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Columbia Generating Station

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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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REGULATORY CONFERENCE  
COLUMBIA GENERATING STATION

+ + + + +

EA No. 15-038

Docket No. 50-397

+ + + + +

MONDAY, JUNE 15, 2015

+ + + + +

REGION IV OFFICE  
ARLINGTON, TEXAS

+ + + + +

The Meeting convened via teleconference,  
Mark Haire, Facilitator, presiding.

NRC PARTICIPANTS:

MARK HAIRE, Chief, Plant Support Branch 1, Division of  
Reactor Safety

RACHEL BROWDER, Region IV

JEFFREY CLARK, Deputy Director, Division of Reactor  
Safety

MARC DAPAS, Regional Administrator, Region IV

PAUL ELKMANN, Senior Emergency Preparedness Inspector

GILBERT GUERRA, Emergency Preparedness Inspector

ROBERT KAHLER, Chief, Inspection & Regulatory  
Improvements Branch, NSIR

TROY PRUETT, Director, Division of Reactor Projects

WAYNE WALKER, Chief, Branch A, Division of Reactor  
Projects

LICENSEE PARTICIPANTS:

GROVER HETTEL, Vice President of Operations

ANDREW BLACK, Emergency Services General Manager

DAVID BROWN, Manager Planning/Scheduling, Outage

SEAN CLIZBE, Emergency Preparedness Manager

A.J. FAHNESTOCK, EP Program Manager

KURT GOSNEY, Acting Emergency Services General Manager

DONALD GREGOIRE, Regulatory Affairs Manager

J. R. TRAUTVETTER, Regulatory Compliance Supervisor

DESIREE WOLFGRAMM, Compliance Engineer

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

2:01 p.m.

1  
2  
3 MR. HAIRE: Okay. Thanks. And just a  
4 reminder to the folks in the room, the microphones that  
5 are on the desks have a little green LED. When it's  
6 lit, your mike is live if you touch the little push  
7 button. When the green light is not lit, that means  
8 you're not live and you're not being amplified for the  
9 phone folks.

10 Also in the room, there is a wireless mike  
11 on the stand for any members of the public. I don't  
12 see any members of the public in the room at this time,  
13 but they may join us later.

14 All right. So to kick off the meeting,  
15 there are some opening remarks and statements that need  
16 to be made, including some logistic comments. And I'll  
17 be leading that charge, so I'll be reading through some  
18 elements that need to be covered, and then I'll follow  
19 the agenda.

20 So step one is to go through the conference  
21 opening. So my name is Mark Haire. I'm the Branch  
22 Chief for the Emergency Preparedness and Security  
23 Inspectors in the NRC's Region IV Office. Welcome to  
24 the reg conference between the NRC and Energy Northwest  
25 Columbia Generating Station.

26 Today, we will be discussing the finding  
27 related to the Columbia Generating Station's failure  
28 to follow requirements of their site emergency plan,  
29 specifically that emergency plan implementing  
30 procedures were changed so that the procedures did not  
31 continue to provide an option to recommend  
32 shelter-in-place as a protective action recommendation  
33 for the public when it's appropriate. The revised  
34 procedure also did not continue to provide further  
35 development of protective action recommendations for  
36 an intentional release of radioactive material and  
37 inappropriately delegated some responsibilities of a  
38 senior reactor operator in the control room for making  
39 protective action recommendations.

40 This conference is open to public  
41 observation. However, this is an enforcement  
42 regulatory conference, and, as such, it is a meeting  
43 between the NRC and Columbia Generating Station. And  
44 during the meeting, comments and questions will not be

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1 taken from members of the public. But following the  
2 conference, NRC staff will be available to answer  
3 questions and receive comments from members of the  
4 public concerning matters discussed here at the  
5 conference or any other questions, as Marc Dapas, our  
6 regional administrator, has mentioned.

7 It's important to note that this phone  
8 bridge is being recorded. Both the recording and the  
9 transcript will be made publicly available soon after  
10 this meeting. The Columbia Generating Station's  
11 representatives have provided slides for their  
12 presentation, and those slides have been made available  
13 at the NRC's public meeting web page. It's at  
14 [www.nrc.gov](http://www.nrc.gov), and you would click on the "public  
15 meetings and involvement" tab and then click on the  
16 "public meetings schedule" link and scroll down and see  
17 today's meeting listed, and you'd click on the "more"  
18 tab and you'd see the related documents include the  
19 slides that Columbia Generating Station has provided.  
20 And those slides that are on that link are the updated  
21 slides that Columbia provided to the NRC today. So  
22 those are the updated slides.

23 All right. Some administrative items  
24 before we review the rest of the agenda. For those in  
25 the room, the closest restrooms are out the door to the  
26 left, pass the guard station, and then they'll be on  
27 the right close to the lobby. If there is an emergency,  
28 we need to listen to the announcements over the intercom  
29 system. And if an evacuation of the building is  
30 required, the nearest exits are either at the main  
31 building entrance where you came in, which is left out  
32 of this room, or on the side of the building to the right  
33 there's an emergency exit.

34 For the microphones, we ask that all NRC  
35 and Columbia Generating Station personnel who will be  
36 speaking, please use the microphones so that the people  
37 on the phone will be able to hear.

38 We should have sign-in sheets available.  
39 I don't know if they've been passed around yet, but if  
40 they haven't we'll make sure that those get passed  
41 around. We'd like to have a record of everyone's  
42 attendance to the meeting. And if there are any  
43 members of the public in the room, we'll provide you  
44 with feedback so that you can provide comments to the

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1 NRC.

2 A meeting summary will be made available  
3 by the NRC within 30 days of this meeting.

4 So a quick review now of the agenda of the  
5 meeting. The meeting will open with the opening  
6 comments by me, which I've done. Next, we'll go  
7 through introductions of the key participants from both  
8 organizations. Then I will go through a summary of the  
9 regulatory process and the apparent violation at stake  
10 that be discussed today. And then Marc Dapas, our  
11 regional administrator, will make some opening  
12 remarks, and then we'll turn it over to Columbia  
13 Generating Station to make any remarks and presentation  
14 that they'd like to make.

15 Throughout the presentation, we'll be  
16 engaging with questions during that process. Then  
17 after your presentation and after we've had a chance  
18 to ask some questions, the NRC will disengage from the  
19 meeting for a timeout. We'll exit the room, have a  
20 caucus in a separate room where we'll discuss what we've  
21 heard and if we have any additional questions. It will  
22 probably take us 15 - 20 minutes to do that.  
23 And we'll reconvene the meeting after that caucus for  
24 any final questions that we have.

25 And then I'll offer the opportunity for our  
26 senior managers, including Marc Dapas, to make any  
27 closing comments. And then I'll make some comments  
28 about the closing of the business of the meeting, and  
29 then I'll invite at that time the operator to allow  
30 members of the public to ask questions, and the NRC will  
31 be happy to entertain those and answer those.

32 So that's how the meeting will progress.  
33 So at this point, I'd like to engage in some  
34 introductions, starting on the NRC side. I've already  
35 introduced myself. I'm Mark Haire. I'm the Branch  
36 Chief for Emergency Preparedness and Security  
37 Inspectors.

38 MR. DAPAS: Well, I'm Marc Dapas. I'm the  
39 Regional Administrator for our Region IV Office.

40 MR. KAHLER: Bob Kahler. I'm the Branch  
41 Chief with the Inspection of Regulatory Improvements  
42 Branch with NSIR at the Rockville, Maryland NRC  
43 Headquarters office.

44 MR. CLARK: I'm Jeff Clark, Deputy

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1 Director of Division of Reactor Safety.  
2 MR. WALKER: And I'm Wayne Walker. I'm  
3 the Branch Chief for Columbia in the Division of Reactor  
4 Projects.  
5 MR. HAIRE: And the next table back.  
6 MR. PRUETT: Troy Pruett, Director of  
7 Projects in Region IV.  
8 MR. ELKMANN: Paul Elkmann, Inspector,  
9 Region IV.  
10 MR. GUERRA: Gilbert Guerra, Inspector,  
11 Region IV.  
12 MS. BROWDER: Rachel Browder, Senior  
13 Enforcement Specialist.  
14 MR. HAIRE: Okay. Thanks. And if, Mr.  
15 Hettel, if you'll introduce your team.  
16 MR. HETTEL: Okay. My name is Grover  
17 Hettel. I'm the Vice President of Operations at the  
18 Columbia Generating Station for Energy Northwest, and  
19 I'll let my team introduce themselves.  
20 MR. GREGOIRE: I'm Don Gregoire. I'm the  
21 Manager of Regulatory Affairs.  
22 MR. CLIZBE: Sean Clizbe. I'm the  
23 Emergency Preparedness Manager at Energy Northwest.  
24 MR. BROWN: Dave Brown, Planning,  
25 Scheduling, and Outage Manager, also Emergency  
26 Director.  
27 MR. GOSNEY: Kurt Gosney, Acting  
28 Emergency Services General Manager.  
29 MR. BLACK: Andy Black. I'm the  
30 Emergency Services General Manager. Although I've  
31 been on loan to capital projects for the last five  
32 months, I still retain ownership of EP in my division.  
33 MR. FAHNESTOCK: A.J. Fahnestock, EP  
34 Program Manager.  
35 MR. TRAUTVETTER: J.R. Trautvetter,  
36 Regulatory Affairs Compliance Supervisor.  
37 MS. WOLFGRAMM: Desiree Wolfgramm,  
38 Compliance Engineer.  
39 MR. HAIRE: Okay. That is a full  
40 introduction of the folks in the room. We don't have  
41 any members of the public, a couple of observers from  
42 the NRC staff in the room. And I do believe we have  
43 some folks from the NRC staff also listening on the  
44 line.

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1           So now I'm going to summarize where we're  
2 at in the regulatory process, what the apparent  
3 violation at stake is today, and then we'll move forward  
4 with the agenda. So a bit of a lengthy description,  
5 so bear with me.

6           So in accordance with the NRC's regulatory  
7 process, after a potentially risk-significant finding  
8 is identified and characterized by our significance  
9 determination process as potentially greater than  
10 green, we offer licensees an opportunity for regulatory  
11 conference. In this case, Columbia Generating Station  
12 requested that a conference be held to discuss the issue  
13 and its significance.

14           It is the responsibility of NRC licensees  
15 to provide protective action recommendations to local  
16 and state officials. Those local and state officials  
17 then consider the plant's recommendations if they make  
18 protective action decisions to protect the health and  
19 safety of the public. And we're here today because,  
20 in 2014, Columbia Generating Station made a change to  
21 their emergency plan implementing procedures that  
22 deleted shelter-in-place as a possible outcome from  
23 their flowchart used to make protective action  
24 recommendations and they deleted instructions to  
25 develop protective action recommendations when the  
26 release was intentional and they added limitations on  
27 the protective action recommendation choices available  
28 to the senior reactor operator in the control room.

29           So let me give a little more detail about  
30 that, those issues. When an emergency occurs that may  
31 present a risk to the public, the NRC requires that  
32 licensees consider a range of protective actions to  
33 arrive at a recommendation for the safest overall  
34 action for the public to take. Often, but not always,  
35 that action is evacuation. Sometimes, the most  
36 protective action is to shelter-in-place. Outside  
37 authorities consider a licensee's recommendation,  
38 along with other information about the event, in  
39 deciding what measures to implement. But a licensee's  
40 recommendation to the outside authorities is important  
41 because it communicates the radiological risk to the  
42 public.

43           Columbia Generating Station's original  
44 approved emergency plan and all subsequent revisions

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1 up through the current plan has included a range of  
2 protective actions appropriate to a spectrum of  
3 emergency events. The emergency plan describes both  
4 evacuation and shelter-in-place as potential actions  
5 that may be recommended to off-site officials for the  
6 protection of the public.

7 In a specific event, the choice is based  
8 on plant and radiological conditions, the EPA  
9 Protective Action Guidance, and the radiation dose that  
10 could be avoided. NRC concluded that the Columbia  
11 emergency plan appropriately describes the protective  
12 measures to be taken in the event of an emergency.  
13 However, June 16th, 2014, Columbia changed their  
14 procedures for developing protective action  
15 recommendations and inappropriately removed  
16 shelter-in-place from the procedure text and from the  
17 primary decision tool, which is a flowchart used to  
18 determine which protective measures would be  
19 recommended to the public.

20 The removal of those instructions reduced  
21 the number of options that would be considered and then  
22 a shelter-in-place recommendation could only be  
23 arrived at by going outside of the procedure, even in  
24 the unusual circumstance where shelter would provide  
25 a dose savings and, therefore, more protection for the  
26 public. And I think it's important to note that our  
27 guidance defines shelter-in-place as a dose-saving  
28 protective action involving people going into their  
29 houses, closing their doors, closing their windows,  
30 turning off their ventilation, and attempting to avoid  
31 dose. It's a dose-avoidance protective action.

32 The same procedure also failed to ensure  
33 that the need for additional protective measures would  
34 be evaluated if Columbia was intentionally venting  
35 radioactive material, so intentionally venting  
36 radioactive material, and also delegated the decisions  
37 about protective measures for some areas of the senior  
38 reactor operator in the control room to other company  
39 officials in other facilities. And the responsibility  
40 to make protective action recommendations is not  
41 delegable. It must remain with the individual  
42 exercising command and control. Because those other  
43 facilities might not be staffed when conditions require  
44 a recommendation, the procedure could have caused

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1 delays in protecting the public.

2 As a result of procedure changes, Columbia  
3 no longer complied with the NRC requirements to follow  
4 their emergency plan and no longer provided for a range  
5 of protective actions. Therefore, this apparent  
6 violation is associated with a finding that has  
7 preliminarily been determined to be of White  
8 significance. Note that we use phrases like "apparent  
9 violation" at a conference like this because the NRC  
10 will not make its final determination on the violation  
11 or its significance until after the conference.

12 The White significance indicates the NRC  
13 has preliminarily concluded that Columbia degraded  
14 their ability to implement a risk-significant  
15 emergency preparedness function. We use this phrase  
16 "risk significant" to denote those functions with the  
17 most immediate impact on the licensee's ability to  
18 protect the health and safety of the public, such as  
19 event classification, offsite response organization  
20 notification, radiological assessment, and protective  
21 action recommendations.

22 Their ability to implement a  
23 risk-significant function was degraded because the  
24 procedure change narrowed the protective measure  
25 options and could have delayed making some  
26 recommendations. The NRC takes this very seriously.

27 So having said all of that, let me  
28 summarize, actually let me read the proposed apparent  
29 violation. Title 10 of the Code of Federal  
30 Regulations, Part 50.54(q)(2) requires, in part, that  
31 a holder of a license under 10 CFR Part 50 shall follow  
32 and maintain the effectiveness of their emergency plan  
33 that meets the requirements of Appendix E to 10 CFR Part  
34 50 and the planning standards of 10 CFR 50.47(b).

35 Now, Title 10 of the CFR Part 50.47(b)(10)  
36 requires, in part, that a range of protective actions  
37 has been developed for the plume exposure pathway  
38 emergency planning zone for the public. And in  
39 developing this range of protective actions,  
40 consideration has been given to evacuation and  
41 sheltering, as appropriate. A Columbia Generating  
42 Station Emergency Plan Revision 59, which was dated  
43 September 10th, 2013, through the Revision 61, which  
44 was dated September 2014, and Section 2.1,

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1 Organizational Concepts, required, in part, that the  
2 responsibility for emergency direction and control  
3 comprises the overall direction of the plant's  
4 emergency response, which must include the  
5 non-delegable responsibilities for emergency  
6 classification, the decision to notify and recommend  
7 protective actions to authorities responsible for  
8 offsite emergency measures.

9 Columbia Generating Station Emergency  
10 Plan Section 5.5, Protective Action Responsibilities,  
11 required, in part, that the appropriate protective  
12 actions for an airborne release of radioactive material  
13 are evacuation and sheltering and that the decision to  
14 evacuate or shelter is made based on the dose to be  
15 avoided by the protective action relative to the risk  
16 associated with implementing the protective action,  
17 and that protective action recommendation shall be made  
18 based on plant and radiological conditions.

19 Contrary to the above, between June 26,  
20 2014 and April 23rd, 2015, Columbia Generating Station  
21 failed to follow and maintain the effectiveness of  
22 their emergency plan, which meets the requirements of  
23 Appendix E of 10 CFR Part 50 and 10 CFR 50.47(b).  
24 Specifically, Columbia Generating Station's procedure  
25 13.2.2, which is titled "Determining Protective Action  
26 Recommendations," Rev 18, Section 4.5.1 did not  
27 implement the requirements of the emergency plan in  
28 Section 2.1 because the procedure required the  
29 emergency director in the control room to delegate the  
30 formulation of protective action recommendations to  
31 the technical support center or the emergency operation  
32 facility. However, protective actions are  
33 non-delegable responsibilities of the emergency  
34 director.

35 In addition, Procedure 13.2.2 Rev 18 did  
36 not implement the requirements of Emergency Plan  
37 Section 5.5 because it did not provide for the  
38 development of shelter-in-place as a protective action  
39 recommendation and did not provide for protective  
40 action recommendations to protect against planned  
41 releases of radiological material. Now, the licensee  
42 has entered this issue into their corrective action  
43 process, Corrective Action Request 320790 dated  
44 January 19th, 2015 and several other corrective action

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1 documents.

2 All right. That is the proposed apparent  
3 violation. This proposed apparent violation, along  
4 with an option to request a regulatory conference, were  
5 communicated to Columbia Generating Station Power  
6 Plant during an exit meeting on April 23rd, 2015 and  
7 in the NRC Inspection Report 05000397/2015502, which  
8 was dated May 7th, 2015. This regulatory conference  
9 is the last step of the inspection process before the  
10 NRC makes its final decision on the significance of the  
11 inspection finding.

12 And the purpose of the conference today is  
13 to allow you, Columbia Generating Station, to provide  
14 your position with respect to the facts and assumptions  
15 used by the NRC to make our preliminary significance  
16 determination and to allow you to present any new  
17 information that may assist us in arriving at the most  
18 appropriate final significance determination.

19 In addition to discussing your views on the  
20 significance of the finding, you may want to present  
21 your views on the identified apparent violation.

22 It is important to note that the decision  
23 to conduct this conference does not mean that the NRC  
24 has made a final determination that a violation has  
25 occurred, and the enforcement related to the finding  
26 being discussed today will be assessed in accordance  
27 with the Commission's enforcement policy. I should  
28 also note at this time that any statements of view or  
29 expressions of opinion made by NRC employees at this  
30 conference do not represent final agency  
31 determinations or beliefs relative to the matter before  
32 us today.

33 Following this conference, the regional  
34 and NRC Headquarters staff will reach a significance  
35 determination and an enforcement decision. The NRC's  
36 goal is to issue the final significance determination  
37 by July 10th, 2015.

38 And that concludes my rather lengthy  
39 discussion of the regulatory process and the apparent  
40 violation. And I'd like to turn it over now to Marc  
41 Dapas, Regional Administrator, for his opening  
42 remarks.

43 MR. DAPAS: Thank you, Mark. First and  
44 foremost, I'm sure that the Columbia team appreciates

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1 that developing protective action recommendations is  
2 an important process. It provides for the local and  
3 state government officials to be able to make informed  
4 decisions regarding what the protective action  
5 decision will be, mainly the decision regarding what  
6 actions members of the public need to take to minimize  
7 exposure in the unlikely event that there is a release  
8 of radiation resulting from some upset condition at the  
9 plant.

10 And you heard Mr. Haire describe how your  
11 emergency plan does provide for shelter-in-place, but  
12 the issue that we identified was your emergency plan  
13 implementing procedures did not provide specific  
14 direction.

15 It's my understanding that, based on the  
16 inspection team's interactions with various folks on  
17 the licensee's staff, that it was the intent in applying  
18 the guidance in NUREG-0654 Supplement 3, which provides  
19 an acceptable method for complying with Appendix E of  
20 10 CFR Part 50 and 10 CFR 50.47(b), which are the  
21 emergency planning standards, that the intent behind  
22 the guidance there when it came to shelter-in-place was  
23 to provide for those instances where there is a  
24 rapidly-developing event and your evacuation time  
25 estimates would indicate that you can evacuate the  
26 affected population in less than three hours, I think  
27 it is, that you can go ahead and forego shelter-in-place  
28 and actually recommend to the local and state  
29 authorities a protective action recommendation that  
30 would dictate evacuation versus shelter-in-place, and  
31 that was meant to apply to that unique circumstance  
32 where you have a rapidly-developing event. And it's  
33 my understanding that the inspection team, from talking  
34 to members of your team, was told that it was the plan  
35 to remove shelter-in-place, that they had intended to  
36 remove that from the implementing procedure. You  
37 know, in other words, they had made a mistake in  
38 following or implementing the guidance in NUREG-0654  
39 Supplement 3.

40 So if you have a different view, I'd want  
41 to understand that. I need to understand and reconcile  
42 the difference between what was communicated to the  
43 team as they execute the inspection process and what  
44 is your current position because it is my understanding

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1 that you have a differing view on the violations that  
2 we have communicated to you.

3 And, again, as you heard Mark go through  
4 his description of the issues, he did talk about how  
5 we have preliminarily concluded there's a proposed  
6 apparent violation. We have not made an enforcement  
7 decision regarding the existence of a violation here  
8 or the final significance determination associated  
9 with that violation. So it's very important that we  
10 develop a shared understanding of the facts and that  
11 we hear from you what your assumptions are and then we  
12 have the opportunity to have further dialogue on our  
13 assumptions, so we can reach the most informed decision  
14 here regarding the existence of a violation and then  
15 what is the associated significance for that particular  
16 violation.

17 So I look forward to hearing the discussion  
18 and your planned presentations. So with that, I'll  
19 turn it back over to you, Mr. Hettel, to begin any  
20 discussion or presentation that you would like to  
21 provide us.

22 MR. HETTEL: Mr. Dapas, we do take the  
23 protection of the health and safety of the public very  
24 seriously. So this afternoon, we'll be presenting our  
25 perspective on the information NRC used to arrive at  
26 the proposed White finding. And we'll also take the  
27 opportunity to fully discuss the changes that were made  
28 to our procedures back in June of last year. We will  
29 lay out our facts, again, as we see them, and we'll  
30 discuss how we reached our conclusion on the subject  
31 relevant to the level of significance of the White  
32 timing.

33 Our procedures do provide the appropriate  
34 level of protection for the health and safety of the  
35 public. They still provide an option for  
36 shelter-in-place should the conditions warrant to  
37 protect the public from the effects of a possible  
38 radioactive release. We believe that, through our  
39 discussion today, you'll find our procedures are, in  
40 fact, consistent with our emergency plan. And as far  
41 as you look on this slide 3 with the agenda, again, we'll  
42 step through the apparent violation, and we'll talk  
43 about our emergency planning commitments and how the  
44 regulatory guidelines are applied and also how our

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1 procedures interact with that and demonstrate that we  
2 follow our emergency plan and then also share some of  
3 our lessons learned. And then we'll wrap it up with  
4 a summary, and then I'll close. So that's kind of the  
5 high-level agenda that we'll be going through.

6 So with that, I'll turn it over to Don  
7 Gregoire.

8 MR. GREGOIRE: Okay. So I'd like to just  
9 be clear on our position with regard to the apparent  
10 violation. As mentioned, there's two sections of our  
11 emergency plan that NRC has concluded that we failed  
12 to follow, so I'll speak to each one separately. The  
13 first one is in regard to Section 2.1 of the emergency  
14 plan in which it was communicated that our procedure  
15 did not implement the requirements of Section 2.1  
16 because the procedure required the emergency director  
17 in the control room to delegate the formulation of  
18 protective action recommendations to the technical  
19 support center or the emergency operations facility.  
20 However, protective actions are a non-delegable  
21 responsibility.

22 So I have three points that I'd like to  
23 mention with that regard. And by the way, this is a  
24 high-level review. I'm not going to cover in great  
25 detail. We'll discuss it more in the later slides.

26 With regard to the first point, step 4.5.1  
27 of the current version of the procedure, it is our  
28 position, correctly transfers protective action  
29 recommendations for expansion beyond ten miles to the  
30 TSC or EOF because the procedure points to the use of  
31 both dose projection and field teams to make the  
32 necessary determination. This is consistent with  
33 industry practice. The field team monitoring is an  
34 augmented ERO function. Augmented ERO, emergency  
35 response organization, is a function that is managed  
36 by either our technical support center or emergency  
37 operations facility. If either of these augmented  
38 areas have been established, the emergency director  
39 responsibility would have been transferred in  
40 accordance with the station's emergency plan  
41 implementing procedures, including protective action  
42 recommendation responsibilities.

43 Thirdly, the transfer of emergency  
44 director responsibilities are carried out consistent

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1 with our Emergency Plan Sections 2.1 and I'd like to  
2 point out Section 5.5.2 for relying on field team data  
3 when you get beyond the ten-mile EPZ.

4 The second area of non-compliance noted in  
5 the NRC inspection report on page nine relates to two  
6 examples where it was stated that we were non-complying  
7 with Section 5.5, the first being we did not provide  
8 for the development of shelter-in-place protective  
9 action recommendations and, secondly, that we did not  
10 provide for protective action recommendations to  
11 protect against planned releases of radioactive  
12 materials.

13 So I'd like to treat them separately, and  
14 the first I'll speak to is the shelter-in-place  
15 protective action recommendation. So  
16 shelter-in-place, it is our position shelter-in-place  
17 was not removed as a protective action recommendation.  
18 It can be recommended as a protective action by use of  
19 Attachment 7.1 and 7.2 of our procedure. And you'll  
20 note the inspection report made no mention of  
21 Attachment 7.2.

