

**Official Transcript of Proceedings**  
**NUCLEAR REGULATORY COMMISSION**

Title: Draft Environmental Impact Statement for  
Callaway Plant License Renewal  
Public Meeting - Evening Session

Docket Number: 50-483

Location: Fulton, Missouri

Date: Wednesday, March 19, 2014

Work Order No.: NRC-643

Pages 1-18

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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PUBLIC MEETING

ON THE DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT  
STATEMENT FOR THE LICENSE RENEWAL  
OF CALLAWAY PLANT, UNIT 1

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EVENING SESSION

+ + + + +

March 19, 2014

7:00 p.m. - 8:30 p.m.

+ + + + +

Fulton City Hall Council Chambers  
18 East 4th Street  
Fulton, Missouri 65251

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

1  
2 MR. BURTON: All right, I think we are  
3 going to go ahead and get started. Good evening  
4 everybody. I see a lot of familiar faces and I'm glad  
5 to see you all here. This is the second meeting today  
6 to provide an opportunity for members of the public to  
7 provide comments on the Draft Supplemental  
8 Environmental Impact Statement, which we otherwise call  
9 DSEIS, that was prepared by the NRC staff as part of its  
10 review of Callaway's application to [renew] its  
11 operating license for an additional twenty years.

12 My name is William Burton and I otherwise  
13 go by Butch. I am from the NRC's office of Nuclear  
14 Reactor Regulation and tonight I am going to be serving  
15 as your Facilitator. And the purpose of a facilitator  
16 is to help ensure that the meeting goes smoothly and is  
17 productive and informative. So I will take a quick show  
18 of hands. How many people were here for the earlier  
19 meeting?

20 (Numerous hands raised)

21 MR. BURTON: I think that I counted maybe  
22 three who were not. Okay, so we may actually make  
23 record time here.

24 This is a Category 3 public meeting. And  
25 as a Category 3 meeting we encourage active

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1 participation and information exchange with the public  
2 to obtain comments on the [DSEIS]. Hopefully everyone  
3 has signed in, gotten copies of the agenda, the  
4 presentation slide and a feedback form. If you have not  
5 received any of those they are on the registration table  
6 in the front.

7 The agenda, -- we are going to have an  
8 overview of the license renewal environmental review  
9 process, followed by a few minutes if anybody would like  
10 to ask questions about the process or anything that you  
11 heard during the presentation. After that we will open  
12 it up for comments on the DSEIS. And once that is done  
13 we will have final remarks and close out the meeting,  
14 so any comments or questions on that? I think it was  
15 pretty straightforward.

16 (No audible response)

17 MR. BURTON: Okay, good. So meeting  
18 logistics; I always need to go through this. The  
19 meeting is being transcribed so in order to make sure  
20 we have a clean transcript we would ask that you turn  
21 off or mute anything that rings, buzzes, talks back to  
22 you or that kind of thing, and minimize any side  
23 conversations because they do get picked up during the  
24 recording of the transcript.

25 The restrooms are out the back, the men's

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1 room to my right, the lady's room to my left. If for  
2 some reason we have to evacuate or leave the building  
3 I think you guys know where the exits are and it should  
4 not be a problem. We do ask that when you are speaking  
5 to please use the mic. You can come up and use the one  
6 here at the podium or we do have a handheld and I will  
7 be more than happy to bring it to you if you would prefer  
8 to do that.

9 The last thing before we really get started  
10 is the feedback forms. We really encourage folks to  
11 fill those out and let us know how the meeting went and  
12 how we can improve things. We really look forward to  
13 that, so please feel free to fill it out either here or  
14 later on. If you want to fill it out you can send it  
15 to us free postage, so no problem there. Okay, that's  
16 about it for the logistics, any questions on that?

