13 found that might have an impact on the aquatic  
14 resources at Cooper. These set of issues right here  
15 on this slide, they all relate to Cooper's cooling  
16 system. As you probably know, Cooper withdraws water  
17 from the Missouri River, returns it heated to the  
18 Missouri River, and this has an impact on small  
19 animals, small fish and shellfish. And this document  
20 contains the large discussion on the Missouri River  
21 and the impact that this might have.

22 We found that as far as entrainment and  
23 impingement of fish and shellfish -- entrainment means  
24 pulling little fish through the plant's system.  
25 Impingement means pinning them to the intake

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1 structure. We analyzed it. We found that there was a  
2 very small level of impact on entrainment and  
3 impingement of fish and shellfish.

4 NPPD has installed new equipment that  
5 should improve this. They have plans to install more  
6 equipment. And overall, license renewal might have a  
7 positive impact on the entrainment and impingement of  
8 fish.

9 And then there's also heat shock, the  
10 impacts of thermal discharge on fish and shellfish.  
11 After reviewing all of these extensively, the NRC  
12 found that that would just be a small impact on  
13 aquatic resources. Next slide, please.

14 So far, I've just been talking about what  
15 would be the impact of renewing the license of Cooper.

16 The staff also looks into what we call cumulative  
17 impacts. This is looking at, over time, and over all  
18 other actions that might be taking place during this  
19 time, past, present, and future. By the past, we  
20 mean, when Cooper first started operation. The  
21 present is the current operation. And the future is  
22 the next 20 years license renewal. And we're not just  
23 looking at, say, as a license renewal. We're looking  
24 at all -- everything that's going on that might have  
25 an impact on the environment during this period.

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1           For example, on the aquatic resources, we  
2 did an extensive analysis of what's going on with the  
3 Missouri River and we found that it's an unstable  
4 ecosystem, maybe even to the point of being called  
5 degraded. Because it is unstable by NRC's definition  
6 of large impact, we said that there was a large  
7 cumulative impact on aquatic resources. But recall  
8 for the single impact of license renewal, we said it  
9 was a small impact.

10           Terrestrial resources. When NRC looked at  
11 license renewal alone, we said that might be a small  
12 impact on terrestrial resources, but when we look at  
13 the cumulative impact over all time and all actions,  
14 that may be a moderate impact on terrestrial  
15 resources.

16           For all other areas, environmental areas,  
17 we found that there would be a small cumulative  
18 impact. Next slide, please.

19           NEPA also requires that any federal agency  
20 who is planning on taking action that they also  
21 consider alternatives to that action. In this case,  
22 the action is license renewal, so the staff must also  
23 provide an option that allows for power generation  
24 capability beyond the term of a current nuclear power  
25 plant operating license to meet the future generating

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1 needs.

2 The staff began their analysis of  
3 alternatives. They had 19 different alternatives for  
4 meeting the energy needs. Some of these alternatives  
5 were just not really technically feasible yet. Some  
6 of them didn't meet -- probably wouldn't meet the  
7 energy needs. Some just had more environmental  
8 impacts, obviously, than options we were considering.

9 In the end, NRC decided to look at three of the  
10 environmental options, energy options, in depth. The  
11 supercritical coal-fired power plant, natural gas  
12 combined cycle units, two of those, and then a  
13 combination of alternatives, one combined cycle gas-  
14 fueled unit, 250 wind turbines, and energy  
15 conservation, the public agrees to conserve energy, to  
16 use less energy.

17 The first two, supercritical coal-fired  
18 and the natural gas-fired combined cycle, are  
19 considered to be more environmentally friendly, to  
20 have less impact on the environment than the  
21 conventional coal-fired and gas-fired plant.

22 And then we also, sort of a fourth option  
23 was what we call the no-action alternative. NRC takes  
24 no action, Cooper is required to shut down on or  
25 before 2014. Actually, this is not -- it's not really

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1 an option, because the energy needs that Cooper now  
2 provides would not be met. Next slide, please.

3 This is our preliminary findings on these  
4 alternatives. The coal-fired alternative is the least  
5 environmentally favorable alternative due to the  
6 impacts from air quality conditions and construction  
7 impacts. The gas-fired alternative would have  
8 slightly lower impacts due to air emissions and  
9 construction. The combined alternative that I  
10 mentioned would have greater impacts due to  
11 construction. And all other alternatives capable of  
12 meeting the energy needs served by Cooper have greater  
13 impacts than the proposed action of license renewal.  
14 When we compare the alternatives side by side with the  
15 license renewal impact. That is the least impacts on  
16 the environment. Next slide, please.

17 When we take together our review of the  
18 single impacts, the cumulative impacts, and the  
19 alternative options, the NRC concludes that the  
20 environmental impacts of license renewal for Cooper  
21 Nuclear Station are not so great as to make license  
22 renewal unreasonable. This is our preliminary  
23 conclusion, although we're not finished yet. Next  
24 slide.

25 This is the schedule for producing our

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1 final SEIS. We are, right now, at the SEIS public  
2 meeting. We will continue to receive comments on the  
3 SEIS until May the 5<sup>th</sup>. At that point, we will review  
4 the comments and take it into consideration what the  
5 public comments have been, would they change our  
6 finding on any of these environmental impacts. As I  
7 said, it can be either written or presented at this  
8 meeting orally. And then our schedule is to produce  
9 the final SEIS in July of this year. Next slide.