22 The guidance in our procedure is based on  
23 Supplement 3, 2011 version. And Supplement 3 clearly  
24 states that it provides an acceptable mean for  
25 complying with Appendix E and 10 CFR 50.47(b). In that  
26 document, you will find no mention of planned releases,  
27 puff releases. However, we still address it, and we  
28 will speak to that in later time.

29 And, lastly, we will share with you how our  
30 emergency plan points to sheltering and evacuation  
31 guidance based on this NUREG document.

32 The second example of non-compliance with  
33 Section 5.5 had to deal with planned releases.  
34 Although a planned puff release is not explicitly  
35 called out in the procedure in the current version, a  
36 planned release continues to be addressed in the  
37 procedure in another manner than in the previous  
38 revision using Attachment 7.1 and 7.2. The ability to  
39 use Attachment 7.1 and 7.2 provides consistency with  
40 commitments made in Section 5.5.2 of the emergency  
41 plan.

42 I want to sum it up this way. The  
43 inspection report gives this picture that the emergency  
44 plan says this and the procedures don't say that. As

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1 a matter of fact, it's quoted on page five of the  
2 inspection report. However, Revision 18 of the  
3 procedure no longer follows the above-quoted sections  
4 of the station's emergency plan. From August 2014  
5 through March of this year, there have been a lot of  
6 back-and-forth discussion on changes to our  
7 implementing procedures and a lot had to deal with,  
8 revolve around planned releases or puff releases,  
9 which, again, as I mentioned, is no longer discussed  
10 in the NUREG document.

11 When we saw the conclusions of the  
12 inspection report, it appeared to us that a number of  
13 points had not been reflected in the report, the number  
14 of points that we had made. We believe that the  
15 inspection report doesn't give a fair characterization  
16 of this issue or the conversations that were held.  
17 We're here to discuss those things that were either not  
18 quoted or not emphasized in the determination of a  
19 performance deficiency.

20 MR. DAPAS: Just to make sure I have clear  
21 clarification, it's your contention that the station's  
22 perspective regarding these issues was clearly  
23 communicated during the inspection process and the  
24 inspection report does not accurately reflect the  
25 discussion that your staff had with our team?

26 MR. HETTEL: I was going to kind of bring  
27 it back up or address it in the closing. I'm not sure  
28 what, you know, Marc, maybe what transpired. We didn't  
29 either communicate well enough, or I guess we're not  
30 wanting to say that, you know, I guess we weren't going  
31 to get into that, basically. We just feel that we have  
32 not maybe communicated as clearly as we should, so we  
33 want to, again, present our facts as we see them, again,  
34 and I'll stress as we see them, you know, because,  
35 again, you know, views are different and we understand  
36 that. So I just think, as we went through the  
37 conversations, we didn't make ourselves clear enough.

38 MR. DAPAS: Well, I think it's important,  
39 and I stressed this in my opening here, it was my  
40 understanding that the conclusions developed via the  
41 inspections process was a function of interactions with  
42 your staff. So if there was information that your  
43 staff felt they communicated and it's not apparent how  
44 that was considered as part of the inspection process,

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1 you know, that's a potential disconnect there and we  
2 need to understand that.

3 I certainly want to hear the licensee's  
4 official position today regarding these apparent  
5 violations, but I do want to understand what occurred  
6 during the inspection process because I had, quite  
7 frankly, a different understanding here from talking  
8 to Mark here to my right. And he'll have the  
9 opportunity to engage you, but I think that's an  
10 important element that we reach closure on so that we  
11 understand that because we rely on the inspection  
12 function and we communicate preliminary conclusions  
13 and the basis for that and we conduct debriefs and exit  
14 meetings, and that's clearly an opportunity for any  
15 member of your team that interacted with our staff to  
16 say, wait a minute, you know, I had a discussion with  
17 you on Wednesday and we talked about X, and how did you  
18 consider that?

19 So I think that's important that we flush  
20 that out, whether it be here or whether we do it  
21 subsequently. I mean, the focus of this conference is  
22 to make sure we understand your position clearly, you,  
23 the licensee. But we want to make sure that we address  
24 any inspection function disconnects that occurred.

25 MR. GREGOIRE: And we agree. We know  
26 there were some areas we could improve overall in  
27 understanding where the NRC was coming from and how we  
28 translated the information to the NRC. But we agree  
29 it's very important to have that dialogue.

30 I think the rest of our communication here  
31 today is really to try to highlight some of those areas  
32 as that we felt probably should be reflected on and  
33 given a little more attention. So on our next slide,  
34 you'll note that I have a star on this slide, and the  
35 star is really trying to symbolize the areas where we  
36 think there's some gaps in the communication and things  
37 that we think should be added to the conversation. And  
38 so any slide where you see a star on it, it's really  
39 to address that information we think was not emphasized  
40 enough earlier on in discussions.

41 So to this point, with regard to shelter  
42 and evacuation and the consideration for shelter and  
43 evacuation, it's our position that the emergency plan  
44 specifically points to federal guidance on how you

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1 consider shelter and evacuation in your procedures for  
2 protective action recommendations. We'll present  
3 more information beyond that cited in the inspection  
4 report that we believe is relevant to the finding.

5 Next slide. So just starting with the  
6 foundation here, the regulation, as you know, 10 CFR  
7 50.47 governs or describes a number of standards that  
8 are required for emergency response plans. With  
9 regard to this one specifically, 10 CFR 50.47(b)(10),  
10 I won't read the whole thing to you but the very last  
11 paragraph there is the guidelines for the choice of  
12 protective actions during emergency consistent with  
13 federal guidance are developed and in place.

14 So our message here today is that we have  
15 four things that we're going to focus on in our  
16 presentation: emergency planning commitments, what do  
17 they actually say, what was omitted; what does the  
18 federal guidance say and how did we evaluate that  
19 federal guidance; what is the actual implementing  
20 procedure, how do we use it, how would our emergency  
21 director look at that procedure; and then, lastly, our  
22 classification notification form where the protective  
23 action gets issued. So we'll speak to all of that.

24 I do want to mention that the regulation  
25 has consider shelter and evacuation but doesn't tell  
26 us how to apply them in our procedures or action  
27 schemes. Our emergency plan does point to federal  
28 guidance that describes how we do this, and we'll walk  
29 through that shortly. But the four elements here are  
30 interlinked together to assure that appropriate  
31 protective action recommendations will be made.

32 So the first point that we would like to  
33 emphasize that we disagree with the conclusion on is  
34 the statement that says that we failed to follow Section  
35 5.5 of our plan. Now, as you see there, it mentions  
36 we're required to have appropriate protective actions  
37 for an airborne release of radioactivity, which were  
38 evacuation and sheltering; and then the decisions to  
39 evacuate or shelter or based on dose avoided; and then,  
40 lastly, the protective actions are based on plant or  
41 radiological conditions. What that doesn't say is how  
42 that's implemented.

43 If we look to the next slide, this is a  
44 section of 5.5 that was not included in the inspection

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1 report, but it goes on to further say that protective  
2 action guidance discussed in Section 5.5.2 provide  
3 preplanned guidance for making response decisions. So  
4 it is directing us towards the federal guidance that  
5 we would use for developing our protective action  
6 scheme. We'll show later how that ties in.

7 Let's go to the next slide. So, again,  
8 here's another slide. You know, this was referenced  
9 in the inspection report, but we don't believe it was  
10 given, you know, the proper emphasis. There's a  
11 presumption that sheltering must always be considered  
12 in every scenario. What we did, we evaluated  
13 NUREG-0654. It describes sheltering and evacuation,  
14 and it tells you how to consider it in your pre-planned  
15 procedures.

16 I do want to emphasize that in this  
17 commitment here in our emergency plan it says that our  
18 shelter and evacuation guidance are based on both the  
19 EPA document, as well as the NUREG-0654 Supplement 3  
20 document. At this point, I don't believe there's any  
21 concern or issue with our compliance with the EPA  
22 document, so we're only going to go forward and speak  
23 to the NUREG-0654 document.

24 The protective action recommendation  
25 decision-making tool found in PPM 13.2.2, the tool that  
26 specifies how shelter and evacuation are applied during  
27 any general emergency at Columbia, is based on these  
28 documents. What they do is guide us for a limited set  
29 of scenario or conditions on how to consider  
30 shelter-in-place versus evacuate for these scenarios.  
31 Meeting these guides, in essence, meets the commitments  
32 described in Section 5.5 of the emergency plan. And,  
33 again, we'll describe how we meet that and how we  
34 actually have additional guidance in our procedure  
35 above and beyond the NUREG.

36 So I'll turn it over to Sean.

37 MR. CLIZBE: I'd like to discuss  
38 NUREG-0654 Supplement 3 and our evaluation of it and  
39 implementation of it in our procedures, so my intent  
40 here isn't to read the regulation to you but more to  
41 just describe our evaluation of the applicable section.

42 So from Supplement 3 guidance, it is clear  
43 that application of the guidance is an acceptable  
44 method to comply with 10 CFR Appendix E Part 50 and

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1 provide the guidance for the provisions of 10 CFR  
2 50.47(b)(10). It also clearly supports that it's  
3 acceptable guidance for developing a range of  
4 protective action recommendations prior to an  
5 emergency and not during the actual emergency itself.

6 This is the guidance that our Emergency  
7 Plan Section 5.5.2.2 for developing protective action  
8 recommendations at Columbia. Columbia used this  
9 guidance for the development of our procedure 13.2.2  
10 to meet our emergency planning commitments and develop  
11 appropriate protective action recommendations. The  
12 next two slides will walk through our development  
13 process using the supplemental guidance and how it was  
14 applied in developing our appropriate protective  
15 action recommendation strategy.

16 So in Section 1.2 from the NUREG, I'd like  
17 to discuss that Energy Northwest voluntarily used the  
18 guidance that it demonstrated compliance with Appendix  
19 E and 50.47(b)(10) and, secondly, the changes to our  
20 procedure did not require an emergency plan change when  
21 we implemented our shelter and evacuation protective  
22 action recommendation tool. The change that we made  
23 did not require an emergency plan change from our  
24 procedure.

25 So as you look through the Supplement 3  
26 guidance, it's noted that in Section 2.1 of the guidance  
27 it suggests that licensees should use the attachment  
28 and supplement to develop protective action  
29 recommendation procedures and decision logic. What  
30 we'd like to point out is Energy Northwest did use the  
31 attachment for formulation of protective action  
32 recommendation procedure, and it was the basis of  
33 Revision 18 to 13.2.2.

34 So next we'll take a high-level walk  
35 through of the attachment. So this tool is used  
36 throughout the development process of our protective  
37 action recommendation procedure. This tool is generic  
38 to the industry and designed to be used by all nuclear  
39 sites. With the tool being generic to all sites, there  
40 is site-specific information that must be included to  
41 make the tool useful. The tool starts off with a  
42 general emergency, and it flows different directions  
43 based on emergency conditions. Our decision-making  
44 tool is similar to attachment, as we use this guidance

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1 to make our procedure change.

2 As we step through our procedure later in  
3 the presentation, note the similar tool used in  
4 Attachment 7.1 and 7.2 of our procedure.

5 Next slide. As mentioned in the previous  
6 slide, the guidance is generic to all sites. In here,  
7 it's noted nuclear power plants should develop  
8 site-specific strategies when using the guidance.  
9 Additionally, as noted, the licensees are encouraged  
10 to collaborate with off-site response organizations  
11 during the development process.

12 Energy Northwest did develop a  
13 site-specific strategy and did collaborate with  
14 offsite response organizations. In our case, it's to  
15 be Benton and Franklin County, the State of Washington,  
16 and the Department of Energy.

17 In collaboration, Energy Northwest issued  
18 Revision 18 to Procedure 13.2.2. The guidance clearly  
19 suggests that the protective action recommendation  
20 strategy should be developed prior to the emergency and  
21 all invested parties should participate.

22 During collaboration with the offsite  
23 response organizations, it was clear throughout the  
24 process that Energy Northwest protective action  
25 recommendations must align with federal guidance, and  
26 ours does.

27 In the next few slides, we'll provide some  
28 site-specific information that we used during our  
29 development process that we think is important.

30 MR. DAPAS: Before you go on, I had a  
31 question just following your flowchart here. On the  
32 flowchart you've got on page 18, are you equating all  
33 others to monitor and prepare to shelter?

34 MR. CLIZBE: So we haven't implemented the  
35 monitor and prepare section, but we do have, in our  
36 procedure, when we walk through it, we'll step through  
37 when we shelter, the remaining sections would be  
38 shelter-in-place.

39 MR. DAPAS: I look forward to that  
40 discussion because I looked at your implementing  
41 procedure relative to the Supplement 3, and, certainly,  
42 in my view, it was intended to be monitor and prepare  
43 and I thought your shelter remaining sections was your  
44 phraseology for the monitor and prepare, and if your

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1 position is that that meant shelter-in-place I think  
2 we really need to understand that.

3 MR. CLIZBE: Do you want to discuss it now  
4 or later?

5 MR. DAPAS: Whenever it's convenient. If  
6 you want to wait until we get to the actual slide, I  
7 think that has that specific language.

8 MR. CLIZBE: This is, up on the slide, a  
9 general representation of Energy Northwest emergency  
10 planning zone. I circled the representation of the  
11 two-mile, five-mile, and ten-mile distances. So this  
12 site-specific consideration was used in the  
13 development process, as suggested by the guidance.  
14 And it's important to note the limited population and  
15 the location of population being on the outer edge of  
16 the emergency planning zone. This factors into the  
17 evaluation process when determining whether shelter or  
18 evacuation is appropriate. The low-population  
19 density and distant location of the population within  
20 the emergency planning zone informed the collaborative  
21 evaluation process that which we revised our procedure.

22 Also note that Columbia Generating Station  
23 max 90-percent evacuation time estimate is two hours  
24 and 15 minutes.

25 So kind of walking through what our site  
26 looks like. You know, obviously, we have a lot of  
27 desert surrounding our site. We're on the Hanford  
28 Nuclear Reservation. Most of our population resides  
29 on the outer edges of the EPZ, this being the cities  
30 of West Richland at the very bottom here, and over here  
31 across the river is Franklin County which is a farming  
32 community. So there's zero population in the two  
33 miles, and in the five-mile there's a total of, well,  
34 approximately 55 people residing over here in the  
35 farming community, and then approximately 300 people  
36 in our emergency planning zone. This kind of gives you  
37 a look at what we're having to deal with in our planning  
38 process.

39 Next slide, please. So looking through  
40 NUREG-0654, this is the decision point in the  
41 supplemental flowchart previously discussed where  
42 consideration of evacuation versus shelter is  
43 addressed. The guidance states that if the 90-percent  
44 evacuation time estimate is less than three hours for

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1 a rapidly-progressing scenario, the most appropriate  
2 or safest protective action is evacuation. Energy  
3 Northwest 90-percent evacuation time estimate is two  
4 hours and 15 minutes, and it's less than three hours  
5 for the entire emergency planning zone.

6 As a result, Energy Northwest determined  
7 the most appropriate protective action for a  
8 rapidly-progressing scenario is evacuation.  
9 Additionally, the low-population density and distant  
10 location result in short evacuation times. Columbia  
11 continues to recommend evacuation corrective action  
12 recommendations for the zero- to two-mile and two- to  
13 ten-mile distances as our PARTICULAR strategy for these  
14 conditions.

15 As a result, there's no benefit to adopting  
16 a staged evacuation, so no benefit in holding people  
17 up. We have the ability to evacuate.

18 MR. HAIRE: This is Mark Haire. I just  
19 want to make sure I clarify the particular section in  
20 NUREG-0654 Supplement 3, the section you're pointing  
21 to is Section 2.7, which is particular guidance for a  
22 rapidly-progressing scenario. So there's lots of  
23 other scenarios that need to be considered in your plan.  
24 This is guidance for a rapidly-progressing scenario,  
25 and we understand you applied the guidance out of Sup  
26 3 for rapidly-progressing scenarios in consideration  
27 of your evacuation time estimate and decided  
28 evacuation, per the NUREG, was appropriate for  
29 rapidly-progressing scenarios.

30 MR. CLIZBE: That's correct.

31 MR. HETTEL: And I would say it's  
32 consistent with the attachment in the NUREG as far as  
33 the tool that you use to determine your protective  
34 action scheme.

35 MR. DAPAS: Right. And I guess I would  
36 just add that we're very, very interested in how you  
37 guys handle your guidance for PARs for things other than  
38 rapidly-progressing scenarios because we're familiar  
39 with our guidance for rapidly-progressing scenarios,  
40 and we don't take exception to what you did for that.

41 MR. HETTEL: So can I just be clear?  
42 We're talking about scenarios that are not currently  
43 described in NUREG-0654; is that correct? And Section  
44 2.7 talks about rapidly-progressing scenarios.

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1 MR. DAPAS: Right. So it's a particular  
2 section, and then there are other, obviously, possible  
3 scenarios that aren't described.

4 MR. HETTEL: They're all described in  
5 NUREG-0654.

6 MR. DAPAS: Yes. The long and short of  
7 it, as I said in my opening, and perhaps this is not  
8 a reflection on what occurred at the station, but it  
9 was my understanding from talking to the team that you  
10 applied that particular guidance for  
11 rapidly-developing scenarios and inadvertently  
12 removed guidance, I don't know if it was inadvertent  
13 or by design but removed guidance regarding  
14 shelter-in-place for other scenarios other than  
15 rapidly-developing scenarios. So we're looking to see  
16 where there is, in your implementing procedure, very  
17 clearly direction to consider shelter-in-place for  
18 other scenarios based on the dose-avoidance concept.  
19 That's really, in my mind, the crux of it.

20 MR. CLIZBE: We agree with you, and we will  
21 show you.

22 MR. HETTEL: If I can, too, I mean, we keep  
23 using the terms "rapidly-progressing scenarios."  
24 However, this is a specific type of an event. It's a  
25 severe accident, so it is defined within the supplement  
26 to a severe accident and also in an FAQ follow-up that  
27 was asked by the industry and responded to what  
28 constitutes a severe accident. So it's a specific type  
29 of event that is expected to take place rapidly and  
30 severe enough that it would be something handled within  
31 the control room such that this would be the leg that  
32 the control room emergency director would most likely  
33 be entering without the assistance of anyone else. So  
34 it's that type of severe accident.

35 MR. CLIZBE: I'd like to just also  
36 emphasize that, you know, part of the struggle that  
37 we've had with the communication up to this point is  
38 we removed portions of our procedure dealing with a puff  
39 release or planned release. And then we were asked how  
40 did we address that, and we tried to address it in the  
41 context of what's in NUREG-0654 or tried to use the  
42 guidance in NUREG-0654 to address how we would look at  
43 that scenario. So I think maybe some of the confusion  
44 that has transpired between us is our attempts to try

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1 to fit, you know, something that was not clearly  
2 described in the new guidance and to try to make it work.

3 So we'll gladly speak more on that if  
4 anyone has any questions, but I think, you know, Mark,  
5 you had mentioned some of the concerns about  
6 communication. I think that was one issue there.

7 MR. CLIZBE: So the next consideration for  
8 sheltering versus evacuation in the supplement is  
9 associated with impediments to evacuation. Each one  
10 of these impediments was evaluated and discussed with  
11 the offsite response organizations and the appropriate  
12 decisions are reflected in Revision 18 to Procedure  
13 13.2.2.

14 Additionally, our procedure allows for  
15 consideration of impediments not clearly identified in  
16 the supplement, and we'll discuss that later. Next,  
17 we'll discuss our evaluation of each impediment in the  
18 following slides.

19 First, we'll start off with evacuation  
20 support. The guidance states that lack of traffic  
21 control may not be considered as an impediment when  
22 there's low-population density within two miles.  
23 Energy Northwest has a low population within two miles  
24 of the site, and, through collaboration with the  
25 offsite response organizations, it was determined the  
26 lack of traffic control would not be an impediment to  
27 evacuation. In fact, there's zero permanent residents  
28 within two miles of our site.

29 This evaluation was incorporated into our  
30 procedure, and Revision 18 has evacuation support not  
31 being considered an impediment to evacuation.

32 Next, we'll take a look at hostile actions  
33 as an impediment. The hostile action impediment  
34 consideration was discussed with our offsite response  
35 organizations and determined that, due to low  
36 population surrounding the site, that an appropriate  
37 protective action recommendation during this event  
38 would be evacuate. Due to low population surrounding  
39 the site, zero residents within two miles, the  
40 evacuation recommendation would not be putting people  
41 at risk of inadvertently becoming involved in hostile  
42 action. We came to this agreement, and this analysis  
43 was included in Revision 18 of our procedure as the  
44 appropriate protective action.

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1                   Next, we'll discuss adverse weather as an  
2                   impediment. During the collaboration process, it was  
3                   determined that the offsite response organizations  
4                   would have a better understanding of any adverse  
5                   weather impediments at the time of the event,  
6                   especially when the location of the at-risk population  
7                   is taken into account, that being on the outer edges  
8                   of our emergency planning zone. Therefore, Energy  
9                   Northwest did not include consideration of adverse  
10                  weather impediments in the protective action  
11                  recommendation process.

12                  Additional considerations were given to  
13                  the evacuation time estimate values when evaluating the  
14                  impediment. The evacuation time estimate for all  
15                  populations in the emergency planning zone for the  
16                  adverse weather scenario were less than three hours.

17                  While it was determined that Energy  
18                  Northwest did not need to consider adverse weather as  
19                  an impediment in our protective action recommendation  
20                  for the standard protective action recommendation, it  
21                  was taken into consideration for radiological release,  
22                  as described in Attachment 7.2 of our procedure. And  
23                  so we'll discuss that further.

24                  So in summary, NUREG-0654 Supplement 3  
25                  guidance encourages licensees to use the guidance for  
26                  developing the protective action recommendation  
27                  strategies. Energy Northwest did use this guidance  
28                  and, with offsite response organization collaboration,  
29                  implemented Revision 18 to Procedure 13.2.2. The  
30                  NUREG was fully evaluated, revealing that evacuation  
31                  is the most appropriate protective action  
32                  recommendation for offsite emergency planning zone for  
33                  the scenarios that are described in the NUREG.

34                  As we'll demonstrate, our procedure still  
35                  retains the mechanism for issuing a shelter-in-place  
36                  protective action recommendation when conditions not  
37                  specifically described in the NUREG warrant. Before  
38                  we demonstrate this, we'll take a quick review of the  
39                  changes to our procedure.

40                  MR. GREGOIRE: I'd like to just point out  
41                  the inspection report makes these three conclusions  
42                  that we disagree with. The first is that the  
43                  assumption that we removed shelter-in-place as a  
44                  protective action; number two, that we removed a

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1 recommendation of protective actions for planned  
2 releases; and, three, that we eliminated the ability  
3 of the emergency response organization to recommend  
4 protective actions outside the plume exposure zone.

5 Revision 18 eliminated specific language  
6 for shelter-in-place for some cases. However, it did  
7 not remove shelter-in-place considerations or limit  
8 abilities associated with protective action  
9 recommendations within or outside the plume exposure  
10 emergency planning zone.

11 I'll turn it back over to Sean.

12 MR. CLIZBE: So I'm going to walk through  
13 our Procedure 13.2.2 Revision 17 and Revision 18  
14 changes; but, first, I wanted to discuss why we made  
15 the change in June of 2014. So the reason the change  
16 occurred was to implement the 2011 version of  
17 Supplement 3 to NUREG-0654 with the objective of  
18 reducing potential health effects in the event of a  
19 nuclear power plant accident, incorporated  
20 shelter-in-place considerations in the structure of  
21 protective action recommendation decision-making  
22 tool, and also implemented some formatting  
23 improvements based on our site process. But the only  
24 reason that we implemented this guidance is it's the  
25 best guidance, and it's based on real large emergency  
26 operating experience and it's the safest for the  
27 public.

28 Next, I'll walk through major changes to  
29 our procedure that are relevant for discussion today.  
30 So on the screen, we have Revision 17 and our current  
31 revision, Revision 18, up. There's kind of some  
32 administrative things to take care of first. So the  
33 only text on Revision 17 that you'll see is text that  
34 changed. Green text in Revision 18 is text that was  
35 added, and blue text in both revisions is text that  
36 hasn't changed but is relevant to the discussion today.

37 So the changes that were made here were to  
38 include a statement and updates to ensure the  
39 dose-projection tool was the first tool available for  
40 use, and the table in the back has a backup.  
41 Additionally, we split it into two sections for  
42 clarity. These changes do not impact the range of  
43 protective action recommendations to be considered by  
44 the emergency director, nor the obligation to make

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1 protective action recommendations beyond the emergency  
2 planning zone.

3 The only change in this section here is we  
4 removed the mention of a planned puff release. That  
5 language is no longer included in NUREG-0654 Supplement  
6 3, 2011, and so that's a removal of -- it's hard to see,  
7 I guess, from here but removal of this 4.3.5 step.  
8 While we did remove the step, the concept of a planned  
9 release is still considered in our procedure. And,  
10 again, we're going to walk through that in detail.

11 And also in step 4.3.5, there's a known  
12 impediment language in there, and this was also still  
13 addressed and it's addressed in Attachment 7.2 in our  
14 Revision 18 procedure.

15 Step 4.4.4 in Revision 18, and it says  
16 "focus on how to implement a protective action  
17 recommendation and not what protective action  
18 recommendation should be made." It's simply letting  
19 the offsite response organization know that we're going  
20 to vent containment so they can prepare.

21 So what didn't change? The blue text,  
22 4.4.2. It still requires the use of Attachment 7.2 for  
23 updating protective action recommendations. The  
24 procedure points to 7.1 and 7.2, which provides the  
25 mechanism for an emergency director to consider shelter  
26 employees. Attachment 7.2 wasn't mentioned in the  
27 inspection report, and we think it's important to the  
28 conversation today, as this is part of the  
29 decision-making process for the emergency director.  
30 So we're going to discuss each attachment next.