17 (No audible response)

18 MR. BURTON: All right, so I think we are  
19 going to go on and get started. First, let me introduce  
20 some of the folks from the NRC. I'll start with Ms.  
21 Carmen Fells. Ms. Fells serves as the lead Project  
22 Manager overseeing the staff's development of the  
23 Environmental Impact Statement. We also have Mr. Zack  
24 Hollcraft, who is one of the two Resident Inspectors at  
25 Callaway. They serve as our eyes and ears at the plant

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1 and we welcome him. We're glad to see you here. We  
2 also have Mr. Brian Wittick. He is the Chief of the  
3 Projects Branch that manages the environmental review.  
4 And finally we have Ms. Lara Uselding, the Public  
5 Affairs Officer in Region IV, which is our Dallas  
6 office. And I think with that we will go on and get  
7 started and I'll turn it over to Carmen.

8 MS. FELLO: Thank you Butch. Good evening  
9 and thank you all for taking the time to come to this  
10 meeting. My name again, is Carmen Fells. I am the  
11 Project Manager for the environmental review of the  
12 Callaway Plant, Unit 1 License Renewal Application. I  
13 hope the information that we provide with this  
14 presentation will help you to understand what we have  
15 done so far, and the role you can play in helping us make  
16 sure that the Final Environmental Impact Statement is  
17 accurate and complete. However I would like to  
18 emphasize that the environmental review is not yet  
19 complete.

20 So now I will start off by briefly going  
21 over the agenda for today's presentation.

## 22 OVERVIEW

23 Today I will discuss the NRC's regulatory  
24 role. The preliminary findings of our environmental  
25 review which address the impacts associated with

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1 extending the operating license for Callaway for an  
2 additional twenty years. I will also present the  
3 current schedule for the remainder of the environmental  
4 review and how you can submit comments outside of this  
5 meeting.

6 At the end of the presentation there will  
7 be time for questions and answers pertaining to the  
8 environmental review process. And most importantly,  
9 time for you to present your comments on the Draft  
10 Supplemental Environmental Impact Statement or SEIS.

#### 11 NRC'S REGULATORY OVERSIGHT

12 The NRC was established to regulate  
13 civilian use of nuclear materials, including facilities  
14 producing electric power. The NRC conducts license  
15 renewal reviews for plants whose owners wish to operate  
16 them beyond their initial licensing period. The NRC  
17 license renewal review addresses safety issues related  
18 to managing the effects of aging and environmental  
19 issues related to an additional twenty years of  
20 operation. In all aspects of the NRC's regulations our  
21 mission is three-fold, to ensure adequate protection of  
22 public health and safety; to promote common defense and  
23 security and to protect the environment.

#### 24 ENVIRONMENTAL REVIEW

25 We are here today to discuss the potential

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1 site-specific impacts of license renewal for the  
2 Callaway Plant, Unit 1. The Generic Environmental  
3 Impact Statement or the GEIS examines the possible  
4 environmental impacts that could occur as a result of  
5 renewing licenses of individual nuclear power plants  
6 under 10 CFR, Part 54. The GEIS, to the extent  
7 possible, establishes the bounds and significance of  
8 these potential impacts.

9 The analysis in the GEIS encompasses all  
10 operating light water and power reactors. For each  
11 type of environmental impact the GEIS establishes  
12 generic findings covering as many plants as possible.  
13 For some environmental issues the GEIS found that a  
14 generic evaluation was not sufficient and that a  
15 plant-specific analysis was required.

16 The site-specific findings for Callaway  
17 are contained in the Draft Supplemental Environmental  
18 Impact Statement published in February of this year.  
19 This document contains analyses of all applicable  
20 site-specific issues, as well as a review of issues  
21 covered by the GEIS to determine whether the conclusions  
22 in the GEIS are valid for Callaway. In this process the  
23 NRC staff also reviews the environmental impacts of  
24 potential power generation alternatives to license  
25 renewal to determine whether the impacts expected from

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1 license renewals are unreasonable.