10 This just provides some information. As I  
11 mentioned, I'm the Environmental PM. It's my  
12 telephone and e-mail address. Tam Tran is our Safety  
13 PM. Tam could not be here because he's been busy  
14 getting out our Safety Evaluation Report. There are  
15 also copies of our draft SEIS at your Auburn Memorial  
16 Library and there are also copies online. The address  
17 there is in our handout. Next slide.

18 As I mentioned, we welcome written  
19 comments. People who prefer to send written comments,  
20 we receive them by e-mail or by regular mail. There's  
21 also a new Internet site, [regulations.gov](http://regulations.gov), and you can  
22 go on there and get copies of any documents or  
23 regulations and submit comments online. And there's  
24 information on how to find our documents, submit  
25 comments there. And then you can come see us in

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1 Rockville, Maryland, give us your comments, if you  
2 would like.

3 This completes my presentation. Now I  
4 turn the meeting back over to Andy.

5 MR. IMBODEN: Thank you, Bennett.

6 Just two or three things. First, does  
7 anyone have any questions about the presentation?

8 (No response.)

9 One of the things I'm really excited about  
10 is this regulations.gov. It's a new way to submit  
11 comments. Instead of throwing your e-mail into a  
12 black box and wondering if it ever got there,  
13 regulations.gov, you could see your comment right away  
14 when you submit it, so it gives you that assurance  
15 that it will be responded to, and you could also see  
16 everybody else's comments. You could see -- We're  
17 going to put like, when the EPA comments on our draft,  
18 you could see what EPA has to say and that kind of  
19 thing. So, that's interesting.

20 The other thing is, with the alternatives  
21 and the NRC's decision-making standard, we don't have  
22 to pick the most environmentally friendly alternative.

23 But, in this case, the license renewal is, you know,  
24 at least from what we could tell so far, that is the  
25 most environmentally friendly alternative. So, that

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1 should make the NRC's job easier.

2 And with that, I just would -- I don't  
3 think there's anybody who's signed up to submit a  
4 comment. Oh, is there a yellow card up there?

5 Would you like to come up, state your  
6 name, your organization, if you have one, and then  
7 your comment then. I'm not going to limit your time,  
8 because --

9 MR. ENGLES: I got an hour?

10 (Laughter.)

11 MR. IMBODEN: Maybe not an hour.

12 BOB ENGLES

13 Thank you very much. My name is Bob  
14 Engles and I'm the mayor of Auburn, and I have  
15 submitted a letter of support to you. And I just  
16 wanted to make a couple brief comments in regard to  
17 this process.

18 First of all, from the environmental  
19 standpoint, the people of Auburn and Nemaha County are  
20 very much in support of the relicensing process and we  
21 are very much comfortable with the environmental  
22 aspects of Cooper Nuclear Station. I've talked to  
23 literally hundreds of farmers and fishermen on both  
24 sides of the river in regard to the impact  
25 environmentally of Cooper Nuclear Station, and I've

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1 never talked to anyone who has a problem with that.  
2 So, we are very much in support of that.

3 Also, I'd like to comment that Cooper  
4 Nuclear Station is not just a power-generating  
5 facility for us here. We feel that the people who  
6 work at Cooper Nuclear Station, the people that work  
7 on site here, even some of the top executives from  
8 corporate headquarters who are here today. These  
9 people are our friends, our allies, they're part of  
10 the fabric of our community. We are -- we feel very  
11 blessed to have Cooper Nuclear Station here with us,  
12 both the plant over there and the two support  
13 facilities that are here in Auburn. I don't think you  
14 will ever find a community, a county community, or a  
15 region like southeast Nebraska that would be more in  
16 support of the consideration that you would give for  
17 relicensing Cooper Nuclear.

18 And I would be glad to answer any  
19 questions you have now or at any time in the future in  
20 regard to NPPD or Cooper Nuclear Station. Thank you.

21 MR. IMBODEN: Thank you so much and we'll  
22 get this entered in on the record.

23 Is there anything else? Please come up  
24 and state your name.

25 GLEN KRUEGER

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1 My name is Glen Krueger, G-l-e-n,  
2 K-r-u-e-g-e-r. I was a former hospital administrator  
3 here for 31 years, retired in 2002. Totally great  
4 cooperation with Cooper. There was some -- a couple  
5 of small accidents. Went very well, the cooperation  
6 between them and us. Cooper did a wonderful job of  
7 educating, providing the necessary materials.

8 At first when, many years ago, '71-'72,  
9 when it first started, we was a little concerned.  
10 That was alleviated very quickly. Soon as we were  
11 educated as to how to handle in case there was a  
12 problem and we was very proud to find out that we'd  
13 never had any great problems with them. Some small  
14 accidents were handled quite well.

15 I am very much in support of this, though  
16 I am not personally the hospital administrator at this  
17 time, but those 31 years, we was very proud to have  
18 them over there and had no problem at all with them.  
19 Thank you.

20 MR. IMBODEN: Thank you.

21 Is there anyone else who would like to  
22 submit a comment?

23 (No response.)

24 If not, we have this reserved for three  
25 hours, is that correct? If not, I'm going to

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1 temporarily pause the formal meeting for half an hour  
2 and if nobody comes up before then, then we'll close  
3 it from the record.

4 (Whereupon, at 2:00 p.m., on April 7,  
5 2010, the public meeting was concluded.)  
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