31 MR. ELKMANN: Just a second. Go back to  
32 that last slide. This is Paul Elkmann. You talked a  
33 couple of times about how Supplement 3, you talked about  
34 the need for, how Supplement 3 took away the need for  
35 puff releases. I'm not sure that we would agree that  
36 the guidance took away that. It wasn't mentioned, but  
37 that doesn't mean that it supersedes previous guidance  
38 on puff releases. In discussions that we had over the  
39 winter with the staff, we were told that you understood  
40 the old puff release to be the same as  
41 rapidly-progressing, and I guess if you could explain  
42 a little bit about why you came to that conclusion.

43 MR. CLIZBE: So the point we're trying to  
44 make here is that the term "planned puff release" is

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1 no longer in the guidance, but our procedure still does  
2 take into consideration a planned release. And that's  
3 the part we're going to walk through, and we think that  
4 that's specifically the part that maybe wasn't  
5 communicated clearly enough in our original  
6 conversations.

7 MR. ELKMANN: But we're saying that,  
8 because you read Supplement 3 as being silent on the  
9 puff release, you didn't have to address it?

10 MR. CLIZBE: We addressed planned release  
11 in our procedure.

12 MR. GREGOIRE: I do want to mention again,  
13 you go to the intro of the NUREG and it says you comply  
14 with this, you meet the regulation. It doesn't speak  
15 to it. And albeit, an EPFAQ a few years later, 2013,  
16 where the industry asked the question, hey this  
17 guidance doesn't mention it, how do you treat it,  
18 essentially.

19 And we are treating it, but we're just not  
20 treating it in a direct manner because, again, like I  
21 said, the NUREG0654 doesn't treat it in a direct manner.  
22 But we are addressing it in another manner and we will  
23 speak to that.

24 MR. HETTEL: I can point, I guess, state at  
25 least in through my understanding and kind of  
26 discussion on this, when you take a look at the 4.4.4  
27 and it's also about containment vent, in essence what  
28 puff releases whether it's short release or release  
29 with a known duration so to speak. I mean, you're  
30 basically - mini-containment's probably going to be the  
31 most likely situation.

32 So, again, like I think Don and them have  
33 been saying, we have the ability to, whether you call  
34 a puff release, whether you call it mini-containment,  
35 regardless of what you want to call the name of it, our  
36 procedures would still evaluate the PAR for that and  
37 sheltering-in-place would be one of those that we'd be  
38 evaluating.

39 MR. CLIZBE: Yes. I think that's the  
40 bottom line here.

41 MR. HETTEL: Yes.

42 MR. CLIZBE: Whether NUREG-0654 talks about  
43 plan release, whether it was previously termed a puff  
44 release in your implementing procedures. My interest

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1 is, do you have a process to provide for a protective  
2 action recommendation in this scenario where you would  
3 need to vent containment. Which is a planned release  
4 here.

5 MR. HETTEL: Yes.

6 MR. CLIZBE: And I think we need to talk a  
7 bit about -- discuss the proposed activity with offsite  
8 authorities to assist them with protective action  
9 implementation or is it the expectation that you  
10 actually have a protective action recommendation  
11 you're providing versus that engagement with offsite  
12 authorities. I think we need to understand that  
13 aspect.

14 MR. GREGOIRE: I think we'll be very clear  
15 on it when he gets to -- Dave Brown, he'll actually speak  
16 through how he uses the guidance to reach that. So I  
17 think if you'd give us a few moments, we'll get to that  
18 point.

19 MR. HAIRE: This is Mark here again. I  
20 just, not to belabor the point, but I want to make sure  
21 I understand. So we understand in our review that you  
22 still mention a discussion of shelter-in-place as a  
23 potential protective action in your Attachment 7.2.  
24 And your view is that the way that, that could get  
25 implemented by Control Room staff or Emergency Director  
26 staff is by virtue of this reference to it in Step 4.4.2,  
27 where it says --

28 MR. GREGOIRE: That's for the updated PARs,  
29 yes.

30 MR. HAIRE: It says, determine the  
31 appropriate offsite PAR by comparing the  
32 plume-projected dose and field monitoring team data  
33 with a protective action guidance provided in  
34 Attachment 2 for the early phase of the nuclear  
35 incident. So that's your view is that's the staff's  
36 connection to potentially making a shelter-in-place.

37 MR. GREGOIRE: Yes. This is one of the  
38 points on the conversation we had on the phone, I  
39 believe it was in February time frame, where we were  
40 told that our staff would specifically jump over that  
41 step. And Dave Brown will speak to that and how he uses  
42 the procedure.

43 But we don't agree with that conclusion,  
44 so, again, if you would allow us to wait until Dave

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1 Brown, who is one of our Emergency Directors, to walk  
2 through that.

3 MR. CLIZBE: Next, we'd like to discuss  
4 Attachment 7.1 and Revision 17 and 18, in just kind of  
5 a high-level walkthrough familiarity. Entering the  
6 top of the flow chart, General Emergency, down to  
7 determine is it a release in progress? Yes, go to the  
8 right. Which is going to drive you to look at the next  
9 Attachment, which is 7.2, which we've been discussing  
10 quite a bit.

11 And then if it's no, then it drives you down  
12 to these actions in this note box. So previously in  
13 the previous Revision, this is where we had a "See Note"  
14 for puff release, so that's what was removed in the  
15 Revision 18. Okay.

16 Now I'll use the closer one so you guys can  
17 see it better, how about that? So removal of the  
18 terminology puff release, again, was removed for  
19 consistency as we removed it in Step 4.3.5 of the  
20 procedure.

21 And there were no substantial changes to  
22 the release in progress path other than we had  
23 additional footnotes added. And, again, after we get  
24 done with my portion of the procedure changes, we'll  
25 have an Emergency Director walk you through the use of  
26 the procedure and the associated attachments.

27 MR. GREGOIRE: I do want to make this quick  
28 point. Mark, you had asked me if there was any  
29 differences between what we had sent earlier and the  
30 newer version. So on Slide 31, I just wanted to point  
31 out that the previous version didn't have green text  
32 or highlighted the section areas. We actually changed  
33 those that had changed text. But in case somebody's  
34 looking at a previous version of the presentation.

35 MR. DAPAS: Just so I'm clear, and thank you  
36 for that, the box it talks about evacuate sections where  
37 EPA protective action guidelines are projected to be  
38 exceeded based on dose assessments or actual survey  
39 readings.

40 Plus, the next if not previously  
41 recommended, then evacuate all sections there to two  
42 miles and ten miles downwind and shelter remaining  
43 sections. Is it your contention that, that in  
44 shelter remaining sections meaning shelter-in-place?

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1 MR. CLIZBE: That's the current definition  
2 we have in our emergency plan is shelter is a  
3 shelter-in-place definition.

4 MR. DAPAS: So shelter remaining sections  
5 you're maintaining is that every other section -- the  
6 population that exists in all the rest of the remaining  
7 sectors, other than zero to two miles and ten miles  
8 downwind, you would shelter-in-place as a dose  
9 avoidance versus when you go look at the NUREG it talks  
10 about monitor and prepare? That your plan was to have  
11 everyone shelter?

12 MR. CLIZBE: Yes.

13 MR. DAPAS: That's always been the intent?

14 MR. CLIZBE: That's been the intent.

15 MR. DAPAS: Okay.

16 MR. CLIZBE: We're working with our offsite  
17 response organizations and we currently were working  
18 through them when this came up to implement a better  
19 monitor and prepare strategy. And we'll continue to  
20 work with them and get that -- the intent is to work  
21 with the offsite response organizations to implement  
22 the monitor and prepare language that's in this.

23 MR. DAPAS: Well, this is important here.  
24 Because what I'm hearing you say is -- I want to  
25 understand if you truly intended that to be  
26 shelter-in-place and the individuals that would  
27 implement this understood it or is it meant to be  
28 monitor and prepare and you used the words shelter  
29 remaining sections. In my view, this is an important  
30 distinction and I want to understand your view on that  
31 and the basis for that.

32 MR. GREGOIRE: Dave, you should speak to  
33 that.

34 MR. BROWN: Yes. So, this particular box  
35 and that language did not change with Rev 18. So it  
36 has been our station policy, we call it the Standard  
37 PAR, to at a general emergency evacuate zero to two  
38 miles, evacuate downwind sectors, shelter remaining  
39 sectors. So that's our station emergency plan  
40 guidance. I think Sean and/or Don can talk about what  
41 the offsites describe shelter as being because I've  
42 seen that definition as we prepared for this  
43 conference.

44 MR. HAIRE: Hi Dave, this is Mark Haire. I

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1 know we're beating the horse to death here, but as Marc  
2 said this is an important distinction for us. And as  
3 you mentioned and we saw, that language about evacuate  
4 certain sectors and downwind and then shelter everybody  
5 else, that language was in your previous version.

6 The previous version also included  
7 distinct and separate considerations for potential  
8 shelter-in-place PAR for dose avoidance. And in fact,  
9 your Attachment 7.2 talks about a separate PAR for dose  
10 avoidance.

11 And the way you're using this language here  
12 in the flow chart and the way similar language is used  
13 in the NUREG implies not that you'd be telling everybody  
14 that doesn't evacuate to go indoors, close their  
15 windows, turn off their air conditioning, and hide from  
16 dose, but rather you're telling them to hang out and  
17 wait for further instructions. Which to us is a very  
18 different issue.

19 MR. BROWN: Right.

20 MR. HAIRE: It's not a protective action  
21 recommendation to tell everybody you're not protecting  
22 to standby. Which is what it sounds like you're using  
23 this flow chart to mean.

24 MR. BROWN: So I will go through the flow  
25 chart with some examples where I will use Attachment  
26 7.2 in that discussion. What I was really trying to  
27 get it is the Standard PAR language was not part of our  
28 change. It's been in the procedure as long as I can  
29 remember and I've been a licensed operator at the site  
30 since 1998.

31 MR. HAIRE: Right.

32 MR. BROWN: So I've been through a lot of  
33 training and I've seen this --

34 MR. HAIRE: I guess our --

35 MR. BROWN: -- PAR.

36 MR. HAIRE: Our concern though, the  
37 distinction we're trying to understand is when you have  
38 issued the protective action recommendation for two  
39 miles evacuate, ten miles downwind evacuate, shelter  
40 everybody else, were you trying to protect everybody  
41 else with a shelter PAR by telling them to turn off their  
42 air conditioning and close their doors or were you just  
43 telling everybody else standby and wait for further  
44 instructions? Because those are very, very different.

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1 MR. GREGOIRE: We know the NUREG0654 uses  
2 the monitor and prepare language and we haven't built  
3 that into our process yet. Our definition for shelter  
4 still is the same in the emergency plan. So we haven't  
5 changed that.

6 We know that there's a -- we were going to  
7 proceed towards down that path. But the other thing  
8 to consider, I realize you don't call it a protective  
9 action, but having people not travel through the plume  
10 zone is an important detail for protection even though  
11 we're asking them to go inside, shut the door, shut the  
12 windows, even if they're not in the plume zone area.

13 So in essence, we're still -- it may not  
14 be called a protective action because they're not in  
15 the plume zone, but also keeping them out of traveling  
16 through the plume zone is somewhat of a protective  
17 action. I know it hasn't been dialogued much on, but  
18 that hasn't changed.

19 So we want to make the point that this  
20 hasn't changed, although that we were working towards  
21 the process of implementing something along that line  
22 of monitor and prepare. We have to change our forms,  
23 we have to change our procedures, we have to change  
24 agreements with the offsites.

25 MR. HAIRE: I just want to make sure -- why  
26 we're pursuing this is because it's my understanding  
27 that you're contending that the shelter-in-place was  
28 always an aspect that you'd consider by virtue of this  
29 shelter remaining sections, right?

30 MR. GREGOIRE: That's one part of it, yes.

31 MR. HAIRE: That's one part. And we'll get  
32 to 7.2 here, but I'd like to know, when you conducted  
33 exercises and you had the general emergency scenario  
34 here, was your Emergency Director directing  
35 evacuations zero to two miles and then ten miles  
36 downwind and then for everyone else shelter-in-place  
37 and that was part of your protective action  
38 recommendation and that's what you actually practiced  
39 when you had exercises.

40 Versus did you actually practice what is  
41 considered this monitor and prepare and is that what  
42 you did during the exercises or did you actually expect  
43 and issue a protective action recommendation that would  
44 have every other section, you'd have the populace there

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1 sheltering-in-place. Which gets to closing windows,  
2 turning off air conditioning.

3 And that was part of your protective action  
4 recommendation. If that's what you're maintaining  
5 here that, that was the intent. Did you practice that  
6 in your exercises?

7 MR. GREGOIRE: Yes. So we went through and  
8 validated with our offsite response organizations on  
9 what it meant when we gave the message out. What was  
10 the message that the public was receiving? And the AS  
11 messages that they were giving for shelter was the  
12 shelter-in-place definition that's in our emergency  
13 plan.

14 MR. HAIRE: So their exercises, the shelter  
15 remaining sections was translated to shelter-in-place.  
16 That was part of your PAR? And that's what you have  
17 done for each exercise that reaches the general  
18 emergency where there's a release involved, right?

19 MR. GREGOIRE: Yes.

20 MR. HAIRE: Okay. So we should've had the  
21 opportunity via observation of those exercises to  
22 validate that, right? All right. Let's move on.

23 MR. CLIZBE: So next we'll discuss  
24 Attachment 7.2. And this is where the consideration  
25 for sheltering versus evacuation is located. So the  
26 previous section for release in progress drives you to  
27 use Attachment 7.2.

28 And this is where it's found and it has not  
29 changed from Revision 17 to Revision 18. The one minor  
30 change here was that we added a reminder that no matter,  
31 regardless of the protective action recommendation  
32 that we give, it's the offsite response organizations  
33 have the final say on the decision.

34 This Attachment, like I mentioned, is the  
35 tool for determining shelter versus evacuation and it  
36 wasn't specifically referenced in the Inspection  
37 Report, but we think it's important to our conversation  
38 today. And, again, we'll walk through it with an  
39 Emergency Director to show us appropriate use. I'm  
40 going to turn it over to Don here.

41 MR. GREGOIRE: Okay. So with regards to  
42 the Inspection Report --

43 MR. DAPAS: Can I ask you to indulge me?  
44 Since we've spent a fair amount of time talking about

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1 this, can we go and have you walk through exactly how  
2 you would, if you were an Emergency Director, refer to  
3 Attachment 7.1 and 7.2 and how you would make that  
4 shelter-in-place protective action recommendation?  
5 It seems appropriate in my mind to do that.

6 MR. GREGOIRE: Okay. So what we'll do is  
7 jump to Slide 37 and turn it over to Dave Brown, our  
8 Emergency Director, to do that.

9 MR. BROWN: Okay. Good afternoon. Again,  
10 my name's Dave Brown. I've been Emergency Director  
11 since 2003 when I qualified as a Shift Manager. Been  
12 through annual training on emergency plans since 1998  
13 when I obtained an SRO license. So been through a lot  
14 of training, drills, evaluations, actual alert  
15 activation, I was there.

16 And so when I walk through the procedure,  
17 I'm going to explain from my perspective what the words  
18 mean. Okay. In my experience. Also, I'll try to  
19 highlight where training has emphasized different  
20 things.

21 So starting with PPM 13.2.2, Initial Plant  
22 Based PARs. When the plant has reached or is about to  
23 reach a general emergency for a classification  
24 occurring at the station. I've used Section 4.2 in the  
25 procedure and I'm going to try to use my pointer and  
26 start with step 4.2.1.

27 So the thing about procedure use  
28 fundamentals at our site, if the steps have numbers,  
29 you do them in sequence one after the other. You don't  
30 skip around unless that procedure gives you permission  
31 to do that. So what would be different is if the steps  
32 are just bulleted, then those steps could be done in  
33 any order.

34 So I'm going to step right through this  
35 procedure starting with Step 4.2.1 and that's going to  
36 drive me to evaluate my decision for protective action  
37 recommendation in accordance with Attachment 7.1.  
38 That's the next slide.

39 So Attachment 7.1 for the case we're on in  
40 a general emergency, and I have a release in progress,  
41 or I have a planned release I'm about to take, I'm going  
42 to enter this chart in the same spot. Enter up here  
43 in the upper arrow where it says "Enter if site area  
44 emergency or general emergency is declared." With the

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1 general emergency, I'm going to go down.

2 So the only difference there in my  
3 discussion is that if we're at a site area emergency  
4 and we plan on doing a planned release, well I'm going  
5 to upgrade to a general as a part of that evolution and  
6 move down through the chart. And then I'm going to  
7 evaluate this decision that I'm in.

8 Do I have a release in progress? And I  
9 move over to the right and that points me to evaluate  
10 my protective action recommendation in accordance with  
11 Attachment 7.2.

12 MR. DAPAS: Dave, could I just back you up  
13 for a second? You used the word evaluate per  
14 Attachment 2, but your procedure says evacuate --

15 MR. BROWN: Right.

16 MR. DAPAS: -- per Attachment 7.2.

17 MR. BROWN: So the direction is to evacuate  
18 sections where EPA PAGs are projected to be exceeded  
19 based on dose assessments. Attachment 7.2 is the  
20 dialogue or expectations in the procedure that I have  
21 to consider a shelter-in-place if extreme  
22 circumstances are warranted. So that's what I was just  
23 getting ready to explain.

24 So with any release that we have, it  
25 doesn't matter if it's a planned release or an  
26 unisolable leak, I'm in this box and I'm going to  
27 evaluate -- I'm going to evacuate sectors, excuse me,  
28 I used the wrong word, in accordance with Attachment  
29 7.2. Did I clarify your question?

30 MR. DAPAS: Well, I just wanted to make sure  
31 that we were speaking the same language. And to me,  
32 if I'm following the procedure and I read the word  
33 evaluate per 7.2, then I think I've got to go to 7.2  
34 and evaluate what the right PAR is.

35 But when I read the word in the procedure  
36 evacuate where PAGs are being exceeded per 7.2 and I'm  
37 not going to 7.2 to assess whether I'm going to shelter,  
38 I'm going to 7.2 to assess what parts to evacuate.  
39 That's --

40 MR. BROWN: Okay.

41 MR. DAPAS: -- the part I'm trying to  
42 understand is if we're using this as a tool to say we  
43 would get to 7.2 and consider shelter, are we following  
44 the procedure? That's what I'm trying to understand.

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1 MR. BROWN: Yes. So let me clarify that.  
2 So the next slide is Attachment 7.2 and let me point  
3 out something. So back to my training and experience.  
4 So we have the Standard PAR that we issue for general  
5 emergency of zero to two miles evacuate, evacuate  
6 downwind, shelter remaining sections. That's our  
7 Standard PAR.

8 I've been taught use Attachment 7.2 to  
9 decide if you need to deviate from that Standard PAR.  
10 And it gives some specific considerations here. Where  
11 sheltering may be preferred protective action when it  
12 will provide protection equal to or greater than  
13 evacuation.

14 I've read those words for 17 years.  
15 They're not any different last year than they are today.  
16 And like I said, I've been taught in training, I've been  
17 coached on it, that in certain circumstances, like  
18 severe weather, you don't evacuate. You do need to  
19 consider sheltering.

20 And so that's really what it amounts to is  
21 that the direction is to evacuate. That is our  
22 Standard PAR. The procedure also tells me to consider  
23 these other circumstances.

24 MR. ELKMANN: Dave, two questions on that  
25 if you would? The first is, I thought we heard earlier  
26 that you agreed with your offsite authorities that in  
27 circumstances such as severe weather there might  
28 impediments, but that you were not going to consider  
29 those as part of your process.

30 MR. CLIZBE: So with the exception -- on  
31 that slide with the exception of the radiological  
32 release scenario.

33 MR. ELKMANN: That's not what you discussed  
34 earlier.

35 MR. BROWN: Okay. So with the release in  
36 progress, we do go to this chart, this Attachment,  
37 excuse me. And then based on the circumstances -- I  
38 tend to want to point over here, but I know that's hard  
39 for you guys to read and I'm hitting Grover in the head.

40 MR. GREGOIRE: Can we just make a -- address  
41 one point. And Paul, I know you've mentioned something  
42 that we said. If you look on Slide 25, it specifically  
43 says there that we retain consideration for sheltering  
44 in adverse weather conditions during a radioactive

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1 release. Maybe we didn't emphasize that clearly when  
2 we were at that slide. But on Slide 25.

3 MR. ELKMANN: That doesn't seem to  
4 completely jive with the description of your process.  
5 The second question goes to the first part of the vote.  
6 Go back to 7.2, Attachment 7.2, Slide 39.

7 That first -- where it starts when shelter  
8 would be the preferred in red, as a Command and Control  
9 individual, what process do you have to know whether  
10 protection is greater than or equal as far as  
11 sheltering? It doesn't seem to provide me a tool for  
12 making that decision.

13 MR. BROWN: Right. So the tools that we  
14 have available, I talk to my team including at the  
15 table, we have offsite representation. So they can  
16 weigh in. If they have particular details that we  
17 don't have in terms of impediments, they can bring that  
18 up.

19 As far as dose, the Radiological Emergency  
20 Manager and I talk about it. We use the dose assessment  
21 tool that we have in front of us for that release. And  
22 use that to help us make our decision.

23 So part of what we're able to do with our  
24 dose assessment tool is show how far into the emergency  
25 planning zone are we above one Rem or five Rem CDE. So  
26 that's just a -- using different dose assessments, you  
27 can show where the plume is at in the planning zone and  
28 you can make a decision from there.

29 MR. ELKMANN: So does your dose assessment  
30 tool provide you an assessment of the dose under the  
31 shelter-in-place option versus the dose under the  
32 evacuate option so you can make the comparison?

33 MR. BROWN: The dose assessment tool  
34 doesn't tell you what to do. You use your professional  
35 judgment. So right now what we're doing is we're  
36 considering these impediments, including roads that  
37 might be closed due to severe accident or competing  
38 disasters and things like that. That's something our  
39 Security Manager might be privy to as he's talked with  
40 the local law enforcement.

41 So this is clearly a judgment space that  
42 we're in. When we're using Attachment 7.2, applying  
43 it to the circumstances, we are using our collective  
44 experience and our tools. Any other questions on that?

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1 MR. DAPAS: Yes. I have a question here.  
2 If I heard you correctly, this evacuate sections where  
3 EPA PAGs, and there's reference to Attachment 7.2, are  
4 projected to be exceeded, that's where you go to 7.2  
5 and you evaluate whether you should evacuate or  
6 shelter-in-place. Am I hearing you correctly?

7 MR. BROWN: So, like I said, I've  
8 interpreted this table for many years to apply that the  
9 direction in Attachment 7.1 says evacuate sectors above  
10 one and five. I've interpreted this table and I've  
11 been reinforced in my training that you evacuate unless  
12 you meet one of these thresholds for sheltering, then  
13 you shelter.

14 MR. DAPAS: Yes. I appreciate that.  
15 Because when I read that evacuate sections where EPA  
16 PAGs, Attachment 7.2, that tells you what the EPA PAGs  
17 are, the one to five Rem TEDE or 5 to 25 Rem CDE thyroid  
18 or 50 to 500 Rem skin.

19 If any of those PAGs are exceeded or  
20 projected to be exceeded, based on the dose assessments  
21 or actually survey readings, so you are evacuating  
22 those sections plus if not previously recommended, then  
23 evacuate all sections zero to two miles and ten miles  
24 downwind and shelter remaining sections. And it's  
25 been your contention that shelter remaining sections  
26 meant shelter-in-place.

27 It's not clear to me why you're going  
28 through this, an evaluation of shelter-in-place when  
29 you've got specific direction here that tells you  
30 you're going to shelter all the other sections  
31 in-place. It seems like this is inappropriate given  
32 the directions.

33 So now you're telling me, and I'm seeking  
34 to understand, you're telling me that this evacuate  
35 sections where EPA PAGs, and because it has reference  
36 to Attachment 7.2, that has been your trigger point to  
37 go to 7.2 and determine whether evacuation is  
38 appropriate or shelter-in-place. Independent of the  
39 subsequent guidance there that would tell you to  
40 shelter all sections, remaining sections.

41 MR. BROWN: Yes. So I believe I said that.  
42 And that is my position that the shelter-in-place  
43 discussion is really pertinent to the downwind sectors  
44 because our Standard PAR is to shelter remaining

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1 unaffected sectors.

2 So what we're applying Attachment 7.2 to  
3 is that downwind sector. Do we evacuate or do we  
4 shelter that section? Every other sector two miles to  
5 ten miles is being sheltered.

6 MR. GREGOIRE: I do want to mention that  
7 when this was first brought to our attention in the  
8 phone call, I believe it was in February time frame,  
9 me personally as the Reg Affairs Manager, I had some  
10 concerns. Was our staff interpreting that step there  
11 and disregarding or feeling like they did not or they  
12 should not consider sheltering in-place in Attachment  
13 7.2?

14 Knowing that our staff hadn't been  
15 interviewed in this process, I wanted to know for myself  
16 from a safety prospective, how are they using the table?  
17 So we interviewed the four emergency operation facility  
18 Emergency Directors and how they would use the  
19 procedure and if under certain scenarios, and maybe  
20 this is leading, but I wanted to know does the procedure  
21 work for them? How do they get to shelter-in-place?

22 And they all pointed to using this box,  
23 this section, that Attachment 7.2 as what they would  
24 use to introduce shelter-in-place considerations for  
25 a planned release.

26 MR. HETTEL: Don, you said four, we actually  
27 interviewed three and then we didn't take the other one.

28 MR. GREGOIRE: Yes. So we actually had  
29 three that were onsite and the fourth one was out for  
30 medical reasons. And when he came back we actually dry  
31 ran him through a scenario and tabletop and he was able  
32 to use the procedure to reach a shelter-in-place  
33 consideration.