2 For each environmental issue identified an  
3 impact level is defined. The NRC's standard of  
4 significance for impacts was established through the  
5 White House Council of Environmental Quality or CEQ's  
6 terminology for significance.

7 HOW IMPACTS ARE QUANTIFIED

8 The NRC established three levels of  
9 significance for potential impacts, SMALL, MODERATE and  
10 LARGE, as defined on the slide.

11 For a SMALL impact the effects are not  
12 detectable or are so minor that they will neither  
13 destabilize nor noticeably altar any important  
14 attribute of the resource. For a MODERATE impact the  
15 effects are sufficient to alter noticeably, but not to  
16 destabilize important attributes of the resource. And  
17 for a LARGE impact the effects are clearly noticeable  
18 and are sufficient to destabilize important attributes  
19 of the resource.

20 SITE-SPECIFIC ENVIRONMENTAL REVIEW

21 OF CALLAWAY LICENSE RENEWAL

22 This slide lists the site-specific issues  
23 the NRC staff reviewed for the continued operation of  
24 Callaway during the proposed license renewal period.

25 Overall the direct and indirect impacts for

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1 license renewal on all of these issues were found to be  
2 SMALL, which means the effects are not detectable or are  
3 so minor that they will neither destabilize nor  
4 noticeably alter any important attribute of the  
5 resource.

#### 6 CUMULATIVE IMPACTS

7 This slide provides a summary of our  
8 findings with respect to cumulative impacts associated  
9 with Callaway.

10 Cumulative impacts include the effects on  
11 the environment from other past, present and reasonably  
12 foreseeable human actions. These effects not only  
13 include the operation of Callaway, but also impacts from  
14 activities unrelated to Callaway, such as future  
15 urbanization, other energy producing facilities in the  
16 area and climate change.

17 Past actions are those related to the  
18 resources at the time of the power plant licensing and  
19 construction.

20 Present actions are those related to the  
21 resources at the time of current operation of the power  
22 plant. And future actions are considered to be those  
23 that are reasonably foreseeable through the end of the  
24 plant operation, including the period of extended  
25 operation.

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1                   Therefore, the analysis considers  
2 potential impacts through the end of the current license  
3 term, as well as the twenty year renewal license term.  
4 While the level of impact due to the direct and indirect  
5 impact of Callaway on aquatic and terrestrial resources  
6 are SMALL, the cumulative impacts when combined with all  
7 other sources, such as increased urbanization and  
8 climate change were SMALL to MODERATE for terrestrial  
9 resources and LARGE for aquatic resources. In other  
10 areas considered the staff preliminary concluded that  
11 the effects were SMALL.

#### 12 ALTERNATIVES

13                   The National Environmental Policy Act  
14 mandates that each Environmental Impact Statement  
15 consider alternatives to any proposed major federal  
16 action. A major step in determining whether license  
17 renewal is reasonable or not, is comparing the likely  
18 impact of continued operations of a nuclear power plant  
19 with the likely impacts of alternative means of power  
20 generation.

21                   Alternatives must provide an option that  
22 allows for the power generation capability beyond the  
23 term of the current nuclear power plant operating  
24 license to meet future system generating needs. In the  
25 Draft Supplement NRC staff initially considered fifteen

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1 different alternatives. After this initial  
2 consideration the staff then chose the most likely and  
3 analyzed these in depth.

4 The NRC staff considered what would happen  
5 if no action was taken and Callaway shuts down at the  
6 end of its current license without a specific  
7 replacement alternative. This alternative would not  
8 provide power generation capacity. Nor would it meet  
9 the needs currently met by Callaway.

#### 10 PRELIMINARY CONCLUSION

11 Based on our review of likely environmental  
12 impacts from license renewal, as well as potential  
13 environmental impacts of alternatives to license  
14 renewal, the NRC's staff's preliminary recommendation  
15 in the Draft SEIS is that the adverse environmental  
16 impacts of license renewal for Callaway are not great  
17 enough to deny the option of license renewal for  
18 energy-planning decision-makers.