34 MR. HETTEL: It's for -- any containment  
35 scenario.

36 MR. KAHLER: Excuse me. Bob Kahler from  
37 NRC Headquarters. I guess then, during the inspection  
38 process to better understand what the actual  
39 individuals would do during a real event, following the  
40 changes that were made between Rev 17 and Rev 18, the  
41 questions started coming up.

42 Discussion turned to training modules as  
43 to the change that was incorporated into Rev 18 and what  
44 was intended to change in the training modules to

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1 reflect that change. Now, I understand what you're  
2 talking about in the past, which was associated with  
3 Rev 17. What we're discussing is the Rev 18.

4 And it was my understanding that during  
5 that discussion with the staff at Columbia, that a  
6 discussion on the training module occurred and about  
7 action items that had not yet been completed the  
8 training that it intended to train individuals for the  
9 removal of shelter from even the judgment piece that  
10 was in Table 7.2.

11 To continue on and then all the training  
12 was yet to take place, training changes were yet to take  
13 place. Some of them had occurred already to discuss  
14 the shelter being removed from the Attachment 7.1,  
15 where you go through the flow chart. It no longer  
16 discusses the use of sheltering even after ten miles.

17 And the fact that I believe during that  
18 discussion was discussed what was meant by sheltering  
19 outside of that zero to two and downwind legs. That  
20 the shelter was not the same as it was previously and  
21 that a difference of how that shelter would be looked  
22 at in the future was to be made. And it was only the  
23 monitor and prepare.

24 So the changes have not yet been made to  
25 the training module. So can you explain a little bit  
26 about that discussion and where maybe the discussion  
27 that, I guess, we heard and that you said may have  
28 difference in what was made between Rev 17 and 18 and  
29 what was planned to occur during the training modules  
30 as per the action item that you had initiated?

31 MR. GOSNEY: Sure. I'll --

32 MR. KAHLER: We're around in circles there,  
33 but --

34 MR. GOSNEY: Maybe A.J. can jump in here,  
35 he's in charge of the training program. But we  
36 recognize when we're going through the process and  
37 certain discussions that our training required some  
38 additional updates. When we talked with Mr. Elkmann  
39 we recognized that.

40 We put all of our training on hold. No one  
41 had received any training. And evaluated the training  
42 module and it does need updated to incorporate the  
43 changes that we made to Revision 18, incorporating the  
44 0654 guidance. So that's really the way the discussion

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1 went. I can't recall any additional conversations. I  
2 don't know if A.J. can --

3 MR. FAHNESTOCK: So, I can jump in.

4 MR. GOSNEY: -- jump in. You need a  
5 microphone.

6 MR. FAHNESTOCK: I need a microphone.

7 MR. GOSNEY: Do you want to come up here and  
8 use mine?

9 MR. FAHNESTOCK: So I'll jump in Kurt's  
10 position. My name is A.J. Fahnestock. As Sean  
11 mentioned, I work for him in Emergency Preparedness.

12 So the discussion was about some changes  
13 that we had made to the training materials which removed  
14 the reference to what was, I believe, Attachment 7.3,  
15 which had times associated with it, evacuation time  
16 estimates associated with it and was referenced to  
17 Section 4.3.5 in the procedure which talked about the  
18 use of those evacuation time estimates for puff  
19 release.

20 That had been sequentially removed from  
21 the procedure. And we had some dialogue about the  
22 process by which that was done. We didn't end up  
23 writing a Condition Report prior to that conversation  
24 about the timing of that removal. It was something  
25 that did not meet our standards at the station -- the  
26 timing of the removal did not. Again, that was to align  
27 it with the procedure changes that were made in June  
28 of 2014.

29 The discussion having to do with  
30 shelter-in-place was certainly not as crisp as it  
31 could've been. In fact, we came back to the table on  
32 a subsequent phone call and provided information  
33 directly out of our county's EAS messaging system,  
34 follow-on message for EAS broadcast and, in fact, read  
35 the language directly out of that follow-on message.  
36 And if you'd like, I could repeat that here today.

37 This is the EAS follow-on message that Sean  
38 referenced earlier having to do with shelter-in-place.  
39 And it actually describes the actions that the public  
40 should take for shelter-in-place. And while we  
41 recognize that, that discussion may not have been as  
42 crisp as it needed to be, we did initiate a follow-on  
43 dialogue to clarify that position on a subsequent phone  
44 call. And I can read you that language if you like.

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1           Okay. So this comes right out of the  
2 county EAS message. And it states, "If you live or work  
3 in an area that was asked to take shelter, go into a  
4 house or other well-built structure. Close all  
5 windows and outside doors. Close anything else that  
6 might bring air in from the outside, which would include  
7 HVAC potentially, such as fireplace damper, range fan,  
8 bathroom vents or clothes dryer vents. Turn off range  
9 fans and clothes dryers."

10           And it goes on to provide additional  
11 information that's not really relevant to the  
12 conversation here. But in short, the public is told  
13 to shelter, which involves shelter-in-place. Go  
14 indoors, close off access to outside air. And that was  
15 communicated subsequently.

16           MR. ELKMANN: So just so I'm clear. It's  
17 an important point in my mind.

18           MR. FAHNESTOCK: Yes.

19           MR. ELKMANN: In practice and during the  
20 exercise, and you contend in an actual event, when  
21 you're following Attachment 7.1, you would evacuate all  
22 sections zero to two miles and ten miles downwind and  
23 you would shelter-in-place remaining sections. And  
24 that message that you just referred to is what would  
25 be shared --

26           MR. FAHNESTOCK: That's correct.

27           MR. ELKMANN: -- as part of the protective  
28 action recommendation and Mr. Brown would evacuate  
29 sections where EPA PAGs are projected to be exceeded  
30 based on dose assessments.

31           That you looked at Attachment 7.2 and when  
32 you were just considering the downwind sector, that's  
33 when you decided whether it needed to be  
34 shelter-in-place or evacuation. Even though this  
35 would say evacuate sections where EPA PAGs are  
36 exceeded. And that's how you applied this guidance  
37 here in Attachment 7.2?

38           So you expected to evacuate zero to two,  
39 ten miles downwind, shelter all other sections, right?  
40 Shelter-in-place for all other sections, because  
41 that's what this guidance says. And the  
42 shelter-in-place comes into play there in terms of any  
43 discretionary decision is downwind?

44           MR. BROWN: So, yes. And let me clarify

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1 what I mean by downwind. So the dose assessment would  
2 show us which sectors are affected from the ongoing  
3 release. It could be more than one.

4 So when we say downwind, we're talking  
5 about those sectors where the dose assessment has  
6 projected dose rates above one Rem TEDE, five Rem CDE.  
7 So when I say I would consider sheltering the downwind  
8 sectors, I'm talking about those sectors that are  
9 potentially affected by the offsite release.

10 MR. DAPAS: So the point is, where it say  
11 evacuate sections where EPA PAGs are exceeded --

12 MR. BROWN: Yes.

13 MR. DAPAS: -- you would look at  
14 shelter-in-place, right?

15 MR. BROWN: As it pertains to the special  
16 circumstances on this slide, yes I would.

17 MR. DAPAS: Okay. And the expectation is  
18 that you evacuate zero to two miles, ten miles downwind,  
19 and you shelter all the other sections. So the  
20 discretionary aspect is those sections where the EPA  
21 PAGs are exceeded and you have the option of  
22 shelter-in-place?

23 MR. BROWN: Yes, I do.

24 MR. DAPAS: Okay. So that's how you  
25 applied that?

26 MR. BROWN: Yes. And like I mentioned,  
27 this Attachment really hasn't changed in all my years  
28 as a licensed operator --

29 MR. DAPAS: Okay.

30 MR. BROWN: -- it has not changed.

31 MR. DAPAS: And the government's found, to  
32 me, from listening to the discussion that you're  
33 planned training would reinforce that expectation. It  
34 sounds like there was a disconnect there on what your  
35 planned training was. Is that right?

36 MR. BROWN: Well, I've been taught that for  
37 years.

38 MR. DAPAS: No. I'm talking about --

39 MR. BROWN: Oh --

40 MR. DAPAS: -- change where you're  
41 implementing --

42 MR. BROWN: -- okay.

43 MR. DAPAS: -- Revision 18. I would offer  
44 from what I heard, would not be consistent with what

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1 you just said was how you would practically apply that  
2 direction in that box.

3 MR. GREGOIRE: Yes. We recognize we didn't  
4 -- in the revision process, we didn't do a good job in  
5 training on the subject of what we implemented. In the  
6 interview process, we specifically asked them what kind  
7 of training did you get on this? And it really wasn't  
8 very much training on it to make any changes in how they  
9 would use the table. So there was nothing that would  
10 alter how they would use it.

11 MR. HETTEL: So, it's worth mentioning, Mr.  
12 Dapas, that the training that had previously been  
13 provided on Attachment 7.2, which was not as involved  
14 and lengthy as what had been provided on the Section  
15 I spoke of that was removed, has not changed. That has  
16 not -- as Mr. Brown pointed out, has not been altered  
17 in the last period of time, I don't know that I could  
18 quote 17 years the way he did. But it has not --

19 MR. DAPAS: Okay.

20 MR. HETTEL: -- been altered.

21 MR. DAPAS: The reason why I am engaging to  
22 the degree I am on this is because you've got an  
23 inspection team that interacts with your staff, walks  
24 away with a certain understanding here, that's the  
25 basis for the apparent violations and the basis for the  
26 preliminary significance in determination, right?

27 And what I'm hearing here is how this  
28 guidance was intended to be applied, how it's always  
29 been applied, and how it would applied as a result of  
30 Revision 18 is that shelter-in-place is part and parcel  
31 of your protective action recommendation process. And  
32 the implementing of Revision 18 in accordance with  
33 NUREG0654 Supplement 3 didn't change that.

34 That's a disconnect from we obviously  
35 preliminarily concluded. That's why you're  
36 challenging that. But I'm really trying to understand  
37 how we were so disconnected here between the inspection  
38 team's findings based on interaction with the staff and  
39 what your position was communicated based on those  
40 interactions and what I'm hearing here today.

41 Now, going forward, it's important that we  
42 understand what your position is. And then we're going  
43 to have make a value judgment, quite frankly, whether  
44 we agree with that, whether we think that's reasonable,

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1 et cetera. Okay?

2 MR. GREGOIRE: Yes. And like I said, we  
3 agree that the communication process along the way, we  
4 certainly could've improved it. We could've gathered  
5 a better understanding of really what the issue was.  
6 Because it really wasn't until late where it was  
7 formulated that this is what the issue was.

8 Up to, I believe, around the February time  
9 frame, it was more of an information gathering, we were  
10 trying to address questions as best we could. So, we  
11 realize there are some areas for improvement in our  
12 interaction there.

13 MR. HETTEL: Because we didn't just -- to  
14 give you an example, Mark was -- his interaction asking  
15 us, and I thought, what I was getting from it was, okay,  
16 when we say shelter, do we mean shelter-in-place? In  
17 essence, what's our definition?

18 At least, that's what I thought you were  
19 getting and not being answered by four or five different  
20 other things before they finally answered your  
21 question. So, again, I'll take that back with our  
22 interactions during the inspection. I think that was  
23 a lot of what was going on.

24 We either, we weren't seeking to really  
25 understand the question well enough. And we were  
26 answer what we thought the question was. And then,  
27 maybe the inspector was receiving the answer to what  
28 he thought he was asking. And, again, they just kind  
29 of missed each other or something.

30 I wish I had a better explanation, but,  
31 again, I just saw an exhibition of it and you asked the  
32 question on shelter and, again, what the question was  
33 and even back to the procedures, I agree. When you say  
34 evacuate sections, okay how did we come up with  
35 evaluation on that?

36 But again, you hear and we got it  
37 consistent from the other Emergency Directors that we  
38 got, that's how they were trained. You got forward to  
39 Section 7.2 and you're going to evaluate. So, again,  
40 I wish I had a better explanation, but --

41 MR. DAPAS: I appreciate that. I have to  
42 tell you, I'm struggling with this shelter remaining  
43 sections to mean shelter-in-place here. When you're  
44 talking about a wind direction that doesn't impact

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1 those particular sectors and you're communicating what  
2 shelter-in-place is.

3 And I, quite frankly, am struggling with,  
4 is that truly what you intended? Or did you intend this  
5 monitor and prepare? Because the monitor and prepare  
6 makes sense to me. Sheltering-in-place every other  
7 unaffected sector here, I struggle with.

8 And doing that as a dose avoidance  
9 protective action recommendation when you already know  
10 the areas for which you have projected dose levels that  
11 would exceed the PAGs, you've already got the zero to  
12 two miles, you've got the ten miles downwind. And  
13 every other section, it was your intent, to  
14 shelter-in-place.

15 When you go back and you look at the generic  
16 guidance and it talks about monitor and prepare, and  
17 this is language that you had in your procedures, so  
18 I'm going to assume every exercise you conducted, you  
19 clearly communicated when you had a general emergency  
20 that all other sections, other than zero to two miles  
21 and ten miles downwind, you would shelter-in-place.

22 And that was part of your PAR. And we  
23 should be able to go back and validate that, that's what  
24 you recommended during the exercises.

25 MR. GREGOIRE: I do want to point out that  
26 the monitor and prepare language actually showed up in  
27 the 2011 NUREG documents. So prior to that time, it  
28 really wasn't -- maybe it had a different form, but that  
29 term monitor and prepare actually showed up in that  
30 document. And it is something that, like I said, we've  
31 considered as far as moving forward and how we're going  
32 to adopt that in our process.

33 MR. DAPAS: Yes. But the point there is  
34 that you always adopted the shelter-in-place for that.  
35 Whether in 2011 there's specific reference to monitor  
36 and prepare, what was your behavior? And your  
37 behavior, is what I'm hearing is the --

38 MR. GREGOIRE: That's correct.

39 MR. DAPAS: -- shelter-in-place.

40 MR. GREGOIRE: That's correct.

41 MR. DAPAS: Independent of this monitor and  
42 prepare language introduced in 2011. Right?

43 MR. GREGOIRE: That's correct.

44 MR. DAPAS: Which brings me to the curious

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1 question as to if you're discussing Supplement 3 and  
2 I heard at the beginning of the conference that if we  
3 met what Supplement 3 provided to us in guidance, you  
4 were being compliant to regulation, you adopted  
5 everything that was in Supplement 3, but yet, the piece  
6 on monitor and prepare was not adopted.

7 So, I guess I need to know more about why  
8 you're saying now that you did not adopt monitor and  
9 prepare and you're saying the shelter-in-place that you  
10 will do for the rest of remaining EPZ is the same as  
11 if it were to be for dose avoidance. When Supplement  
12 3, one of the major differences from Supplement 3 and  
13 any previous guidance was to identify the rest of the  
14 EPZ to monitor and prepare. And that was a major change  
15 and was identified as such numerous occasions before  
16 it was issued.

17 You adopted and you say you used everything  
18 else out of Supplement 3, but you didn't use that piece.  
19 What was the reasoning behind that and why you're  
20 continuing to say that your shelter-in-place for the  
21 remainder of the EPZ is the same as if it was for dose  
22 avoidance?

23 MR. CLIZBE: So we were working through the  
24 monitor and prepare language and working with the  
25 outside response organizations in adding it to the  
26 program. When this came up, we kind of stopped  
27 discussions to understand what the regulatory issue was  
28 last August.

29 And it is our intent to include the monitor  
30 and prepare language with offsite response  
31 organization collaboration. To be clear, we think  
32 it's an appropriate tool. So we're working towards it.  
33 We recognize we have some terminology differences.  
34 And we stopped after we were informed of the issue.

35 MR. ELKMANN: So you're saying you have not  
36 completed all of your changes to your PAR strategies?

37 MR. CLIZBE: The only one that we didn't --

38 MR. ELKMANN: With --

39 MR. CLIZBE: Yes.

40 MR. ELKMANN: -- the guidance provided in  
41 Supplement --

42 MR. CLIZBE: Yes. That --

43 MR. ELKMANN: -- 3 through August of last  
44 year?

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1 MR. CLIZBE: Correct. The additional  
2 language of monitor and prepare into the strategy  
3 impacts messaging, public documentation, and those  
4 kinds of things. And we have not done that yet.

5 MR. ELKMANN: I wanted to return a little  
6 bit to the training module. And to the recollection  
7 document that A.J. mentioned a couple of minutes ago.  
8 We did ask for the training module that underlies  
9 essentially your 7.2 for the PAR procedures, the  
10 version that was changed in June of 2014.

11 And going through there, we looked at it  
12 and noticed that nothing was added to that module that  
13 references the shelter had been deleted. And then in  
14 January of this year, we were provided the corrective  
15 action report which says that you intended to remove  
16 additional references to shelter, essentially, but you  
17 didn't complete the initial revision.

18 It kind of -- just to be clear, the current  
19 training for PARs, if you go through that computer based  
20 module, there is no explicit reference to this  
21 Attachment 7.2 and in particular to the notes  
22 associated with it. Is that correct?

23 MR. GREGOIRE: So we don't have a copy of  
24 the training material right here before us. It's  
25 something we can follow-up on, on that material.

26 MR. FAHNESTOCK: But it is important to  
27 note, Paul, that the training, the CBT is currently on  
28 hold and has been since that time.

29 MR. ELKMANN: And what training that you've  
30 given to your -- you have an annual training requirement  
31 for your Command and Control individuals. How have you  
32 been fulfilling it if your training module's on hold?

33 MR. FAHNESTOCK: So that was actually in  
34 progress at the time that we made the determination call  
35 and was near completion. So that did go forward and  
36 was completed with the current materials. But that was  
37 almost complete at the time that we noted the  
38 discrepancy and generated the Condition Report. Since  
39 then it's been on hold.

40 MR. ELKMANN: I think that's a big -- that  
41 really gets to the intent of whether Attachment 7.2  
42 would not be used if you intended not to reference it  
43 in training, that would make it difficult to understand  
44 why you think it would be used if it wasn't being trained

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1 on.

2 MR. DAPAS: I think I've heard the  
3 acknowledgment that your training was not what you  
4 expected here. If you are going to use 7.2 as part of  
5 the decision process and that's a tool that you have  
6 for your decision makers, that it would be appropriate  
7 to reference that in your training.

8 So what I'm hearing from the licensee is  
9 that while there's the recognition that the training  
10 module did not capture 7.2, it's your view that  
11 individuals that have served in that Command and  
12 Control function would in fact have exercised the  
13 guidance like you said, Mr. Brown --

14 MR. BROWN: Right.

15 MR. DAPAS: -- with the shelter-in-place  
16 considerations. That's what I've heard. Is that  
17 correct?

18 MR. BROWN: That's correct.

19 MR. DAPAS: And I know we haven't gone on  
20 to Slide 40, but just to make sure here, that if there's  
21 no release in progress, you still would've sheltered  
22 all the remaining sections with the shelter-in-place,  
23 even though there's no release, right? That's the  
24 expectation. That's what you exercised.

25 MR. BROWN: That's correct. I will walk  
26 through the rest of my procedure presentation --

27 MR. DAPAS: Yes.

28 MR. BROWN: -- if you're ready for that.

29 MR. DAPAS: Yes. Sure.

30 MR. BROWN: Okay. So the next slide -- so  
31 here's the case where we're looking at initial PARs in  
32 a general emergency with no release in progress. We  
33 do work through the Attachment 7.1 in a similar fashion,  
34 go down the general emergency path, evaluate release  
35 in progress. The answer to that is no.

36 And then we issue the Standard PAR,  
37 evacuate all sectors zero to two miles, ten miles  
38 downwind. And shelter remaining sections.

39 So even though we don't have a release in  
40 progress, our dose assessment will show us a downwind  
41 sector and that's what we use as a basis for issuing  
42 the Standard PAR. Any questions on that? Okay. So,  
43 I'll move on to a discussion about the updating PARs.

44 MR. GREGOIRE: We did just put this in here

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1 because there was a reference in the Inspection Report  
2 that with regard to how we handled a planned release  
3 and regard to Step 4.4.4 and in the last statement it  
4 said that it concluded that a discussion intended to  
5 assist offsite authorities is not equivalent to a  
6 protective action recommendation.

7 And we agree with that, but that's  
8 referencing those steps. You'll find that later on,  
9 we speak to Step 4.4.6, that does provide the protective  
10 action recommendation.

11 MR. BROWN: So next slide. So in the case  
12 that I was just discussing, if we're in a general  
13 emergency and we have no release in progress, and when  
14 we decide to either do a planned release or a release  
15 develops, I would be using the updated PAR section of  
16 the procedure.

17 And I'll point to Step 4.4.2, which says  
18 to determine the appropriate offsite PAR by comparing,  
19 again, your dose assessment data to Attachment 7.2.  
20 And use the guidance in Attachment 7.2 to make your  
21 decision.

22 So, updating PARs, I would do the same  
23 thing. I would get a dose assessment. I would look  
24 at Attachment 7.2 for any special circumstances. And  
25 then I'd move on in the procedure.

26 The next slide shows where Step 4.4.4 is,  
27 if we plan on doing a planned release, I would discuss  
28 with the offsites. So, I've already made my decision  
29 on the updated PAR at this point. What I'm talking to  
30 them about is we're going to do a planned release that  
31 has a finite duration to protect our primary  
32 containment. And we're going to do that as directed  
33 by the emergency operating procedures. After the  
34 Emergency Director, who is myself, has concurred with  
35 that action as the Control Room is wanting to do it.

36 But, as it relates to the offsites, what  
37 we're doing is we're giving them advance notice that  
38 we're going to update our PAR for this particular  
39 scenario of a planned release. And that helps them  
40 with their planning. And you can see the step language  
41 says to assist them with their protective action  
42 implementation.

43 The next step, when you turn the page in  
44 the procedure, I communicate the updated PAR with a new

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1 CNF form, Classification Notification Form, in Step  
2 4.4.6. So that's how we officially notify the offsites  
3 with that updated PAR. Any questions on that? Okay.  
4 Next slide, I'll move on to --- okay.

5 MR. DAPAS: Again, I see 4.4.4 that talks  
6 about discuss the proposed activity with offsite  
7 authorities, but show me where it is in your procedure  
8 again that you would make a PAR. Because --

9 MR. BROWN: Okay. So the PAR --

10 MR. DAPAS: -- I'm looking at that --

11 MR. BROWN: The PAR is actually made in Step  
12 4.4.2, so if I go back to the previous slide. I'm  
13 making my decision for the updated PAR in Step 4.4.2.  
14 Again, I'm going to be directed to consider special  
15 circumstances that might be defined in Attachment 7.2.

16 MR. DAPAS: Well, let's step back. You've  
17 got a planned release. This isn't updating a PAR based  
18 on new information. You have a planned release.  
19 Where in your procedure does it have you recommend a  
20 protective action -- provide a protective action  
21 recommendation associated with a planned release?

22 MR. GREGOIRE: So the title here, it says  
23 "Updated Offsite PARs Based on Projected Doses."

24 MR. DAPAS: Okay.

25 MR. GREGOIRE: So it's assumed that if  
26 you're having a planned release, you're going to have  
27 a dose to go with that.

28 MR. DAPAS: Okay.

29 MR. GREGOIRE: So it, again, we mentioned  
30 it earlier that it's not speaking directly, but it is  
31 inferred in our existing guidance that is there.

32 MR. BROWN: So whether we open the valves  
33 and do the release ourselves or whether the release  
34 occurs, it is a release. And so my path from that point  
35 is the same. We do a dose assessment, we look at the  
36 consequences, and we update the PAR. And this  
37 discussion with the offsites, Step 4.4.4, is to help  
38 them with that PAR implementation.

39 MR. HAIRE: Paul, did you have a question?

40 MR. ELKMANN: Yes. I'm looking at that.  
41 That presupposes you have a dose to look at. If you  
42 go to your dose assessment procedure, you have  
43 direction in there on how to estimate the radiological  
44 consequences of a planned release. But you don't have

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1 that monitor data.

2 You have dose assessment for a release  
3 occurring when you release by accidental reasons.  
4 You've got either direct field measurements or you have  
5 a radiation monitored number, which you put into dose  
6 assessment, but then you've got producing dose.

7 But do you have directions for doing that  
8 with a release for so many minutes at so much pressure  
9 and so much moisture in the air so that you actually  
10 arrive at a dose assessment for the projected release  
11 that you could trust?

12 MR. BROWN: So to answer your question, I  
13 think I'd have to defer to someone who's a little bit  
14 closer to the dose assessment, the nuts and bolts of  
15 entering the data into it. So I don't know, A.J., if  
16 you could answer his question?

17 MR. FAHNESTOCK: This is going to come into  
18 the category that Don mentioned earlier, we don't have  
19 a copy of the dose procedure here with us today. So  
20 it would be speculative of me to speak to that answer.

21 MR. BROWN: Okay. So, Paul, we can owe you  
22 that information. I think it's a very good question.  
23 I apologize that I don't have it off the tip of my  
24 tongue.

25 MR. FAHNESTOCK: So, let me make one other  
26 point. And that is that the software -- we can say this  
27 alters what I said earlier, but the software has the  
28 ability to run dose projections based upon our  
29 understanding and a Radiological Emergency Manager's  
30 understand of what those instrument readings are likely  
31 to be.

32 And given containment readings, they would  
33 be able to formulate that reasonably well, I would say.  
34 But, again, we don't have a copy of the procedure with  
35 us. So I can't definitively answer your question.

36 MR. CLIZBE: If I can, before we got on to  
37 -- it looks like you're getting into your concluding  
38 type of area here. Talking about some requirements.  
39 Will we be able to go over Slides 33, 34, and 35, related  
40 to the Control Room and exceeding the 10 mile EPZ?  
41 Because we kind of skipped over top of that as we went  
42 through the implementation procedures. Just to make  
43 sure we cover all that too because there is some items  
44 in there I think we need to hear about.

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1 MR. BROWN: So if I might, if I can finish  
2 my section, then we'll go back and finish Sean's section  
3 on the procedure changes. Because he's going to talk  
4 to that point.

5 MR. CLIZBE: Okay. Just so we don't forget  
6 about it.

7 MR. BROWN: That's right. Okay. I'll  
8 move this on then to the next slide. We're talking with  
9 the offsites, letting them know about the planned  
10 activity. Next slide, I'm completing the updated PAR  
11 related to the planned release.

12 And then the next slide is a copy of our  
13 Classification Notification Form. So what we've got  
14 here, I just wanted to highlight a couple aspects of  
15 this form. One is that very little of the information  
16 is automatically populated. Okay.

17 So the user, in my case, this is filled out  
18 by the Assistant EOF Manager and then presented to me.  
19 And we have quite a few discussions as we fill it out.  
20 But I'll highlight two aspects of the form that are not  
21 auto-populated.

22 When we select the emergency action level  
23 that we're in, in this case it's an intentional vent  
24 of containment, we then select the offsite release,  
25 yes, and put in the time of that offsite release  
26 starting. So that's not a default value. So I just  
27 want to highlight that.

28 And over in the PAR area, for general  
29 emergency, when we select the general emergency, this  
30 is all blank. Okay. All these fields you have to  
31 manually select each one. So, I'm making decisions on  
32 zero to two miles, we click the evacuate button. For  
33 the affected sections, I'm making decisions, shelter  
34 or evacuate.

35 All the way across the board. And we just  
36 wanted to highlight that as part of our communication  
37 with the offsites that nothing's really taken away from  
38 me. Okay.

39 And with regard to the procedure changes,  
40 it's my professional judgment that the procedure change  
41 did not put me in a corner as an Emergency Director.  
42 It didn't really change the way that I evaluate whether  
43 I shelter or evacuate. Right.

44 So the point I was trying to make is that

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1 when the Condition Report was written at our station  
2 for this violation, we entered it into -- we developed  
3 a compensatory measure for the Emergency Directors and  
4 emphasized the fundamentals of shelter-in-place as it  
5 pertains to a planned release activity or other rapidly  
6 developing activity.

7 And when I read that, I said, this doesn't  
8 change any -- I already have this direction. Why do  
9 I need a comp measure? That was my reaction. Okay.  
10 So I'm here to tell you today that I can use this  
11 procedure to arrive at a shelter or evacuation PAR based  
12 on circumstances.

13 And it really -- definitely there are  
14 changes in the procedure, but it doesn't change the way  
15 I look at it. It doesn't change the way that I perform  
16 when it comes down to it. So that's what I wanted to  
17 leave you with as it relates to the procedure changes  
18 and how I use them.

19 MR. HAIRE: Dave, this is Mark Haire.  
20 Before we leave this slide, I just want to I guess one  
21 more time to achieve clarity, when you click the button  
22 shelter for any one of those sections, it means the same  
23 thing to the op sites for making their protective action  
24 decisions, and that is that it means to go into the  
25 house, shut the doors, close the windows, turn off the  
26 ventilation as was read by A.J., regardless of whether  
27 it's a downwind sector or an unaffected sector. The  
28 word shelter on that form gets the same direction to  
29 the same recommendation to the op sites, which would  
30 translate to the same actions for the public, whether  
31 they're in an affected downwind zone or an unaffected  
32 downwind zone.

33 MR. CLIZBE: So you are correct. Okay, so  
34 I think you wanted to go back to slide 33, the procedures  
35 changes.

36 MR. ELKMANN: Before we leave that topic,  
37 can I ask one last question. I was interested in, you  
38 know, we talked a lot about Attachment 7.2 and how it  
39 existed a long time prior to June 2014 for most  
40 radiological emergencies. Did you look at whether in  
41 actual global exercises, you have any record of an  
42 exercise in which a shelter recommendation was about  
43 not using Attachment 7.2 vice 7.1 in evacuation? Post  
44 June 2014, you probably haven't run very many

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1 exercises, so you may not have much exercise history  
2 there, but certainly, you know, given your discussion  
3 that the Attachment hasn't changed in a very long time,  
4 and its understanding hasn't changed, one would expect  
5 some history on it actually being used in practice. So  
6 did you look at that?

7 MR. CLIZBE: Yes, well we didn't go back  
8 and look at that, and I think we went back 12 years to  
9 see if we had any scenarios that would have driven an  
10 emergency director to make a shelter--pick an actual  
11 recommendation, and we did not have a scenario that  
12 would have driven them to a shelter. The only one that  
13 we did have was during hostile action base exercise,  
14 where they issued a shelter, but it was inappropriately  
15 issued and critiqued in the team.

16 MR. ELKMANN: In the last 12 years, you've  
17 never had a general emergency with a release as part  
18 of an exercise?

19 MR. CLIZBE: With a release, but none a  
20 scenario drew an emergency director to make a shelter  
21 protective action recommendation for downwind.

22 MR. ELKMANN: When you have a release in  
23 progress and you're at a general emergency, you're  
24 evacuating zero to two miles and 10 miles downwind and  
25 sheltering all--

26 MR. CLIZBE: Sheltering, I'm talking  
27 about down winds, I'm sorry. Down winds.

28 MR. ELKMANN: But they have not run an  
29 exercise where they had to use this option for the  
30 downwind shelter?

31 MR. BROWN: Okay, so I would also clarify  
32 that I know we've had discussions during my role as the  
33 emergency director during drills. I definitely talked  
34 with my team about whether it's appropriate for shelter  
35 or evacuation, and that's why I've circled back to that  
36 comment many times during our presentation today.  
37 Whether we finally concluded that sheltering was more  
38 appropriate in that circumstance, I couldn't point to,  
39 but I know that's part of our discussion.

40 MR. ELKMANN: This is just a follow on  
41 question, and I appreciate your providing your  
42 perspective as a person that has acted as the emergency  
43 director right at the facility, but you're confident  
44 you've engaged others that would be in that position

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1 and they would apply the guidance in a consistent manner  
2 as we've heard from Mr. Brown?

3 MR. GREGOIRE: That's correct. Like I  
4 said, when it was asserted that our staff would not use  
5 that, it raised concerns for me as the reg affairs  
6 manager, you know. Are we not using it or can we not  
7 use it, and through the interview process we determined  
8 that they would all use that, even through a table top  
9 that demonstrated that they would use that for the  
10 unique situation, again, like I said, keeping in mind  
11 our EPZ is very--most folks are on the outside area,  
12 but yes, we would still use it for rack incineration.

13 MR. ELKMANN: All right, thanks.

14 MR. HAIRE: I guess--this is Mark Haire,  
15 and before we leave that topic, I guess one of the  
16 questions that's still lingering in my mind is, hearing  
17 the testimony of Mr. Brown for what he would do and what  
18 it means to him, and then understanding what we see in  
19 the training modules raises the question is the  
20 perspective that Mr. Brown has a legacy of better  
21 training in the past, and are new emergency directors  
22 going to continue that perspective, because the text  
23 in front of us doesn't lead us to logically draw those  
24 conclusions.

25 MR. GREGOIRE: That's a very good  
26 question, and it's something we will look at going  
27 forward, but I mean all of this, it raises our awareness  
28 that real people that could step into this look at it  
29 differently, and for us to re-evaluate and go back and  
30 see if there's some improvements we can do in this  
31 process. But we kind of wanted to see this play all  
32 the way out or not. We have currently a number of staff  
33 people right now that have gone through the previous  
34 training, but we agree with you on that point.

35 MR. ELKMANN: I believe you had some  
36 experience with that before.

37 MR. GREGOIRE: Yes, I think our youngest  
38 emergency director is about two years qualified, and  
39 then the most--and they all average out to somewhere  
40 around five to seven years. I'm sorry, should be  
41 specific; those were the emergency operating facility  
42 emergency directors.

43 MR. DAPAS: I think the important point I  
44 was asking Mr. Haire here, because you indicated

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1 Mr.--how do I pronounce your name?

2 MR. GREGOIRE: Gregoire, like jaguar.

3 MR. DAPAS: Okay, got it. I would ask if  
4 you own one here, but you know, you made the comment  
5 that when you heard from the team, that your emergency  
6 directors wouldn't follow the guidance, you wanted to  
7 know if there was a gap there. Well that was based on  
8 a read of the guidance and trying to follow it, not based  
9 as I understand it from interviews with emergency  
10 directors regarding, you know, how they would apply  
11 that, okay.

12 MR. GREGOIRE: Yes, we understood that.  
13 We knew that at that time, none of the staff had been  
14 interviewed, and it was a conclusion that was being  
15 reached, and it was just from the office as to how we  
16 were looking at it, so yes, we understand that.

17 MR. DAPAS: Okay, thank you.

18 MR. GREGOIRE: Are we ready to go back to  
19 slide 33? Okay, this is a point we wanted to emphasize  
20 again with regard to protective action recommendations  
21 that are beyond the emergency planning zone. This is  
22 a sectional procedure that refers to the updated  
23 sections for the EPZ. So in the inspection report on  
24 page 4, it states that we removed the responsibility  
25 of emergency coordinator in the control room to the  
26 shift manager to make protective action  
27 recommendations for areas outside the plume face. As  
28 we'll show, we actually didn't change anything in the  
29 procedure, and it's been that way since 1999. As far  
30 as the conclusion, we disagree on the conclusion  
31 itself. Again, I want to emphasize this section  
32 relates to updated PARs for beyond their emergency  
33 planning zone, and when--you know, one thing that we've  
34 learned from industry events is that accurate  
35 information to federal, state and local agencies is  
36 important as the event continues on, and that the  
37 further you get away from the plant's met towers, the  
38 more difficult it is to be accurate.

39 So what we're speaking about here is  
40 subsequent period where environmental measurements  
41 would permit inaccurate assessment. I want to point  
42 to the two sections in our emergency plan. As culled  
43 out in the inspection report, section 2.1 speaks to the  
44 responsibilities for the emergency direction and

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1 control and how that for a protective action  
2 recommendation, this is normally transferred from the  
3 shift manager to the EOF manager or the emergency  
4 operating facility manager. And then I also want to  
5 introduce section 5.5.2, which is language that's  
6 common to actually the previous version of the new reg,  
7 but we didn't change this, and we believe it's still  
8 consistent with the current version of the new reg that  
9 protective actions, these supplemental protective  
10 actions beyond those that you've already evaluated says  
11 these protective actions should be based on field  
12 monitoring data and dose projection in areas beyond  
13 those that have been evacuated.

14 So when you take section 2.1 and 5.5.2  
15 together, they help support what we have in the  
16 procedure, and our procedure incorporates both of these  
17 provisions and does not allow delegation of  
18 classification notification or PARs to any  
19 non-emergency director. Our procedure doesn't allow  
20 that. And that field teams are deployed as part of our  
21 technical support center or emergency operations  
22 facility, and so therefore the protective action  
23 recommendations would be based on the field team data  
24 that we would get for this beyond the EPZ.

25 Again, we want to emphasize that this is  
26 consistent with industry practice and that when you get  
27 beyond the EPZ, there's a lot more that's going to be  
28 required for the--to determine where you should  
29 actually make your PAR recommendations, and it is kind  
30 of scenario, if you can imagine that we're talking, you  
31 know, if it's still in the control room, it means to  
32 some of the guys that the emergency response  
33 organization hasn't been implemented yet, but it must  
34 be a rapidly progressing scenario, something pretty  
35 severe to be happening where the on shift folks would  
36 need to be handling--managing the event as well as  
37 trying to determine what the protective action  
38 recommendations are. Anyhow, I'll turn it over to Sean  
39 to walk through the procedure.

40 MR. CLIZBE: So this is Revision 17 and 18  
41 of the procedure, and nothing changed in this section  
42 of the procedural onsets since 1999, and it's aligned  
43 with section 5.5.2 of the emergency plan, and  
44 additionally it was aligned with section 2.9 of the

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1 procedure. The procedure doesn't delegate taking  
2 actions and responsibilities, but it transfers the  
3 responsibility to a qualified emergency director with  
4 augmenting staff support. Additionally, use of field  
5 team data to formulate protective action  
6 recommendations beyond 10 miles is in alignment with  
7 our emergency plan, and aligns with a large majority  
8 of the industry.

9 So this is supported by the EP FAQ 2013 TAC  
10 004; essentially not burdening the on shift or control  
11 rooms staff decision makers, minimizing the demand on  
12 them so they can stay focused on mitigating the  
13 emergency at hand. Additionally, the accuracy of PARS  
14 beyond 10 miles for those initial folks, it's going to  
15 affected beyond 10 miles, and you have the potential  
16 of actually evacuating people into the plume zone  
17 without, you know, a real accurate analysis. And our  
18 dose assessment team would be responding in their  
19 approved times, and RPL teams would be responding in  
20 their approved times in accordance with our plan, and  
21 we'd use that data to support our protective action  
22 recommendation beyond the EPZ.

23 MR. GREGOIRE: Any other questions on  
24 that? If not, we'll move on to--

25 MR. HAIRE: This is Mark Haire; I've got  
26 a question on this. So I think I may have pointed this  
27 out earlier, but our primary concerns here with this  
28 text, and I appreciate that you're highlighting the  
29 text was also present in Rev 17; we may not have caught  
30 that, but the concern that we had with the text,  
31 regardless of how many years it's been present, is that  
32 if I'm the emergency director by default in the control  
33 room because it's early in the event, and your emergency  
34 response facilities have not stood up and are not ready  
35 to receive a transfer of the emergency director  
36 authority, it's possible that a rapidly progressing  
37 severe accident could put the control room staff in the  
38 position of needing to face protective action  
39 recommendations for outside of 10 miles. And if I'm  
40 your emergency director in the control room, this  
41 procedure puts me in a quandary--as we read it, it puts  
42 me in quandary of saying in order to follow the  
43 procedure, I've got to wait until the EOF and the TSC  
44 are stood up before PARS can be made, and I don't think

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1 that's consistent with what the guidance and  
2 requirements are.

3 MR. GREGOIRE: I'd like to say two things  
4 with regard to that. The first is accurate PARs. When  
5 you get beyond EPZ, it's very difficult for the control  
6 room without having the benefit of field teams to be  
7 able to give accurate PARs, and I think accurate is a  
8 piece of the protective action recommendation you want  
9 to continue to demand of a protective action  
10 recommendation. And the second point is, and I  
11 really--I understand the concern; I guess maybe if this  
12 moves on, I would ask maybe a consideration for a  
13 generic approach to this, because I believe this is the  
14 common industry practice, and this may reflect on the  
15 generic approach and how you deal with these updating  
16 PARs beyond the EPZ and dealing with accuracy and the  
17 demands you're putting on the control room in a very  
18 short period of time and the concern for nuclear safety,  
19 as a matter of fact. So I guess I would just ask for  
20 some consideration, that maybe a generic approach, if  
21 you continue to move forward and want to raise this as  
22 a finding for us.

23 MR. HAIRE: Well is it your view then that  
24 other licensees have the same type of language?

25 MR. GREGOIRE: Yes.

26 MR. HAIRE: Okay.

27 MR. GREGOIRE: Very similar, yes.

28 MR. HAIRE: Got it. I'm trying to  
29 envision a scenario rapidly progressing where you have  
30 a release of such a magnitude here that you've got  
31 indications based on dose projection that you're  
32 exceeding the tags at 10 miles and they need to look  
33 at protective action recommendations beyond 10 miles.  
34 That's what we're talking about.

35 MR. GREGOIRE: And the left side of the  
36 chart for the severe accidents. So with accidents that  
37 are so severe, early in the stages, and that's how we  
38 answered the FAQ, where it is--the probability begins  
39 to increase as to PAGs being exceeded beyond 10 miles,  
40 those type of accident scenarios, sequences in which  
41 the control room would be in the position for  
42 determining that PAR for that type of accident in the  
43 initial stages and getting the initial dose projection  
44 that said it exceeds one Rem beyond 10 miles. That's

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1 what we're discussing here, and it would appear as if  
2 what you had here, procedures would permit the control  
3 room emergency director to provide that PAR up to 10  
4 miles.

5 MR. HAIRE: Yes.

6 MR. GREGOIRE: But await the TSC and EOF,  
7 even though the dose projection indicates it is  
8 exceeded beyond 10 miles greater than one Rem.  
9 Now keep in mind that the MET tower that we have is right  
10 there at the station; you get beyond the 10 miles and  
11 you're not going to find MET towers beyond the EPZ that  
12 you would find here. And as Sean had mentioned, there  
13 was some concerns for are you evacuating the right  
14 people, are you moving them into a plume area when maybe  
15 they shouldn't be moving into that area. So again, I  
16 would just emphasize the need for accuracy beyond that  
17 EPZ, as well as reducing the burden on the control room  
18 to have to try to go figure it out, geopolitically  
19 getting all the information without having the  
20 benefit of a field team to make those accurate PARs.

21 MR. DAPAS: But what I hear you saying  
22 then is it would be appropriate for the shift manager  
23 in this case to wait until the TSC or EOF are manned  
24 is what you're saying?

25 MR. GREGOIRE: Yes.

26 MR. DAPAS: And I guess our view when we  
27 have to look at this is, you know, are the scenarios  
28 where that shift manager may have to make a decision  
29 because of the severe accident nature there? I  
30 understand accuracy of information is paramount, but  
31 it's got to be balanced with what your dose projection  
32 tone based on--so I understand the point, you would  
33 expect in most scenarios that the TSC would be manned  
34 or EOF to make a more informed assessment.

35 MR. GREGOIRE: We do indicate to the  
36 offsite responsible organizations as well that dose PAG  
37 may be exceeded, and the additional notes on the  
38 classification notification form if that was the case,  
39 they're trained to identify that response and  
40 understand.

41 MR. DAPAS: Well I assume too you have  
42 confidence in your shift manager if they found  
43 themselves in that situation, they're going to make a  
44 recommendation that they think is appropriate and not

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1 say well, the TSC isn't manned yet, the EOF isn't manned  
2 yet, and I'm going to wait on that. And even though  
3 the procedure might imply that could potentially be  
4 problematic from the way the procedure is written, I  
5 sure would hope that your shift manager as the emergency  
6 director is going to do what they think is the right  
7 thing to do there, right?

8 MR. HETTEL: I would say yes based on what  
9 we've learned from Fukushima and how the operators and  
10 what they were thinking, their mindsets. So yes.

11 MR. BROWN: So if I could add just one  
12 clarifying point. I think what's been said is  
13 accurate. I was a shift manager and as an emergency  
14 director, I feel that it's my duty to accept the  
15 responsibilities as soon as my center is manned. For  
16 the control room, they're directed to notify the  
17 offsites that PAGs may be exceeded beyond 10 miles, and  
18 that's what they do. The rest of this procedure, it  
19 is hard for them to implement from the control room.  
20 They need the assistance of the teams and the additional  
21 data that the teams can develop to be accurate in those  
22 PARs. So that's really where we're trying to say is  
23 the balancing act is timeliness and accuracy, okay.

24 MR. ELKMANN: If you were earlier in a  
25 severe accident or in progress and you were just  
26 starting to notify the emergency response  
27 organization. So what kind of delays, worst case,  
28 would we be talking about while we're waiting for the  
29 ERO and then they dispatch an environmental survey team  
30 and waited to come in?

31 MR. CLIZBE: Our approved response time is  
32 90 minutes.

33 MR. ELKMANN: That's for staff in the  
34 facility?

35 MR. CLIZBE: Yes.

36 MR. ELKMANN: And then how long further  
37 after that to get a team out and a team to the northeast  
38 where the most population is?

39 MR. CLIZBE: I'd be guessing right now to  
40 give you that. I can get it for you if you like.

41 MR. ELKMANN: So I think that's where the  
42 procedure leads us to believe that you've removed--I  
43 understand, Dave, when you're saying you feel as if you  
44 would do the right thing, but the procedure, and that's

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1 what we have to base a lot of what we're deciding upon  
2 and discussions with staff, the procedure doesn't  
3 provide that latitude; the procedure directs the  
4 control room emergency director to wait for the TSC and  
5 EOF to be activated. So it does not provide that  
6 latitude, and I'm sure that's the way it's trained upon  
7 and what you're exercises have shown. So I think  
8 that's our--that's the underlying concern, is that the  
9 procedure provide a little bit more latitude with that  
10 control room emergency director, rather than directing  
11 them to await the TSC and EOF activation as we're  
12 discussing here now, 90 minutes during a severe  
13 accident. That would be our concern.

14 MR. GREGOIRE: And we understand that, and  
15 like I said, knowing that we've had this in place for  
16 a number of years, and we were concerned; are we unique,  
17 are we not; why are we treating this differently than  
18 many other utilities. And we come to find out that  
19 we're in the majority of the way the industry treats  
20 this matter. So it's something that we can strengthen  
21 the process, we agree. And what's happening, we've  
22 done some background information with it, it's  
23 something for us to follow up on I'm sure to find out  
24 if clarification may be needed in this area.

25 MR. ELKMANN: I didn't appreciate earlier  
26 when I made the rather definitive statement about what  
27 I would expect the control room shift manager to do.  
28 I didn't appreciate that it was that directive in  
29 nature, so.

30 MR. HAIRE: This is Mark; let me just add  
31 to the discussion that while we appreciate the desire  
32 for accuracy and the balance between delay versus  
33 accuracy, I'll note that your procedure, the one we're  
34 talking about right now, 13.2.2, in section 4.4 it has  
35 a note for updating PARs, and the note says "do not delay  
36 recommending offsite protective actions while waiting  
37 for field monitoring results to verify accuracy of dose  
38 projections," and that's consistent with I think the  
39 way the Agency views the need for early notification  
40 as opposed to delay for accuracy.

41 MR. GREGOIRE: Yes, if you actually will  
42 go a little bit further down in the procedure there,  
43 4.4.3--I'm sorry, 4.4.2.(b). "If dose projections or  
44 survey results indicate a PAG may be exceeded beyond

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1 the 10 miles, then refer to section 4.5." So it  
2 actually kicks you out of that section and you go to  
3 the other section, which then treats it in a little bit  
4 different manner. So give it over to Sean, I mean to  
5 Kurt.

6 MR. GOSNEY: We looked at the different  
7 opinions around this issue and the significant amount  
8 of time that's went to it. We asked ourselves what  
9 could we have done differently. Since this issue  
10 originated in August of 2014, with question regarding  
11 our implementation of the NUREG, Supplement 3, we  
12 looked for areas we could improve our performance  
13 related to implementation of new federal guidance.  
14 The first one I'd like to speak to is engagement with  
15 the NEI Emergency Planning Working Group. This  
16 working group provides an opportunity for  
17 benchmarking, industry alignment and engagement with  
18 NSIR on key issues affecting the industry. For many  
19 years in the past, we relied on USAs as our  
20 representation of voice rather than regularly  
21 attending ourselves. Over the last year though, we've  
22 significantly improved our engagement with this  
23 working group with regular attendance. In fact, our  
24 Chief Nuclear Officer, Mr. Brad Sawatzke, has  
25 recently been selected as the chair for the group, and  
26 we feel this will be significant in the world of EP going  
27 forward.

28 MR. ELKMANN: My former job as a deputy in  
29 the Office of Nuclear Security and Response, I've  
30 attended several of those nuclear security, I should  
31 say emergency preparedness working group, and I didn't  
32 appreciate that your representative for Columbia was  
33 USA?

34 UNIDENTIFIED SPEAKER: Utility Service  
35 Alliance.

36 MR. ELKMANN: Utility Service Alliance.  
37 I didn't appreciate that; I assumed that one of your  
38 EP managers--because I agree, that's a very valuable  
39 forum for qualification, like on this issue we were just  
40 talking about. I could see that being a forum where  
41 the industry raises that for consideration.

42 MR. GOSNEY: Yes, this--like I said, our  
43 CEO is now chair, I think he's been to three meetings  
44 this year, if not two or three, and over the past year

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1 we've had regular attendance there.

2 MR. ELKMANN: Okay, thanks. So he took  
3 over Tom Joyce's spot on that? Okay.

4 MR. GOSNEY: That's correct. And the  
5 next thing I'll speak to is engagement with NSIR itself.  
6 Section 2 of our guide 1.2.19 provides guidance on when  
7 prior discussion with NRC headquarters is encouraged  
8 before making changes to an emergency plan. While the  
9 guidance in this case doesn't specifically deal with  
10 the types of changes we made, we do feel that this would  
11 have been an area that we could have pursued maybe in  
12 this case, and certainly we'll look at that in the  
13 future if we have some key implementation of guidance  
14 involved in our emergency plan in the future.

15 MR. GREGOIRE: I'm Don, I'd like to just  
16 speak to the last one, since this falls under my  
17 organization. While we're not in total agreement with  
18 many of the items in the report, especially those that  
19 reference conversations over the last nine months, and  
20 the interpretation of our procedures, we recognize that  
21 we, Energy Northwest, had difficulty in really gaining  
22 an appreciation or understanding for what was the issue  
23 underlying the NRC's concern. And we also had  
24 difficulty effectively communicating our response or  
25 position trying to, as I mentioned earlier, trying to  
26 fit the discussion into the regulatory guidance,  
27 especially with planned pub releases, but we have been  
28 looking at how we can improve that in our area,  
29 especially with having more direct communication, even  
30 if we have to come down here to try to have more  
31 face-to-face discussions to try to really understand  
32 what was going on.

33 We're taking that back as a need for my area  
34 to improve the engagement and understanding of issues,  
35 you know, speak--you know, listen before you speak, do  
36 a much better job at that. So we're working on how we  
37 can improve that interaction. We'd certainly welcome  
38 any comments or feedback as to how we can improve that  
39 so that we can truly get to the root of the concerns,  
40 and that we can be--especially in this subject here  
41 where you know, it is to some degree a little bit  
42 complex, but we can clearly communicate our positions  
43 and our role with that and interpretations of our  
44 procedures and what not.