#### 19 WASTE CONFIDENCE RULEMAKING

20 For a timeframe after the end of the license  
21 term for operation of a nuclear reactor which is beyond  
22 the twenty year period of extended operations, and  
23 before disposal in a repository, the NRC addresses the  
24 continued storage of spent nuclear fuel or used fuel,  
25 in the Waste Confidence Decision and Rule.

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1 Previous license renewal Supplemental  
2 EIS(s) noted that the environmental impacts of  
3 temporary storage of the nuclear fuel for the period  
4 following the reactor operating license term were  
5 addressed by this rule.

6 This Draft Supplemental EIS does not  
7 discuss potential environmental impacts of storing  
8 spent fuel for an extended period after the plant shuts  
9 down, that issue will be addressed in the NRC's Waste  
10 Confidence Generic Environmental Impact Statement and  
11 Rule.

12 The Draft Rule and the GEIS were issued in  
13 the fall of 2013, and the public had the opportunity to  
14 provide comments. The Final Rule and GEIS are expected  
15 to be issued in the fall of 2014. Additional  
16 information on the Waste Confidence Rule and the GEIS  
17 can be found on the NRC's public website accurately  
18 listed on the slide.

19 In August of 2012 the Commission decided  
20 that the Agency would not issue licenses dependent upon  
21 the Waste Confidence Decision until the Waste  
22 Confidence Rulemaking is completed. However, the  
23 Commission directed the staff to proceed with licensing  
24 reviews and proceedings.

25 If the results of the Waste Confidence GEIS

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1 and Rule identify information that impacts the analysis  
2 in the Supplemental EIS for Callaway, the NRC staff will  
3 perform the appropriate review for those issues and may  
4 supplement the SEIS before the NRC makes a final  
5 licensing decision as to whether or not to renew  
6 Callaway's license.

7 If no changes are required the NRC staff  
8 will base its decision on the Final Supplemental EIS,  
9 the Waste Confidence EIS and Rule, regional inspections  
10 and the Safety Evaluation Report.

#### 11 ENVIRONMENTAL REVIEW MILESTONES

12 I would like to reemphasize that the  
13 environmental review is not yet complete. Your  
14 comments today and all written comments received by the  
15 end of the comment period on April 7th will be considered  
16 by the NRC staff as we develop a Final SEIS which we  
17 currently plan to issue in November of 2014. Those  
18 comments that are within the scope of the environmental  
19 review and provide new and significant information can  
20 help to change the staff's findings.

21 The Final SEIS will contain staff's final  
22 recommendation on the acceptability of license renewal  
23 based on the work we have already performed and any new  
24 and significant information we receive in the form of  
25 comments during the comment period.

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## 1 ADDITIONAL INFORMATION

2 As many of you know I am the primary contact  
3 for the environmental review. John Daily is the  
4 primary contact for the safety review.

5 Copies of the Draft SEIS are available on  
6 CD and a few hardcopies are also available in the  
7 entryway to my left. In addition, the Callaway County  
8 Public Library has agreed to make a hardcopy available  
9 for review. You can also find electronic copies of the  
10 Draft SEIS, along with other information about the  
11 Callaway's License Renewal Review online.

## 12 SUBMITTING COMMENTS AFTER THE MEETING

13 The NRC staff will address written comments  
14 in the same way we address spoken comments received  
15 today. You can submit written comments either online  
16 or via conventional mail. To submit written comments  
17 online visit the website [regulations.gov](http://regulations.gov)., and search  
18 for docket ID: nrc-2012-0001. And if you have written  
19 comments today you may give them to any NRC staff member.