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1 MR. CLIZBE: I just want to kind of add on  
2 a little bit and I'll do so as the manager of the  
3 department, you know, it's my responsibility to  
4 understand what the issues are and get the clarity that  
5 I needed, and I may have some opportunities in there  
6 to really understand what the inspector was requesting  
7 from Columbia, so just to add on to what Don was saying.

8 MR. GREGOIRE: So in wrapping up our  
9 discussion, and like I mentioned, we don't believe we  
10 have a performance deficiency in that the inspection  
11 report we no longer provided a mechanism for making a  
12 shelter-in-place protective action recommendation,  
13 and again, we pointed to Attachment 7.1 and 7.2 as  
14 providing that means. With regard to no longer having  
15 protective action in the event of a planned release,  
16 as we mentioned, we would the use the flow chart in  
17 Attachment 7.1 since a planned release would result in  
18 a release in progress, we'd use that flow path to help  
19 us consider the recommendations, protective action  
20 recommendations which could include also  
21 shelter-in-place. Next.

22 The inspection report mentioned that we  
23 removed the responsibility; I won't belabor that point.  
24 In regards to the next slide--and if I'm moving too  
25 fast, this is just a wrap up of all of this, but in the  
26 next two slides deals with the specific statements  
27 regard to our non-compliance with our emergency plan.  
28 Let me just spend a little bit more time on that. So  
29 the first one points to Emergency Plan Section 2.1, and  
30 again if you consider the text in Section 5.5.2, you'll  
31 find that it does include the need for field monitoring  
32 for making that assessment. Now our field monitoring  
33 is part of our augmented organization, and that our  
34 procedure correctly refers to the protective action  
35 recommendation being developed with the assistance of  
36 the field teams, which would be an augmenting function.

37 With regard to the Section 5.5, again we'd  
38 just like to emphasize here that Section 5.5.2 and  
39 additional text in Section 5.5 help formulate the how  
40 you actually develop shelter-in-place considerations.  
41 Section 5.5 states that protective action guides  
42 discussed in Section 5.5.2 provide that pre-planning  
43 guidance; Section 5.5.2 points to the federal guidance,  
44 and again we walked through how we would have used the

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1 guidance to develop what we have in place. Again, I  
2 would just like to summarize that although we may have  
3 some differences about how we can improve the  
4 procedure, how we can communicate more clearly on this  
5 matter, we still believe that there's not a performance  
6 deficiency involved here.

7 MR. DAPAS: One comment. I think you  
8 certainly have explained the basis for your conclusion  
9 that you need to wait for field information if you will  
10 from your dose sensitive measuring teams that go out  
11 in the field. I think we talked about your scenarios  
12 where your dose projection is such that you may need  
13 to consider PARs beyond 10 miles; you'd indicated that  
14 your approach is consistent with how the rest of or the  
15 majority of the industry approaches that, and so we'll  
16 look at that. But you know, your comment about which  
17 requires field monitoring an augmented function to  
18 support conclusions, I'm not sure we're in full  
19 agreement right now with that.

20 MR. GREGOIRE: I understand.

21 MR. DAPAS: But I do think we may want to  
22 look at does your emergency director, if it happens to  
23 be the shift manager, for those rapidly developing  
24 scenarios where the dose projection would say the  
25 dosage is going to be greater than the EPA PAGs at 10  
26 miles, does he have the latitude to make what he thinks  
27 is the right decision there if you find yourself in a  
28 case where the TSC is not manned, the EOF is not manned,  
29 or as I think Paul mentioned, you know, it's going to  
30 take a while before that field monitoring team,  
31 depending on the wind direction, gets you some  
32 meaningful data from out in the field. So you need to  
33 consider that I think.

34 MR. GREGOIRE: Right. We will take that  
35 as an action measure to follow up with our shift  
36 managers on their decision process. Okay, in regards  
37 to the significance assessment, again this makes it a  
38 little bit difficult to speak to in that the statement  
39 is " the licensee could no longer recommendations for  
40 the public to shelter-in-place when appropriate, and  
41 that limitations could result in delays in making  
42 appropriate protective action recommendations." As  
43 mentioned before, we clearly are, you know, believe  
44 that we have guidance in place, and we understand we

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1 are going to go back and talk to our shift managers about  
2 the possibility for generating protective action  
3 recommendations for beyond EPZ.

4 And we're also--as a matter of fact, we're  
5 also engaged with the EP Working Group to help have  
6 further dialogue on this. So if you still agree that  
7 there's a performance deficiency here, I do want to make  
8 just a few comments with regard to significance. One,  
9 in using the tool from NUREG-0654, which encourages  
10 site-specific development, our protective action  
11 scheme is site-specific; it was developed in  
12 cooperation with our offsite response organizations,  
13 the county, the state, Department of Energy. We've all  
14 agreed to the protective action recommendation scheme  
15 that we have currently in the procedure. In  
16 consideration of our topography, our very low  
17 population density, our very short evacuation times,  
18 evacuation is the most appropriate PAR to ensure that  
19 dose is avoided in most cases.

20 While we understand that a procedure could  
21 be viewed and interpreted differently, interviews with  
22 our staff, you know, emergency directors conclude that  
23 the use of the procedure can in fact help them reach  
24 their shelter-in-place consideration if the conditions  
25 warranted it. Just a few examples we brought up here  
26 with regard to other stations, I don't have all the  
27 details, I'm not trying to state that I know all the  
28 facts behind it, but just a little bit of comparison.  
29 Here is, for example, in 2015, a Region I plant modified  
30 their procedures that would in essence recommend  
31 evacuation of downwind areas and many more emergency  
32 response planning areas than intended. It was  
33 determined to have very low safety significance.

34 And there's another example, two Region IV  
35 plants, they both had a similar issue or concern that  
36 is not the same as Columbia, but they failed to follow  
37 their federal guidance, EPA guidance, and they  
38 introduced automatic extended protective actions  
39 for--I'm sorry, based on plant conditions and changes  
40 in wind without consideration for dose. In contrast,  
41 just a couple of stations that did receive low to  
42 moderate safety significance findings, white findings,  
43 recently in 2015, a Region IV plant totally removed  
44 their PARs or protective action recommendations for a

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1 certain portion of their EPZ, and secondly a Region III  
2 plant, they had changed their PAR procedure to  
3 eliminate decision-making process for PARs beyond EPZ.

4 And again, I want to emphasize that  
5 Columbia still has protective actions in place for all  
6 sections in the emergency planning zone, and in most  
7 cases, evacuation would be the clear choice; however,  
8 for a very few cases, shelter-in-place would still be  
9 a consideration. For those very few cases at Columbia,  
10 Attachment 7.2 would have us consider  
11 shelter-in-place. So in summary, it's our position  
12 that Columbia continues to meet the emergency plan  
13 commitments, that all considerations for  
14 shelter-in-place found in the applicable federal  
15 guidance and NUREG-0654 Supplement 3 2011 version were  
16 addressed and are implemented in our procedure, and  
17 that Supplement 3 clearly states that compliance with  
18 it demonstrates compliance with 50.47(b)(10). And  
19 lastly, I'd like to just emphasize that in our case,  
20 public health and safety is appropriately protected  
21 with our current protective action scheme.

22 MR. DAPAS: Can I ask a clarifying  
23 question, Mr. Gregoire? Just to make sure I  
24 understood, your point here in talking about the Region  
25 I plant for which the assessment was very low safety  
26 significance--

27 MR. GREGOIRE: Yes.

28 MR. DAPAS: --in comparison to whether it  
29 was low to moderate safety significance here, Region  
30 III plant and the Region IV plant, which is the criteria  
31 for a white finding. You were saying that if we decide  
32 the performance deficiency remains valid, that you  
33 think the safety significance, given these examples,  
34 is more in keeping with the green finding versus white?  
35 Is that the overarching point?

36 MR. GREGOIRE: Yes. If you continue to  
37 believe there's a performance deficiency here, we don't  
38 believe that the--in our situation and our  
39 circumstances compare to the plants that have the white  
40 finding, but are more characteristically more  
41 associated with those that are in the green area.

42 MR. DAPAS: Okay, thank you.

43 MR. GREGOIRE: So with that, I'll turn it  
44 over to Grover.

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1 MR. HETTLE: Okay, thanks. In closing,  
2 I'd like to emphasize this issue has been under review  
3 since last August, and it's really taken us some time  
4 to understand all the facts associated with it, and even  
5 you know, per our discussion today, we can still see  
6 that maybe we're still gaining some understanding with  
7 this, so. But as we stated, our procedures were  
8 developed based on a good faith effort to implement the  
9 federal guidance, and it was done in collaboration with  
10 the offsite response organizations, with the best  
11 interests of public safety in mind. We believe our  
12 procedures continue to provide an option for sheltering  
13 in place should the conditions warrant it to prote4ct  
14 the public from the effects of a possible radioactive  
15 release.

16 And as Don stated, we do not believe that  
17 there is a performance deficiency here, but again, if  
18 it is determined that there is one, we do believe that  
19 it wouldn't raise to a level greater than green. I'll  
20 also state though that we've talked about a couple of  
21 things here that we know are some strong learnings for  
22 us to go back and reflect on and take some actions on  
23 because again, I think they were just reiterated here  
24 today when we talk about the clarity of our procedures.  
25 And I thought one perfect example, again, with the  
26 section or the Attachment 7.1 that talks about I think  
27 it was evacuate sections instead of evaluate. When we  
28 talked to all of our emergency operating facility  
29 directors, if they came to the conclusion it was to  
30 evaluate that, we'd go to that.

31 And again, I'll state too when we talked  
32 to them, we understand that wasn't a perfectly sterile,  
33 you know, test case study because again, we had already  
34 started through the discussions and already put out the  
35 communications. So again, we understand it wasn't a  
36 perfect case study, but also I would say the  
37 interaction, their interface skills definitely we've  
38 got to improve there because again, just a simple  
39 question asked and trying to get us to answer, you know  
40 the shelter, the same thing with shelter in place, you  
41 know, the same. We kind of went through quite a bit  
42 of iteration before we finally answered the question  
43 that was asked. So again, we understand that, and  
44 we'll take appropriate actions to ensure that, again,

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1 that we get better in those areas with that. This does  
2 complete our presentation; we do thank you for your  
3 time.

4 MR. HAIRE: Okay. So at this point, I  
5 think we're at the point in our agenda where we're going  
6 to step out for a separate NRC caucus next door, so those  
7 members of the NRC who are participating over the phone,  
8 I believe you've been informed what bridge line to tie  
9 into. Members of the public can just remain on the  
10 bridge that they're on, and we will re-engage probably  
11 in about 15 to 20 minutes.

12 MR. DAPAS: And the intent of that caucus  
13 is to determine whether we have any additional  
14 questions, not to determine the significance, but to  
15 make sure we have all our questions answered. Thank  
16 you.

17 (Whereupon, the above-entitled matter  
18 went off the record at 4:44 p.m., and resumed at 5:17  
19 p.m.)

20 MR. HAIRE: Okay this is Mark Haire with  
21 the Nuclear Regulatory Commission, just letting the  
22 folks on the phone know that we are ready to resume the  
23 conference now that we've completed our separate NRC  
24 caucus. And with that in mind, we did develop a follow  
25 up question that we wanted to ask, and the context of  
26 the question is that we as an inspection team, beginning  
27 in August, July-August when we received the proposed  
28 change, or the change that had been implemented to Rev  
29 18, we began to read it, to engage the Columbia staff  
30 to try to understand what does the change mean, what  
31 was the intent behind the change. We had dialogue  
32 about that, and interactions periodically for several  
33 months, so through the January-February time frame, we  
34 came away from those discussions with the understanding  
35 that the intent that Columbia had for implementing that  
36 change, and their understanding--your understanding of  
37 the basis for the change, which was interpretation of  
38 Supplement 3 guidance based on your evacuation time  
39 estimates that evacuation was a better PAR given your  
40 evacuation time estimates for rapidly progressing  
41 events.

42 Our understanding of your intent for all  
43 scenarios was to remove shelter from your procedure and  
44 from your training, and to stick with evacuation

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1 exclusively based on your evacuation time estimates and  
2 your interpretation of Supp 3. And we engaged, we  
3 asked the questions, we understand that our questioning  
4 impacted your processes for continuing those changes,  
5 how you engaged the offsites about whether you were  
6 going to change your wording from shelter to monitor  
7 and prepare and those sorts of questions. What we want  
8 to know here is what was your intent with the change  
9 that you began implementing with Rev 18, and had we not  
10 asked some questions, what would your procedures and  
11 your training look like today? That's basically our  
12 question.

13 MR. CLIZBE: So the intent of the  
14 procedure change was to implement the supplemental  
15 guidance. So the intent of the procedure change was  
16 to implement the Supplement 3 guidance; that was the  
17 intent, and what was your second question on training?

18 MR. HAIRE: Right, so given that intent,  
19 was it your intent to remove guidance to provide shelter  
20 in PARs completely from your procedures and your  
21 training? We came away from our discussions with you  
22 thinking that was your intent.

23 MR. CLIZBE: That was not the intent of the  
24 procedure revision.

25 MR. GREGOIRE: And might I add, in the  
26 phone call in February, when we walked through the  
27 procedure with the NRC team, that we showed them where  
28 this procedure still had it in place. And so we had  
29 communicated that we hadn't taken out that portion of  
30 the procedures, and that it still was there. So we had  
31 the conversation in February, so I guess we were hoping  
32 from that conversation that the staff could see that  
33 as well, that we hadn't removed that.

34 MR. DAPAS: That doesn't get to the intent  
35 though, frankly. I mean, that just is where you were  
36 at the time. And what we're trying to understand here,  
37 is we clearly had the inspection function here, at the  
38 inspection interface here, the team that was involved  
39 were talking to members of your staff were clearly left  
40 with the impression that based on your interpretation  
41 of NUREG-0654 Supplement 3, that it was the station's  
42 intent to remove shelter in place as a mechanism for  
43 developing a protective action recommendation, and  
44 we're trying to understand was that the intent, and then

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1 when we engaged and asked questions, you stepped back  
2 and revisited that and said okay, and you looked at what  
3 your training modules says--we're just trying to  
4 understand what was the intent there.

5 That doesn't get to whether or not you had  
6 that mechanism in place; I think you've explained to  
7 us and walked us through how the mechanism still exists  
8 and how it would be applied, but it certainly was our  
9 understanding, at least the team when they went on site,  
10 that it was clearly the station's intent to remove  
11 sheltering in place given your evacuation time  
12 estimates and given your interpretation of NUREG-0654  
13 Supplement 3, not as just being applicable to a  
14 rapidly developing event, but for all scenarios.

15 MR. CLIZBE; So it was not our intent to  
16 remove shelter in place from our procedure.

17 MR. DAPAS: Okay. Do you have any other  
18 questions? Okay thanks. With that, I'd like to  
19 close. Clearly, you've communicated your basis for  
20 concluding that reference to Attachment 7.1 and 7.2 are  
21 your emergency plan implementing procedures, provide  
22 a mechanism to consider shelter-in-place as a  
23 protective action recommendation. I think it's  
24 important that you look as an organization, that you  
25 provide the tools for the staff to be successful. Does  
26 training reinforce those expectations and concepts? I  
27 think you've heard the team explain why when they looked  
28 at this evacuate sections where EPA PAGs are projected  
29 to be exceeded, and you had reference to 7.2, one could  
30 interpret that where you go to 7.2 to validate the PAG  
31 numbers if you will, right, and this reference to and  
32 shelter remaining sections and you know, that was meant  
33 to mean actually shelter-in-place and not this monitor  
34 and prepare, and you know I heard what you said the  
35 county supervisor would read, and that's the bottom  
36 line.

37 That is the outcome when you communicate  
38 that PAR about sheltering the remaining sections, that  
39 it would translate to that county supervisor actually  
40 communicating what shelter-in-place means, and that  
41 clearly is in the context of, you know, a dose  
42 avoidance. You know, I appreciate your statement  
43 there that it was not the intent to remove that, and  
44 we got some conflicting information based on the

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1 inspection function. And I appreciate your  
2 acknowledging that there were lessons learned  
3 regarding the inspection interface; well we have some  
4 learnings on our side as well, and I think you know,  
5 Mark, we'll step back and look at are there learnings  
6 in terms of how we communicated, what we communicated  
7 when, who it is that we communicated our preliminary  
8 conclusions to, our observations, et cetera, and what  
9 was the interaction subsequent to that. As you said,  
10 this issue's been under review since last August; we  
11 should be able to reach closure on an issue sooner  
12 than--we were coming up on, you know it's June here,  
13 you know, what 10 months, and we're still trying to  
14 figure out where are we with this issue, what are the  
15 apparent violations, what is the safety significance.  
16 So collectively, we've got--we spend resources in a  
17 regulatory conference. We spend resources; if this is  
18 something that could have been resolved sooner, we need  
19 to, both of us, look at the both sides to look at that  
20 and see if there are any learnings there.

21 You know I heard you, Mr. Gregoire, mention  
22 that the procedure could be interpreted differently,  
23 and based on your interviews, you indicated that it can  
24 be implemented as intended regarding the  
25 shelter-in-place for downwind sectors. You don't have  
26 any exercises right where you actually challenged the  
27 response team with that; it's based on discussions that  
28 you had with some of your emergency directors. But  
29 when you look at the specific wording, and my  
30 understanding of your--the importance you place on  
31 procedural usage here, you could have a new, a  
32 relatively new emergency director here, and is he going  
33 to have the same understanding as Mr. Brown has based  
34 on his years of experience and how he applied that  
35 guidance, and you have to look back and say what's the  
36 training intent and are you reinforcing those  
37 expectations.

38 So I think you need to step back and look  
39 at that, so independent of whether it was your intent  
40 or not, and I think you have communicated why you think  
41 there is a mechanism in place and shelter-in-pace if  
42 you will would have been considered as part of your  
43 protective action recommendation development, we'll  
44 take that information and look at it. I'm focusing on

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1 that aspect in particular because that's really what  
2 drives the potentially greater than green issue here,  
3 is the protective action recommendation associated  
4 with that shelter-in-place.

5           Regarding the other two aspects there, you  
6 know, regarding the control room and the shift manager  
7 and what responsibilities does he have and how would  
8 he approach it, I think you clearly explained to us your  
9 view that it is appropriate for that shift manager to  
10 wait until the EOF and TSC is manned. I think that's  
11 an issue that should be gauged, should be further  
12 dialogued via the Emergency Planning Working Group. I  
13 don't know the validity frankly of your statement that  
14 that's how the majority of the industry approaches it.  
15 I don't know if that is the case, but I think we need  
16 to understand that and ensure that that shift manager  
17 is prepared if there is a rapidly developing event and  
18 the dose projections are such that you could be  
19 exceeding PAGs at the 10 miles point and you don't have  
20 time to get meaningful, accurate information from the  
21 dose monitoring teams; we need to look at that.

22           And then the--I think the last aspect there  
23 was do you still provide for protective action  
24 recommendations when there's a planned release. I  
25 think you explained why you feel the procedures as  
26 they're currently structured would provide for that  
27 assessment in a protective action recommendation  
28 that's appropriate to the planned release. So we'll  
29 take that information on board here and we'll  
30 communicate to you via separately our final  
31 significance determination and our conclusions  
32 regarding any apparent violations.

33           So you know, in summary, by your own  
34 acknowledgment, the procedure could be interpreted  
35 differently; I think you need to look at that to make  
36 sure you don't create the potential for a procedure to  
37 be interpreted differently, and you have communicated  
38 to us clearly that you feel your staff would have  
39 followed that procedural guidance in the manner that  
40 was intended. Our staff looked at it, and we came to  
41 a different conclusion regarding what was the intent  
42 here. We didn't talk to the emergency directors to get  
43 their view how would you interpret this guidance, how  
44 would you implement that; we didn't do that back in the

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1 original two months as we were developing this issue  
2 here.

3 So you know, we didn't have the opportunity  
4 to quite frankly test what I would call the as found  
5 condition; what is the actual behaviors that would have  
6 been exhibited at the time this issue was first  
7 communicated versus where are you now after there's  
8 been a lot of discussion internally here and on your  
9 end regarding what the emergency directors would do.  
10 But it gets back to are you providing them with the tools  
11 for success. So I want to thank you for the information  
12 that you've provided us, and the time you have spent;  
13 I think we have a clear understanding of your position  
14 and the basis for that, and we will take that under  
15 consideration here, and we will communicate the results  
16 of those internal deliberations here via separate  
17 correspondence, and I would offer in a reasonable time  
18 frame here. I'm sure we're going to be able to engage  
19 here in the next couple of weeks here, and hopefully  
20 reach closure on this soon so we can communicate the  
21 results of our internal review. So with that, this  
22 concludes our regulatory conference with Energy  
23 Northwest, and we now will proceed to provide members  
24 of the public that were on the phone an opportunity to  
25 ask questions, so I'll turn it over to Mark.

26 MR. HAIRE: Yes, thanks Marc. Just a  
27 couple of required closing statements for the end of  
28 the conference. First, the apparent violation  
29 discussed at this conference is subject to further  
30 review and may change prior to any resulting  
31 enforcement action; and second, statements of view or  
32 expressions of opinion by the NRC employees at this  
33 conference or the lack thereof are not intended to  
34 be--to represent final Agency determinations or  
35 beliefs at this time. So if the operator would go ahead  
36 and queue up any folks that have questions on the phone,  
37 we will be standing by ready to receive those questions  
38 in the order you receive them.

39 OPERATOR: Thank you. If you would like  
40 to ask a question, please press star one on your touch  
41 tone phone, un-mute your phone, and record your name  
42 clearly. If you would like to remove your question,  
43 press star two. Again, to ask a question, please press  
44 star one, it will take a few moments for those questions

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1 to come through; please stand by. The first question  
2 comes from Charles Johnson; go ahead sir, your line is  
3 open.

4 MR. JOHNSON: Thank you. I'm Charles J.  
5 Johnson, and I'm the Director of the Joint Task Force  
6 on Nuclear Power for Oregon and Washington Physicians  
7 for Social Responsibility. I don't have a question,  
8 I merely have a comment, which is that I'm glad to see  
9 that the Nuclear Regulatory Commission and Energy  
10 Northwest are discussing this issue of evacuation plans  
11 and some apparent failings in the current plan, taking  
12 it very seriously. Obviously what happened in  
13 Fukushima in the aftermath of the tsunami, earthquake  
14 and tsunami and the accident there illustrates how  
15 chaotic a situation can become in an emergency  
16 situation. You'd have people evacuated into high  
17 radiation zones, and the authorities not knowing that  
18 for several days, until several days later, and you had  
19 confusion as to who was in charge of various operations  
20 at the plant, including I believe some of the decisions  
21 on evacuation.

22 So I'm very pleased to have listened to  
23 this hearing, I believe the NRC is taking this very  
24 seriously, I hope that Energy Northwest is as well, and  
25 trust that they are, and that's all I have to say.  
26 Thank you very much.

27 MR. DAPAS: This is Marc Dapas, I want to  
28 thank you Mr. Johnson for your comment. I think it  
29 really underscores the importance of having a very  
30 specific emergency plan implementing procedure so that  
31 clear guidance and tools are provided to the decision  
32 makers regarding any protective action recommendation,  
33 be it shelter-in-place or evacuation. So you know, you  
34 don't want to be making decisions on the fly when you're  
35 dealing with event response where there can be, you  
36 know, a lot going on if you will. So I very much  
37 appreciate your comment, and thank you.

38 OPERATOR: As a reminder, if you would  
39 like to ask a question, please press star one; we  
40 currently have no questions in the queue at this time.

41 MR. HAIRE: Why don't we put out one last  
42 request and make sure everyone that's on the phone had  
43 an opportunity to ask a question, so I'll give that just  
44 about 30 more seconds. Are there any additional

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1 questions from members of the public that are listening  
2 to the conference? All right, well thank you, and this  
3 concludes our question and answer session. Thank you  
4 operator; you can disconnect us from the bridge line.  
5 Thank you.

6 OPERATOR: That concludes today's  
7 conference; thank you for your participation.

8 (Whereupon, the above-entitled matter  
9 went off the record at 5:34 p.m.)  
10  
11  
12  
13  
14  
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17  
18  
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**NWX-US NUCLEAR REGULATORY COM (US)**

**Moderator: Deborah Harrison**

**June 15, 2015**

**11:45 am CT**

Coordinator: Thank you for standing by. At this time, all participants are in a listen only mode. During the question and answer session, please press star and 1 on your touchtone phone. Today's conference is being recorded, you may disconnect at this time. I will turn the meeting over to Mr. Mark Haire. Sir, you may go ahead.

Mark Haire: Okay. Thanks. And just a reminder to the folks in the room, the microphones that are on the desks have a little green LED when it's lit. Your mike is live. If you touch the little push button and the green light is not lit, that means you're not live. And you're not being amplified for the phone folks. Also in the room there is a wireless mike on the stand for any members of the public.

Don't see any members of the public in the room at this time. But they may join us later. Alright. So to kick off the meeting, there are some opening remarks and statements that need to be made including some logistic comments. And I'll be leading that charge. So I'll be reading through some elements that need to be covered.

And then I'll follow the agenda. So step 1 is to go through the conference opening. So my name is Mark Haire. I'm the Branch Chief for the Emergency Preparedness and Security Inspectors in the NRC's Region 4 office. Welcome to the Reg Conference between the NRC and Energy Northwest Columbia Generating Station.

Today, we will be discussing a finding related to the Columbia Generating Station's failure to follow requirements of their site emergency plan. Specifically, that emergency plan implementing procedure were changed so that the procedures did not continue to provide an option to recommend shelter-in-place as a protective action recommendation for the public when its' appropriate.