20 This concludes my presentation and I will  
21 now turn the meeting back over to Butch. Thank you.

## 22 QUESTION &amp; ANSWER SESSION

23 MR. BURTON: All right, thanks Carmen.  
24 What we want to do next is we want to ask if anyone had  
25 any questions on anything that was presented here so far

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1 on the overall environmental review process, -- any  
2 questions on anything that you've heard?

3 (No audible response)

4 MR. BURTON: Okay. Hearing nothing, we  
5 will go into the next portion, which is the main reason  
6 that we are here, which is to take comments from members  
7 of the public on the Draft SEIS that we may need to  
8 consider as we go from draft to findings. So, if anyone  
9 has any comments? There were none written beforehand,  
10 so I'll ask you now if anyone has any comments you can  
11 say it now.

12 (No audible response)

13 MR. BURTON: Okay, again hearing nothing  
14 we are moving right along. Well basically if there are  
15 no more comments what we'll do is we will actually start  
16 the closing of the meeting.

17 But before we actually have closing remarks  
18 I did want to again, encourage folks to fill out the  
19 feedback form. We really could use that, it's very  
20 helpful to us. I also want to thank Ms. Deborah Carter,  
21 who is our transcriber this evening. And if there is  
22 nothing else I will turn it over to Brian Wittick for  
23 our closing remarks.

24 MR. KRITZER: Butch, I'll just make a  
25 comment.

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1 MR. BURTON: Okay. Do you want to come up  
2 or I can bring you the mic?

3 MR. KRITZER: No.

4 MR. BURTON: And please give us your name  
5 and your affiliation.

6 PUBLIC COMMENTS

7 MR. KRITZER: My name is Doc Kritzer. I am  
8 one of the County Commissioners for Callaway County and  
9 I missed all the excitement from this afternoon. So  
10 this is going to be short and I can get home to eat my  
11 strawberries and ice cream early tonight. That's a bad  
12 job.

13 I just want to go on the record and say that  
14 I have been a Commissioner for nine years, since 2005.  
15 And Callaway, -- I guess originally it was Union  
16 Electric at the time when they got started thirty-some  
17 years ago. I have been a lifelong resident of Callaway  
18 County and I haven't turned green yet. We are all still  
19 kicking, and going, and moving. But Callaway has been  
20 a very good partner and entity, and we are excited to  
21 have them. We will welcome the second unit, if it comes  
22 to that, whether it's the large reactor or whether it's  
23 one of the SMR(s). But I think it's good for the  
24 community. It's good for the State and it's good for  
25 the whole region.

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1           But we need to learn from the problems that  
2 happen. I think the design for, -- everyone tells us  
3 that what we have down here we feel very safe and secure  
4 with it. The problems that have happened in other parts  
5 of the world we need to learn from them and make  
6 adjustments from them, but there are risks and error in  
7 just about any business, so we don't hold that against  
8 Ameren. And we are just pleased they are here. And we  
9 wrote in the opinion, -- the review process, that we felt  
10 very comfortable with the processes it takes. And it  
11 takes a long time on some of it, but we know that that's  
12 the way it is. But we are very comfortable with them  
13 and I just wanted to let everybody know that not  
14 everybody is opposed to it.

15           UNIDENTIFIED AMEREN EMPLOYEE: Thank you.

16           MR. KRITZER: You're welcome.

17           MR. WITTICK: Thank you, Mr. Kritzer and  
18 thank you Butch for facilitating the meeting. I would  
19 like to close with thanking everybody for taking their  
20 valuable time to come out to the meeting. These  
21 meetings are an important part of the NRC's process of  
22 openness and ensuring public participation in our  
23 processes. We value all of the feedback that we get  
24 from everyone. Speaking of which, as Carmen mentioned  
25 we will be taking comments through the closure of the

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1 comment period which is April 7th. There are a couple  
2 of means by which you can use; email forwarded directly  
3 to the regulations.gov website or by conventional mail.  
4 And with that the meeting is closed.

5 (Whereupon, the public meeting was  
6 concluded at 7:25 p.m.)

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