The revised procedure also did not continue to provide further development of protective active recommendations for an intentional release of radioactive material and in appropriately delegated some responsibilities of the senior reactor operation in the control room from making protective action recommendations. This conference is open to public observation.

However, this is an enforcement or a regulatory conference. And as such, it is a meeting between the NRC and Columbia Generating Station. And during the meeting, comments and questions will not be taken from members of the public. But following the conference, NRC staff will be available to answer questions and receive comments from members of the public concerning matters discussed here at the conference.

Marc Dapas: Or any other...

(Mark Hare): Or any other questions as Marc Dapas, our regional administrator has mentioned. It's important to note that this phone bridge is being recorded. Both the recording and the transcript will be made publically available soon after this meeting. The Columbia Generating Station representatives have provided slides for their presentation. And those slides have been made available at the NRC's public meeting webpage. It's at [www.nrc.gov](http://www.nrc.gov) and you would click on the Public Meetings and Involvement tab.

And then click on the Public Meetings Schedule link. And scroll down and see today's meeting listed. And you'd click on the more tab and you'd see the related documents include the slides that Columbia Generating Station has provided. And those slides that are on that link are the updated slides that Columbia provided to the NRC today.

So those are the updated slides. Alright. So administrative items before we review the rest of the agenda. For those in the room, the closest restrooms are out the door to the left past the guard station. And then they'll be on the right close to the lobby. If there is an emergency, we need to listen to the announcements over the intercom system.

And if an evacuation of the building is required, the nearest exists are either at the main building entrance where you came in which is left out of this room or on the side of the building to the right. There's an emergency exit. For the microphones, we ask that all NRC and Columbia Generating Station personnel who will be speaking please use the microphones so that the people on the phone will be able to hear.

We should have sign in sheets available. I don't know if they've been passed around yet. But if they haven't, we'll make sure that those get passed around. We'd like to have a record of everyone's attendance to the meeting. And if there are any members of the public in the room, we'll provide you with feedback forms so that you can provide comments to the NRC.

A meeting summary will be made available by the NRC within 30 days of this meeting. So a quick review now of the agenda of the meeting. The meeting will open with the opening comments by me which I've done. Next, we'll go

through introductions of the key participants from both organizations. Then I will go through a summary of the regulatory process and the apparent violation at stake that'll be discussed today.

And then Marc Dapas, our regional administrator will make some opening remarks. And then we'll turn it over to Columbia Generating Station to make any remarks and presentation that they'd like to make. Throughout the presentation, we will be engaging with questions during that process. Then after your presentation and after we've had a chance to ask some questions, the NRC will disengage from the meeting for a timeout.

We'll exit the room. Have a caucus in a separate room where we'll discuss what we've heard. And if we have any additional questions, it'll probably take us 15-20 minutes to do that. Then we'll reconvene the meeting after that caucus for any final questions that we have. And then I'll offer the opportunity for our senior managers including Marc Dapas to make any closing comments.

And then I'll make some comments about the closing of the business of the meeting. And then I'll invite at that time the operator to allow members of the public to ask questions. And the NRC will be happy to entertain those and answer those. So that's how the meeting will progress. So at this point, I'd like to engage in some introductions starting on the NRC side.

I've already introduced myself. I'm Mark Haire. I'm the branch chief for Emergency Preparedness and Security Inspections.

Marc Dapas: Well, I'm Marc Dapas. I'm the Regional Administrator for our Region IV office.

Rob Kahler: I'm Rob Kahler. I'm the Branch Chief with the Inspection and Regulatory Improvements Branch with NSIR at the Rockville, Maryland NRC Headquarters office.

Jeff Clark: I'm Jeff Clark, Deputy Director, Division of Reactor Safety.

Wayne Walker: And I'm Wayne Walker. I'm the Branch Chief for Columbia and the Division of Reactor Projects.

Mark Haire: And the next table back.

Troy Pruett: Troy Pruett, Director of Reactor Projects, Division IV.

Paul Elkmann: Paul Elkmann, Inspector, Region IV.

Bill Maier: Bill Maier, Inspector Region IV.

Karla Fuller: Karla Fuller, Regional Counsel.

Mark Haire: Thanks. And if Mr. Hettel, if you'll introduce your team.

Grover Hettel: Yes. My name is Grover Hettel. I'm the Vice President of Operations at the Columbia Generating Station for Energy Northwest. And I'll let my team introduce themselves.

Don Gregoire: I'm Don Gregoire. I'm the Manager of Regulatory Affairs.

Sean Clizbe: Sean Clizbe. I'm the Emergency Preparedness Manager at Energy Northwest.

Dave Brown: Dave Brown, Planning, Scheduling and Office Manager. Also Emergency Director.

Kurt Gosney: Kurt Gosney, Acting Emergency Services General Manager.

Andy Black: Andy Black. I'm the Emergency Services General Manager although I've been on loan to Capital Projects for the last 5 months. I still retain ownership of EP in my division.

AJ Fahnestock: AJ Fahnestock. I'm the EP Program Manager.

JR Trautvetter: JR Trautvetter, Regulatory Affairs Compliance.

Desiree Wolfgramm: Desiree Wolfgramm, Complaints Engineer.

Mark Haire: Okay. That is full introduction of the folks in the room. We don't have any members of the public. Couple of observers from the NRC staff in the room. And I do believe we have some folks from the NRC staff also listening on the line. So now I'm going to summarize where we're at in the regulatory process. What the apparent violation at stake is today.

And then we'll move forward with the agenda. So a bit of a lengthy description. So bear with me. So in accordance with the NRC's regulatory process after a potentially risk significant finding is identified and characterized by our significance determination process as potentially greater than green, we offer licensees an opportunity for regulatory conference.

In this case, Columbia Generating Station requested that a conference be held to discuss the issue and its' significance. It is the responsibility of the NRC Licensees to provide protective action recommendations to local and state officials. Those local and state officials then consider the plant's

recommendations as they make protective action decisions to protect the health and safety of the public.

And we're here today because in 2014, Columbia Generating Station made a change to their emergency plan implementing procedures that deleted shelter and place as a possible outcome from their flow chart used to make protective action recommendations. And they deleted instructions to develop protective action recommendations when the release was intentional.

And they added limitations on the protective action recommendation choices available to the senior reactor operator in the control room. So let me give it a little bit more detail about that - those issues. When an emergency occurs, it may present a risk to the public. The NRC requires that Licensees consider a range of protective actions to arrive at a recommendation for the safest overall action for the public to take.

Often but not always that action is evacuation. But sometimes, the most protective action is to shelter-in-place. Outside authorities consider a Licensee's recommendation along with other information about the event and deciding what measures to implement. But a Licensee's recommendations of the outside authorities is important because it communicates the radiological risk to the public.

Columbia Generating Station's original approved emergency plan and all subsequent revisions up through the current plan have included a range of protective actions appropriate to a spectrum of emergency events. The emergency plan describes both evacuation and shelter-in-place as potential actions that may be recommended to offsite officials for the protection of the public.

In a specific event, the choice is based on plant and radiological conditions, the EPA Protective Action Guides and the radiation dose that could be avoided. The NRC concluded that the Columbia Emergency Plant appropriately describes the protective measures to be taken in the event of an emergency.

However, on June 16, 2014, Columbia changed their procedures for developing protective action recommendations and inappropriately removed shelter-in-place from the procedure text and from the primary decision tool which is a flow chart used to determine which protective measures would be recommended for the public.

The removal of those instructions reduced the number of options that would be considered and then put a shelter-in-place. Recommendation could only be arrived at by going outside of the procedure. Even in the unusual circumstance

where shelter would provide a dose-savings and therefore more protection to the public.

And I think it's important to note that our guidance defines shelter-in-place as a dose saving protective action involving people going into their houses, closing their doors, closing the windows, turning off their ventilation and attempting to avoid dose. It's a dose protection - dose avoidance protective action.

Anyway, the same procedure also failed to ensure that the need for additional protective measures would be evaluated if Columbia was intentionally venting radioactive material, so intentionally venting radioactive material. And also delegated the decisions about protective measures for some areas of the senior reactor operation and the control room to other company officials and other facilities.

And the responsibility to make protective action recommendations is not delegable. It must remain with the individual exercising command and control. And because those other facilities might not be staffed when conditions are require a recommendation, the procedure could have caused delays in protecting the public.

As a result of procedure changes, Columbia no longer complied with the NRC requirements to follow their emergency plan and no longer provided for a range of protective actions. Therefore, this apparent violation is associated with a finding that has preliminary been determined to be of white significance.

Note that we use phrases like apparent violation at a conference like this because the NRC will not make its' final determination on the violation or its' significance until after the conference. The white significance in the case the NRC has preliminary concluded that Columbia degraded their ability to implement a risk significant emergency preparedness function.

We use this phrase risk significant to denote those functions with the most immediate impact on the Licensee's ability to protect the health and safety of the public such as event classification, offsite response organization notification, radiological assessment and protective action recommendations. Now their ability to implement a risk significant function was degraded because the procedure change narrowed the protective measure options and could have delayed making some recommendations.

The NRC takes this very seriously. So having said all of that, let me summarize - actually, let me read the proposed apparent violation. Title 10 of the Code of Federal Regulations, Part 50.54Q2 requires in part that a holder of

a license under 10 CFR Part 50 “shall follow and maintain the effectiveness of their emergency plan that meets the requirements of Appendix E to 10 CFR Part 50 and the planning standards of 10 CFR 50.47(b).”

And Title 10 of the CFR Part 50.47(b)10 requires in part ‘that a range of protective actions has been developed for the plume exposure pathway and emergency planning zone for the public. And in developing this range of protective actions, consideration has been given to evacuation and sheltering as appropriate.’”

At Columbia Generating Station Emergency Plan Revision 59 which was dated September 10, 2013 through the Revision 61 which was dated September 2014 in Section 2.1 Organizational Concepts Required in Part “that the emergency direction and comprises the overall direction of the plant’s emergency response which must include the non-delegable responsibilities for emergency classification, the decision to notify and recommend protective actions to authorities responsible for offsite emergency measures.”

Columbia Generating Station Emergency Plan Section 5.5 - Protective Action Responsibilities required in part “that the appropriate protective actions for an airborne release of radioactive material are evacuation and sheltering.” And that the decision to evacuate or shelter is made based on the dose to be avoided by the protective action relative to the risk associated with implementing the protective action.

And that protective action recommendation shall be made based on plant and radiological conditions. Contrary to the above, between June 26, 2014 and April 23, 2015, Columbia Generating Station failed to follow and maintain the effectiveness of the emergency plan which meets the requirements of Appendix E to 10 CFR Part 50 and 10 CFR 50.47(b).

Specifically, Columbia Generating Station’s Procedure 13.2.2 which is titled “Determining Protective Action Recommendations, Reg 18 Section 4.5.1 did not implement the requirements of the emergency plan Section 2.1 because procedure required the emergency director and the control room to delegate the formulation of protective action recommendations to the technical support center or the emergency operation facility.

However, protective actions are non-delegable responsibilities of the emergency director. In addition, Procedure 13.2.2 Rev 18 did not implement the requirements of the Emergency Plan Section 5.5 because it did not provide for the development of shelter-in-place as a protective action recommendation. And did not provide for protective action recommendations to protect against planned releases of radiological material.

And the Licensee has entered this issue into their corrective action process. Corrective Action Request 320790 dated January 19, 2015 and several other corrective action documents. Alright. That is the proposed apparent violation. This proposed apparent violation with an option to request a regulatory conference were communicated to Columbia Generating Station Power Plant during an exit meeting on April 23, 2015 and in the NRC Inspection Report 05000397/2015 502 which was dated May 7, 2015.

This regulatory conference is the last step of the inspection process before the NRC makes its' final decision on the significance of the inspection finding. And the purpose of the conference today is to allow you, Columbia Generating Station to provide your position with respect to the facts and assumptions used by the NRC to make our preliminary significance determination and to allow you to present any new information that may assist us in arriving at the most appropriate significant - final significance determination.

In addition to discussing your views on the significance of the finding, you may want to present your views on the identified apparent violation. It is important to note that the decision to conduct this conference does not mean that the NRC has made a final determination that a violation had occurred. In the enforcement related to the finding being discussed today will be assessed in accordance with the commission enforcement policy.

I should also note at this time that any statements of view or expressions of opinion made by NRC employees at this conference do not represent final agency determinations or beliefs relative to the matter before us today. Following this conference, the regional and NRC headquarter staff will reach a significance determination and an enforcement decision.

NRC's goal is to issue the final significance determination by July 10, 2015. And that concludes my rather lengthy discussion of the regulatory process and the apparent violation. I'd like to turn it over now to Marc Dapas, our Regional Administrator, for his opening remarks.

Marc Dapas: Thank you, Mark. First and foremost, I'm sure that the Columbia team appreciates that developing protection action recommendations is an important process. It provides for the local and state government officials to be able to make informed decisions regarding what the protective action decision will be, mainly the decision regarding what actions members of the public need to take to minimize exposure in the unlikely event that there is a release of radiation resulting from some upset condition at the plant.

And you heard Mr. Haire describe how your emergency plan does provide for shelter-in-place. But the issue that we identified was your emergency plan

implementing procedures did not provide specific direction. It's my understanding that based on the inspection team's interactions with various folks, the Licensee's staff, that it was the intent in implying the guidance in NUREg-0654 Supplement 3 which provides an acceptable method for complying with Appendix E of 10 CFR Part 50 and 10 CFR 50.47(b) which are the emergency planning standards.

That the intent behind the guidance there when it came to shelter-in-place was to provide for those instances where there is a rapidly developing event. And your evacuation time estimates would indicate that you could evacuate the effected population in less than 3 hours I think it is. That you can go ahead and forego shelter-in-place and actually recommend through the local and state authorities protective action recommendation that would dictate evacuation versus shelter-in-place.

And that was meant to apply to that unique circumstance where you have a rapidly developing event. And it's my understanding that the inspection team from talking to members of your team was told that it was the plan to remove shelter-in-place. That they had intended to remove that from the implementing procedure. You know in other words, they had made a mistake in following or implementing the guidance in NUREG-0654 Supplement 3.

So, if you have a different view, I want to understand that. I need to understand and reconcile the difference between what was communicated to the team as they execute the inspection process and what is your current position because it is my understanding that you have a different view on the violations that we have communicated to you. And again, as you heard Mark go through his description of the issues, he did talk about how we have preliminarily concluded there's a proposed apparent violation.

We have not made an enforcement decision regarding the existence of a violation here or the final significance determination associated with that violation. So it's very important that we develop a shared understanding of the facts. And then we hear from you what you're assumptions are. And then we have the opportunity to have further dialogue in our assumption as we can reach the most informed decision here regarding the existence of a violation and then what is the associated significance for that particular violation.

So I look forward to hearing the discussion and your planned presentations. So with that, I'll turn it back over to you, Mr. Hettel to begin any discussion or presentation that you would like to provide us.

Grover Hettel: Mr. Dapas, we do take the protection and the health and safety of the public very seriously. So this afternoon, we'll be presenting our perspective on the information NRC used to arrive at the proposed white finding. And we'll also

take the opportunity to fully discuss the changes that we made to our procedure back in June of last year.

We will layout our facts again as we see them. And we'll discuss how we reached our conclusion on the subject relevant to the level of significance of the white findings. Our procedures do provide the appropriate level of protection for the health and safety of the public. You know they still provide an option for sheltering in place should the conditions warrant to protect the public from the effects of the possible radioactive release.

We believe that through our discussion today, you'll find our procedures are in fact consistent with our emergency plan. And as far as you look on Slide 3 with the agenda, again, we'll step through the apparent violation. And we'll talk about our emergency plan commitments and how the regulatory guidelines, lasting guidelines are applied. And also how our procedures interact with that.

And demonstrate that we follow our emergency plan. And then also share some of lessons learned. Then we'll wrap it up with a summary. And then I'll close. That's kind of the high level agenda that we'll be going through. So with that, I'll turn it over to Don Gregoire.

Don Gregoire: Okay. So I'd like to just be clear on our position with regard to the apparent violation. As mentioned, there's two sections of our emergency plan that NRC has concluded that we failed to follow. So I'll speak to each one separately. The first one is in regard to Section 2.1 of the Emergency Plan in which it was communicated that our procedure did not implement the requirements of Section 201 because the procedure required the Emergency Director in the control room to delegate the formulation of protective action recommendations to the technical support center or the emergency operations facility.

However, protective actions are non-delegable responsibility. So I have 3 points that I'd like to mention with that regard. The first - and by the way, this is a high level review. I'm not going to cover in great detail. We'll discuss it more in the later slides. So with regard to the first point, Sub 4.5.1 of the current version of the procedure, it is our position, can correctly transfers its' protective action recommendations for expansion beyond 10 miles to the TSC or EOF because the procedure points to use of both those projection and field teams to make the necessary PAR determination.

This is consistent with industry practice. The field team monitoring is an augmented EOR function. Augmented EOR is Emergency Response Organization is a function that is managed by our - either our technical support center or emergency operations facility. If either of these augmented

areas have been established, the Emergency Director responsibility would have been transferred in accordance with the stations emergency plan implementing procedures, including protective action recommendation responsibilities.

Thirdly, the transfer of Emergency Director' responsibilities are carried out consistent with our emergency plan Sections 2.1 and I'd like to point out Section 5.5.2 for relying on field team data when you get beyond the 10 mile EPZ.

The second area of noncompliance noted in the NRC inspection report on page 9 relates to two examples where it stated that we were noncomplying with Section 5.5, the first being we did not provide for the development of shelter-in-place protective action recommendations. And secondly, that we did not provide for protective action recommendations to protect against planned releases of radioactive materials.

So I'd like to treat them separately. And the first I'll speak to is the shelter-in-place protective action recommendation. So shelter-in-place - and its' our position shelter-in-place was not removed as a protective action recommendation. It can be recommended a protective action by use of Attachment 7.1 and 7.2 of our procedure.

And you will note the inspection report made no mention of Section - Attachment 7.2. The guidance in our procedure is based on Supplement 3 2011 version. And as Supplement 3 clearly states that it provides an acceptable mean for complying with Appendix E and 10 CFR 50.47(b). In that document, you will find no mention of plan releases, puff releases.

However, we still address it. And we will speak to that in later time. And lastly, we will share with you how our emergency plan points to sheltering and evacuation guidance based on this new Reg document. The second example of non-compliance with Section 5.5 had to deal with planned releases.

Although a planned puff release is not explicitly called in the procedure, in the current version, a planned release continues to be addressed in the procedure and in other manners than in the previous revision using Attachment 7.1 and 7.2. The ability to use 7.1 and 7.2 provides consistency with commitments made in Section 5.5.2 of the emergency plan.

I want to sum it up this way. The inspection report gives this picture that the emergency plan says this and the procedures don't say that. As a matter fact, it's quoted on Page 5 of the inspection report, "However, Revision 18 of the

procedure no longer follows the above quoted sections of the station's emergency plan."

From August 2014 through March of this year, there have been a lot of back and forth discussion on changes to our implementing procedures. And a lot had to deal with - revolve around plan release or puff release which again as I mentioned is no longer discussed in the new Reg document. When we saw the conclusions of the inspection report, it appeared to us that a number of points has not been reflected in the report.

Number of points that we had made. We believe that the inspection report doesn't give a fair characterization of this issue or the conversations that were held. We're here to discuss those things that were either not quoted or not emphasized in the determination of a performance deficiency.

Marc Dapas: Just to make sure I have a clear clarification, it's your contention that the station's perspective regarding these issues was clearly communicated during the inspection process. And the inspection report does not accurately reflect the discussions that your staff had with our team.

Grover Hettel: I guess I was going to kind of bring it back up or address it in my closing. I think - I'm not sure what you know Marc, what maybe transpired. We didn't either communicate well enough or you know I guess we're not wanting to that you know - we weren't going to get into that basically.

We just feel that we have not maybe communicated as clearly as we should. So we want to again present our facts as we see them. Again, and I'll stress as we see them you know because again you know views are different. So - and we understand that. So, now I just think as we went through the conversations, we - we undoubtedly didn't make ourselves you know clear enough so.

Marc Dapas: Well, I think it's important - and I stress this in my opening here. I mean it was my understanding that the conclusions developed during the inspection process was a function of interactions with your staff. So if there was information that your staff felt they communicated. And it's not apparent how that was considered as part of the inspection process, you know that's a potential disconnect there.

And we need to understand that. I certainly want to hear the Licensee's official position today regarding this apparent violations. But I do want to understand what occurred during the inspection process because I had a - quite frankly a different understanding here from talking to Mark Haire to my right. And he'll have the opportunity to engage you.

But I think that's an important element that we reach closure on so we understand that because we rely on the inspection function. And we communicate preliminary conclusions and the basis for that when we conduct debriefs and exit meetings. And that's clearly an opportunity for any member of your team that interacted with our stuff to say, "Wait a minute. You know I had a discussion with you on Wednesday. And we talked about X. How did you consider that?"

So I think that's important that we - we flush that out.

Grover Hettel: Okay.

Marc Dapas: Whether it be here or whether we do it subsequently, I mean the focus of this conference is to make sure we understand your position clearly, you the Licensee. But I want to make sure that we address any inspection functions disconnects that occur.

Don Gregoire: And we agree. We know there was some areas we can improve overall in understanding where the NRC was coming from and how we translated the information to the NRC. But we agree, it's very important to have that dialogue. I think the rest of our communication here today is really to try to highlight some of those areas that we felt probably should be reflected on and given a little more attention.

So on the next slide, you'll note that I have a star on this slide. And the star is really trying to symbolize the areas where we think there's some gaps in the communication. And things that we think should be added to the conversation. And so any slide where you see a star on it, it's really to address that information we think was not emphasized enough earlier on in discussions.

So to this point, with regard to shelter and evacuation and the consideration for shelter and evacuation, it's our position that the emergency plan specifically points to Federal guidance on how you consider shelter and evacuation in your procedures for protective action recommendations. We'll present more information beyond that cited in the inspection that we believe is relevant to the finding.

Next slide. So just starting with the foundation here, the regulation as you know 10 CFR 50.47 governs our - describes the number of standards that are required for emergency response plans. With regard to this one specifically, 10 CFR 50.57(b)(10) - I won't read the whole thing to you. But the very last paragraph there is "Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place."

So our message here today is that we have four things that we're going to focus on in our presentation, Emergency Plan Commitments, what do they actually say; what was omitted. What does the Federal Guidance say and how did we evaluate the Federal Guidance. What is the actual implementing procedure?

How do we use it? How would our emergency director look at that procedure? And then lastly, our classification/notification form where the protective action gets issued. So we'll speak to all of that. I do want to mention that the regulation has us consider shelter and evacuation, but doesn't tell us how to apply them in our procedures or action schemes.

Our emergency plan does point to Federal Guidance that describes how we do this. And we'll walk through that shortly. But the four elements are interlinked together to assure that appropriate protective action recommendations will be made. So the first point that we would like to emphasize that we disagree with the conclusion on is a statement that says that we failed to follow Section 5.5 of our plan.

Now as you see there, it mentions we're required to have appropriate protective actions for an airborne release of radioactivity which were evacuation and sheltering. And the decisions to evacuate or shelter based on dose avoided. And then lastly, the protective actions are based on plant or radiological conditions.

What that doesn't say is how that's implement. If we look to the next slide. This is a Section of 5.5 that was not included in the inspection report. But it goes on to further say that "Protective Action Guides, discussed in Section 5.5.2, provide pre-planned guidance for making response decisions." So it's directing us towards the Federal Guidance that we would use for developing our protective action scheme.

We'll show later how that ties in. But let's go to the next slide. So again, there's another slide we think was - you know this was referenced in the inspection report. But we don't believe it was given you know proper emphasis. There's a presumption that sheltering must always be considered in every scenario.

What we did, we evaluated NUREG-0654. It describes sheltering and evacuation. And it tells you how to consider it in your pre-plan procedures. I do want to emphasize that in this commitment here in our emergency plan that it says that our shelter and evacuation guidance are based on both the EPA document as well as the NUREG-0654 Supplement 3 document.

At this point, I don't believe there's any concern or issue with our compliance with the EPA document. So we're only going to go forward and speak to the NUREG-0654 document. The Protective Action Recommendation decision making tool found in PPM 13.2.2, the tool that specifies how shelter and evacuation are applied during any general emergency at Columbia is based on these documents.

What they do is guide us for a limited set of scenario or conditions and how to consider shelter-in-place versus evacuate for these scenarios. Meeting these guides in essence meets the commitments described Section 5.5 of the Emergency Plan. And again, we'll describe how we meet that and how we actually have additional guidance in our procedure above and beyond the NUREG.

So I'll turn it over to Sean.

Sean Clizbe:

I'd like to discuss our NUREG-0654 Supplement 3 and our evaluation and implementation of it in our procedures. So my intent here isn't to read the regulation to you, but more just describe our evaluation of the applicable sections. So from Supplement 3 guidance, it is clear that application of the guidance is an acceptable method to comply with 10 CFR Appendix E to Part 50 and provide the guidance for the provisions of 10 CFR 50.47(b)(10).

It also clearly supports that it's acceptable guidance for developing a range of protective action recommendations prior to an emergency and not during the actual emergency itself. This is the guidance that our Emergency Plan Section 5.5 - 5.5.2.2 for developing corrective action recommendations at Columbia. Columbia used this guidance for the development of our procedure 13.2.2 to meet our emergency plan commitments and develop appropriate protective action recommendations.

And the next few slides will walk through our development process using the supplemental guidance and how it was applied in developing our appropriate protective action recommendation strategy. So in Section 1.2 from the NUREG, I would like to discuss that Energy Northwest voluntarily used the guidance to demonstrate compliance with Appendix E and 50.57(b)(10).

And secondly, the changes to our procedure did not require an emergency plan change when we implemented our shelter and evacuation protective action recommendation tool. The change that we made did not require an emergency plan change from our procedure. So as we work through the Supplement 3 guidance, it is noted that in Section 2.1 of the guidance that suggests that Licensees should use the Attachment and supplement to develop protective action recommendation procedures and decision logic.

What we'd like to point out is Energy Northwest did use the attachment for formulation of our protective action recommendation procedure. And it was the basis of Revision 18 to 13.2.2. So next, we'll take a high level walk through of the attachment. So this tool was used throughout the development process of our protective action recommendation procedure.

This tool is generic to the industry and designed to be used by all nuclear sites. With the tool being generic to all sites, there is site specific information that must be included to make the tool useful. The tool starts off with a general emergency and flows different directions based on emergency conditions. Our decision making tool is similar to the attachment as we use this guidance to make our procedure change.

As we step through our procedure later in the presentation, note the similar tool used in Attachment 7.1 and 7.2 of our procedure. Next slide. As mentioned in the previous slide, the guidance is generic to all sites. And here it's noted, "nuclear power plant should develop site specific strategies" when using the guidance.

Additionally as noted, the Licensees are encouraged to collaborate with offsite response organizations during the development process. Energy Northwest did develop a site specific strategy and did collaborate with offsite response organizations. In our case, it was to be Benton and Franklin County, the State of Washington and the Department of Energy.

Through guidance use and collaboration, Energy Northwest issued Revision 18 to Procedure 13.2.2. The guidance clearly suggests that the protective action recommendation strategy should be developed prior to the emergency. And all vested parties should participate. During collaboration with the offsite response organizations, it was clear throughout the process that Energy Northwest Protective Action recommendations must align with Federal Guidance. And ours does.

In the next few slides, we'll provide some site specific information that we used during our development process that we think is important.

Marc Dapas: Before you go on, I had a question just following your flow chart here.

Sean Clizbe: Yes.

Marc Dapas: On the flowchart you had on page 18, are you equating all others' monitor and prepare to shelter?

Sean Clizbe: So we - we haven't implemented the monitor and prepare section. But we do have - in our - if you - in our procedure when we walk through it, we'll step through when we shelter remaining sections would be shelter in place.

Marc Dapas: I look forward to that discussion because I looked at your implementing procedure relative to the Supplement 3. And it certainly in my view is intended to be monitor and prepare. And I thought you you know shelter remaining sections was your phraseology for the monitor and prepare. And if your position is that that meant shelter-in-place, I think we really need to understand that.

Sean Clizbe: Yes. We're - do you want to discuss it now or later?

Marc Dapas: Whenever it's convenient. If you want to wait until we get to the actual slide I think that has that specific language.

Sean Clizbe: Okay. Well, this is up on the slide, a general representation of Energy Northwest Emergency Planning Zone. The circle's a representation of the 2 mile, 5 mile, 10 mile distances. So this site specific consideration was used in the development process as suggested by the guidance. And it's important to note the limited population and the location of population being on the outer edges of the emergency planning zone.

This factors into the evaluation process when determining whether shelter or evacuation is appropriate. The low population density and distant location of the population within the emergency planning zone informed a collaborative evaluation process by which we revised our procedure. Also note that Columbia Generating Station max 90% evacuation time estimate is 2 hours and 15 minutes.

So kind of walking through our - what our site looks like. You know obviously we have a lot of desert surrounding our site. We're on the Hanford Nuclear Reservation. Most of our population resides on the outer edges of the EPZ. That's being the cities of Westland Richland, Richland at the very bottom here.

And then over here across the river is Franklin County which is a farming community. So there's zero population from in a zero to 2 miles. And in the five mile, there's a total of approximately 55 people. And residing over here in the farming community. And then approximately 5,300 people in our Emergency Planning Zone.

Then it gives you a look of what we're having to deal with in our planning process. Next slide please. So working through NUREG-0654, this is the decision point in the supplemental flow chart previously discussed for its'

consideration of evacuation versus shelter is addressed. The guidance states that if 90% evacuation time estimate is less than 3 hours for rapidly progressing scenario, the most appropriate safest protective action is evacuation.

Energy Northwest 90% evacuation time estimate is 2 hours and 15 minutes. And it's less than 3 hours for the entire Emergency Planning Zone. As a result, Energy Northwest determined that the most appropriate protective action for rapidly progressing scenario is evacuation. Additionally, the low population density and distant location result in short evacuation times.

Columbia continues to recommend evacuation, restrictive action recommendation for the zero to 2 mile and 2 to 10 mile distances as our PAR strategy for these conditions. As a result, there is no benefit to adopting a staged evacuation. So no benefit in holding people up if we have ability to evacuate.

Mark Haire: So Sean...

Sean Clizbe: (Unintelligible).

Mark Haire: This is Mark Haire. I just want to make sure I clarify the particular section in NUREG-0654 Supplement 3, the section you're pointing to is Section 2.7 which is particular guidance for a rapidly progressing scenario. So there's lots of other scenarios that need to be considered in your plan. This is guidance for rapidly progressing scenario

And we understand you applied the guidance out of Sup 3 for rapidly progressing scenarios in consideration of your evacuation time estimate.

Sean Clizbe: Yes.

Mark Haire: And decided the evacuation per the NUREG was appropriate for rapidly progressing scenarios.

Sean Clizbe: That's correct. And I would say it's consistent with the Attachment in the NUREG as far as the tool that you use to determine your protective actions scheme.

Mark Haire: Right. And I guess I would just add that we're very, very interested in how you guys handle your guidance for PARs for things other than rapidly progressing scenarios because we're familiar with our guidance for rapidly progressing scenarios. And we don't take exception to what you did for you that.

Sean Clizbe: So can I just be clear. We're talking about scenarios that are not currently described in NUREG-0654. Is that correct? Because Section 2.7 talks about rapidly progressing scenarios.

Mark Haire: Right. So it's a particular section.

Sean Clizbe: Right.

Mark Haire: And there are other obviously possible scenarios that aren't described.

Sean Clizbe: They aren't described in NUREG-0654.

Mark Haire: Yes. The long and short of it is I said in my opening and perhaps this is not a reflection on what occurred at the station. But it was my understanding from talking to the team that you applied that particular guidance for rapidly developing scenarios. And inadvertently removed guidance - I don't know if it was inadvertent or by design, but removed guidance regarding shelter-in-place for other scenarios other than rapidly developing scenarios.

So we're looking to see where there is in your implementing procedure very clearly direction to consider shelter-in-place for other scenarios based on the dose avoidance concept. That's really in my mind the crux of it.

Grover Hettel: We agree with you. And we will show you.

Sean Clizbe: If I can too, we keep using the terms rapidly progressing scenarios. However, this is a specific type of an event. It's a severe accident. So it is defined within the supplement as to a severe accident and also you know the FAQ follow up that was asked by the industry and responded to what constitutes a severe accident.

So it's a specific type of the event that is expected to take place rapidly and severe enough that it would be something handled within the control room such that this would be the leg that the control room emergency director would most likely be entering without the assistance of anyone else. So it's that type of severe accident.

Grover Hettel: I'd like to just also emphasize that you know part of the struggle that we've had with the communication up to this point is we removed portions of our procedure dealing with the puff release or planned release. And then we were asked to how do we address that? And we tried to address it in the context of what's in NUREG-0654 or try to use the guidance in NUREG-0654 to address how we would look at that scenario.

So I think maybe some of the confusion that has transpired between us is our attempts to try to fit you know something that was not clearly described in the new guidance and to try to make it work. So we'll gladly speak more on that if anyone has any questions. But I think it's - you know Mark you had mentioned some of the concerns about communication.

I think that was one issue there.

Sean Clizbe: Well, the next consideration for sheltering versus evacuation in the supplement is associated with impediment evacuation. Each one of these impediments were evaluated and discussed with the outside response organizations and appropriate decisions were reflected in Revision 18 to Procedure 13.2.2.

Additionally, our procedure allows for a consideration of impediments not clearly identified in the supplement. And we'll discuss that later. And next, we'll discuss our evaluation of each impediment in the following slides. First, we'll start off with evacuation support. The guidance states that lack of traffic control may not be considered as an impediment when there's low population density within 2 miles.

Energy Northwest has a low population within 2 miles of the site. And through collaboration with the offsite response organizations, it was determined the lack of traffic control would not be an impediment to evacuation. In fact, there are no - there's zero permanent residents within 2 miles - 2 miles of our site.

This evaluation was incorporated into our procedure in Revision 18 as evacuation support not being considered an impediment to evacuation. Next we'll take a look at hostile actions as an impediment. The hostile action impediment consideration was discussed with our offsite response organizations and determined that due to low population surrounding the site, that the appropriate protective action recommendation during this event would be evacuate.

Due to low population surrounding the site, zero residents within two miles, the evacuation recommendation would not be putting people at risk of inadvertently becoming involved in hostile action. We came to this agreement and this analysis was included in Revision 18 of our procedure as the appropriate protective action.

Next, we'll discuss adverse weather as an impediment. During the collaboration process, it was determined that the offsite response organizations would have a better understanding of any adverse weather impediment at the time of the event especially when the location of the at risk

population is taken into account, that being on the outer edges of our emergency planning zone.

Therefore, Energy Northwest did not include consideration of adverse weather impediments in the protective action recommendation process. Additional considerations were given to the evacuation time estimate values when evaluating the impediment. Evacuation time estimate for all population emergency planning zone for the adverse weather scenario was less than 3 hours.

While it was determined that Energy Northwest had not needed to consider adverse weather as an impediment in our protective action recommendation for the standard protective action recommendation, it was taken into consideration for radiological release as described in Attachment 7.2 of our procedure.

And so we'll discuss that further. So in summary, NUREG-0654 Supplement 3 guidance encourages Licensees to use the guidance for developing the protective action recommendation strategies. Energy Northwest did use this guidance. And with offsite response organization collaboration, implemented Revision 18 to Procedure 13.2.2.

The NUREG was fully evaluated revealing that evacuation is the most appropriate protective action recommendation for our site emergency planning zone for the scenarios that are described in the NUREG. As we'll demonstrate, our procedure still retains the mechanism for issuing a shelter-in-place protective action recommendation when conditions not specifically described in the NUREG warrant.

Before we demonstrate this, we'll take a quick review of the changes to our procedure.

Man:

I'd like to just point out the inspection report makes these three conclusions that we disagree with. The first is that the assumption that we will remove shelter-in-place as a protective action. And No. 2, that we remove the recommendation of protective actions for plan releases. And 3, that we limited the ability the emergency response organization to recommend protective actions outside the plume exposures zone.

Revision 18 eliminated specific language for shelter-in-place for some cases. However, it did not remove shelter-in-place considerations or limit abilities to associate with protective action and recommendations within our outside the plume exposure emergency planning zone. I'll turn it over to Sean.

Sean Clizbe: I'm going to walk through our procedures 13.2.2, Revision 17 and Revision 18 changes. But first I wanted to discuss why we made the change in June of 2014. So the reason the change occurred was to implement 2011 version of Supplement 3 to NUREG-0654 with the objective of reducing potential health effects in the event of a nuclear power plant accident.

Incorporated shelter-in-place considerations in the structure of the protective action recommendation, a decision making tool. And also, we implemented some formatting improvements based on site process. But the real reason that we're you know implementing this guidance is the best guidance that's based on real large emergency operating experience. And it's the safest for the public.

The next, I'll walk through major changes to our procedure that are relevant for discussion today. So on the screen, we have Revision 17 and our current revision, Revision 18 up. There's kind of some administrative things to take care of first. For the yellow text on Revision 17 there, you'll see is text that changed - green text in Revision 18 is text that was added. And blue text in both revisions is text that hasn't changed, but is relevant to the discussion today.

So the changes that we made here were to include an If/Then statement and an update to insure that those projection tool was the first tool available for use. And the table in the back as a backup. Initially, we split it into two sections for clarity. So these changes do not impact the range of protective action recommendations to be considered by the emergency director nor the obligation to make protective action recommendations beyond the emergency planning zone.

So the changes in this section here is we removed the mention of a planned puff release as that language is no longer included in NUREG-0654 Supplement 3 2011. And so that that's a removal of - hard to see I guess from here. But removal of this 4.3.5 step. While we did remove this step, the concept of a planned release is still considered in our procedure.

And again, we're going to walk through that in detail. And also step 4.3.5, there's a known impediment language in there. And this is also still addressed. And addressed in Attachment 7.2 in our - of our Revision 18 procedure. Additionally, we had lots of discussion on step 4.4.4 in Revision 18.

And focus on how to implement a protective action recommendation and not what protective action recommendation should be made. It's simply letting offsite response organization know that we're going to vent containment so they can prepare. So what didn't change? The blue text 4.4.2. It still requires the use of Attachment 7.2 for updating protective action recommendations.

The procedure points to 7.1 and 7.2 which provides the mechanism for an emergency director to consider shelter-in-place. The one - Attachment 7.2 wasn't mentioned in the inspection report. We think it's important the conversation today that this is part of the decision making process for the emergency director. So, we're going to discuss each or each attachment next.

Man: (Unintelligible). Go back to that last slide about (unintelligible). A couple of times about how...

Man: Does he need a microphone?

Man: You talked about the need for how Supplement 3 took away the need for puff releases. I don't - I'm not sure that we would agree that this guidance took away that. It doesn't mention it. But that doesn't mean that it supersedes previous guidance on puff release. In discussions that we had over the winter with the staff, we recall that you understood old puff release to be the same as rapidly progressing.

I guess, if you could explain a little bit why you came to that conclusion.

Sean Clizbe: So the point that we're trying to make here is that the term planned puff release is no longer in the guidance. But our procedure still does take into consideration planned release. And that's the part we're going to walk through. And we think that's specifically the part that maybe wasn't communicated clearly enough in our original conversations.

Man: And you're saying that because you read Supplement 3 as being silent on the puff release, you didn't have to address it.

Sean Clizbe: We addressed the planned release in our procedure.

Man: I do want to make mention again, you go to the intro of the NUREG and it says you comply with this, you meet the regulation. It doesn't speak to it. Albeit, an EPF AQ came out a few years later, 2013, where the industry asked the question, "Hey, this guidance doesn't mention it. How do you treat it essentially?"

And we are treating it. But we're just not just treating it in a direct manner because again, like I said, the NUREG-0654 doesn't treat it in a direct manner. But we are addressing it in another manner. And we will speak to that.

Man: I can point - I guess state because at least through my understanding and kind of discussion on this, when you take a look at the 4.4.4 and it talks about

containment vent, in essence, puff release is what is short release or release with a known duration so to speak. I mean you're basically venting containment's probably going to be the most likely situation.

So again, I think as Don has been saying, we have the ability to - whether we call you call it a puff release or you call it mini containment, regardless of what you want to call the name of it, you know our procedures would still take you know evaluate the PAR for that. And sheltering-in-place would be one of those that we'd be evaluating.

Man: Yes. I think that's the bottom line there. Whether NUREG-0654 talks about planned release. Whether it was previously termed a puff release and you're implementing procedures. My interest is do you have a process to provide for a protective action recommendation in the scenario where you would need to vent containment which is a planned release here.

Man: Yes.

Man: And I think we need to talk a bit about - discuss the proposed activity with offsite authorities to assist them with protective action implementation. Or is the expectation that you actually have a protective action recommendation you're providing versus that engagement with offsite authorities. I think we need to understand that aspect.

Man: I think we'll be very clear on it when it gets to Dave Brown. He'll actually speak through how he uses the guidance to reach that. So I think if you'd give us a few moments, we'll get to that point.

Mark Haire: This is Mark Haire again. I just - not to belabor the point, but I want to make sure I understand. So we understand in our review that you still mention a discussion of shelter-in-place as a potential protective action in your attachment 7.2. And your view is that the way that that could get implemented by control room staff or emergency director staff is by virtue of this reference to it in Step 4.2 where it says...

Man: That's for the updated PAR, yes.

Mark Haire: But it says "determine the appropriate offsite PAR by comparing the plume projected dose and field monitoring team data with a protective action guides and guidance provided in Attachment 2 for the early phase of the nuclear incident. So that's - your view is that's the - the staff's connection to potentially making a shelter-in-place.

Man: No. This is one of the points on a conversation we had on the phone. I believe it was in February timeframe where we were told that our staff would

specifically jump over that step. And Dave Brown will speak to that in how he uses the procedure. But we don't agree with that conclusion. So again, if you would allow us to wait until Dave Brown who is one of our emergency directors to walk through that.

Sean Clizbe: Then next we'd like to discuss Attachment 7.1 and Revision 17 and 18 and just kind of a high level walk through for familiarity. Entering in the top of the flowchart, general emergency down to determine is a release in progress. Yes. Go the right which is going to drive you to look at the next attachment which is 7.2 which we've been discussing quite a bit.

And then if it's no, then it drives you down to these actions in this note box. So previously, in the previous revision, this is where we had a "See note" for puff release. So that's what was removed in their Revision 18. Okay. Yes. I'll use the (unintelligible) line so you guys can see it better. How about that? So the removal of terminology "puff release" again it was removed for a consistency as we moved it in Step 4.4.5 of the procedure.

And there were no substantial changes to the Release in Progress path other than we had additional footnotes added. And again, after we get done with my portion of the procedure changes, we'll have an emergency director walk you through the use of the procedure and the associated attachment.

Man: So I do want to make just a quick point. Mark, you had asked me if there was any difference between what we had sent earlier and the new version. So on Slide 31, just wanted to point out that the previous version didn't have green text or highlighted the section areas. We actually changed those. But that had change text. But in case somebody's looking at a previous version of the presentation.

Man: Just so I'm clear and thank you for that. The box, it talks about evacuate sections where EPA protective action guidelines are projected to be exceeded based on dose assessments or actual survey readings plus the next if not previously recommended then evacuate all sections zero to 2 miles and 10 miles downwind in shelter remaining sections.

Is it your contention that in shelter remaining sections mean shelter-in-place?

Man: That's the current definition that we have in our emergency plan. The shelter is the shelter-in-place definition.

Man: So shelter remaining sections you're maintaining that every other section - every other - the population that exists you know and all the rest of the remaining sectors other than zero to 2 miles and 10 miles downwind, you

would shelter-in-place as a dose avoidance versus when you go look at the NUREG, it talks about monitor and prepare.

That your plan was to have everyone sheltered.

Man:

Yes.

Man:

That's always been the intent?

Man:

That's been the intent.

Man:

Okay.

Man:

The - we're working with our offsite response organizations. And we currently were working through them when this came up to implement a better monitor and prepare strategy. And we'll continue to work with them and get that - the intent is to work with the offsite response organizations to implement the monitor and prepare language.

Man:

Well, this is important here because what I'm hearing you say is you know I want to understand your - if you truly intended that to be shelter-in-place and the individuals that would implement this understood it. Or is it meant to be monitor and prepare. And we used the word shelter remaining sections. In my view, this is an important distinction.

And I want to understand your view on that and the basis for that.

Man:

Dave, you should speak to that.

Dave Brown:

Yes. So this particular box and that language did not change with Rev 18. So this has been our station policy. We call it the standard PAR to as a general emergency, evacuate zero to 2 miles, evacuate downwind sectors, shelter remaining sectors. So that's - that's our station emergency plan guidance, I think Sean and/or Don can talk about with the offsites describe shelter as being because I've seen that definition as we prepared for this conference.

Mark Haire:

Yes, Dave. This is Mark Haire. I just - I know we're beating the horse to death here. But this is, as Mark said, this is important distinction for us. And as you mentioned and we saw, that language about evacuate certain sectors and downwind and then shelter everybody else that language was in your previous version...

Dave Brown:

That's right.

Mark Haire: Which also, the previous version also included distinct and separate considerations for potential shelter-in-place PAR for dose avoidance. And in fact, your section - your Attachment 7.2 talks about a separate PAR for dose avoidance. And the way you're using this language here in the flow chart and the way it - similar language is used in the - in the NUREG implies not that you'd be telling everybody that doesn't evacuate to go indoors, close their windows, turn off their air conditioning and hide from the dose.

But rather, you're telling them to hang out and wait for further instructions which to us is a very different issue.

Dave Brown: Right.

Mark Haire: It's not a protective action recommendation to tell everybody you're not protecting to standby which is what it sounds like you're using this flow chart to mean.

Dave Brown: So I will go through the flowchart with some examples where I will use Attachment 7.2 in that discussion. So what I was really trying to get at is the standard PAR language was not part of our change. It's been in the procedure as long as I can remember. And I've been a licensed operator at the site since 1998. So...

Mark Haire: Right.

Dave Brown: I've been through a lot of training and I've see this...

Mark Haire: I guess our concern though, the distinction we're trying to understand is when you have issued the protective action recommendation for two miles evacuate, 10 miles downwind evacuate, shelter everybody else, we're you trying to protect everybody else with a shelter PAR by telling them to turn off their air conditioning and close their doors?

Or were you just telling everybody else standby and wait for further instructions because those are very, very different?

Man: You know we know the NUREG-0654 uses the monitor and prepare language. And we haven't built that into our process yet. Our definition for shelter still exist. It still is the same in the emergency plan. So we haven't changed that. We know that there's a - we were going to proceed towards down that path. But the other thing to consider I realize you don't call it a protective action.

But having people not trans - you know travel through the plume zone is an important detail for protection even though you know we're asking them to go inside, shut the door, shut the windows even if they're not in the plume zone

area. So in essence, we're still - you know it may not be called a protective action because they're not in plume zone. But also keeping them out of traveling through the plume zone is somewhat of a protective action.

I know it hasn't been dialoged much on. But that hasn't changed. So we want to make the point that this hasn't changed although we were working towards the process of implementing something along that line of monitor and prepare. We have to change our forms. We have to change our procedures. We have to change agreements with the offsites.

Man: I just want to make sure - why we're pursuing this is because it's my understanding that you know you're contending that the shelter-in-place was always an aspect that you consider by virtue of the shelter remaining sections, right?

Man: That's one part of it yes.

Man: That's one part. And we'll get to 7.2 here. But I'd like to know, when you conducted exercises and you had the general emergency scenario here, was your emergency director directing evacuations zero to 2 miles and then 10 miles downwind. And then for everyone else, shelter-in-place. And that was part of your protective action recommendation. And that's what you actually practiced when you had exercises versus did you actually practice what is considered this monitor and prepare.

And is that what you did during the exercises? Or did you actually expect an issue - a protective action recommendation that would have every other section. You'd have the populist there sheltering-in-place which gets to closing windows, turning off air conditioning. And that was part of your protective action recommendation.

If that's what you're maintaining here that that was the intent. Did you practice that in your exercises?

Man: Yes. So we went through and validated what the offsite response organizations on what it meant when we gave the message out. What was the message the public was receiving. And the (AES) messages that they were giving for shelter was the shelter-in-place definition that's in our emergency plan.

Man: So during exercises, the shelter remaining sections was translated to shelter-in-place. That was part of your PAR. And that's what you have done for each exercise that has - reaches the general emergency where there's a release involved, right?

Man: Yes.

Man: Yes.

Man: Okay. So we should have had the opportunity. Your observation of those exercises to validate that, right. Alright. Let's move on.

Sean Clizbe: So the next, we'll discuss Attachment 7.2. And this is where the consideration for sheltering versus evacuation is located. So the previous section for release in progress strategy is Attachment 7.2. And this is where it's found. And it has not changed from Revision 17 to revision 18. The one minor change here was that we added a reminder that no matter - regardless of the protective action recommendation that we give, it's the offsite response organizations have the final say on the decision.

So this attachment is like I mentioned is the tool for determining shelter versus evacuation. And it wasn't specifically referenced in the inspection report. But we think it's important to our conversation today. And again, we'll walk through it with an emergency director to show its' appropriate use.

I'll turn it over to Don here.

Don Gregoire: Okay. So with respect to the inspection report...

Man: Be sure to indulge me. Since we spent a fair amount of time talking about this, can we go and have you walk through exactly how you would if you were an emergency director refer to Attachment 7.1 and 7.2 and how you would make that shelter-in-place protective action recommendation. It seems appropriate in my mind to do that.

Don Gregorie: Okay. So what we'll do is jump to Slide 37 and turn it over to Dave Brown, our emergency director to do that.

Dave Brown: Okay. Good afternoon. Again, my name is Dave Brown. I've been emergency director since 2003 when I qualified as a shift manager. Been through training, annual training on emergency plans since 1998 when I obtained an SLR license. So I've been through a lot of training drills, evaluations, actual alert activation. I was there.

And so when I walk through the procedure, I'm going to explain from my perspective what the words mean, okay. And my experience. Also, I'll try to highlight where training has emphasized you know different things. So, starting with Attachment or sorry, PPM 13.2.2. Initial Plant Based PARs, when the plant has reached or is about to reach a general emergency for a classification occurring at the station, I've used Step 4.2 in the procedure.

And I'm going to try to use my pointer and start with Step 4.2.1. So the thing about procedure use fundamentals, at our site, if the steps have numbers, you do them in sequence one after the other. You don't skip around unless that procedure gives you permission to do that. So what would be different is if the steps are just bulleted.

Then those steps could be done in any order. But - so I'm going to step right through this procedure starting with Step 4.2.1. And that's going to drive me to evaluate my decision for protective action recommendation in accordance with Attachment 7.1. Pass the next slide. So Attachment 7.1 for the case where I'm and the general emergency and I have a release in progress or I have a planned release I'm about to take, I'm going to enter this chart in the same spot.

Enter up here in the upper arrow where it says, "Enter if site area emergency or general emergency is declared." With the general emergency, I'm going to go down. So the only difference there in my discussion is that if we're at a site area emergency and we plan on doing a planned release, well, I'm going to upgrade to a general as part of that evolution and move down through the chart.

And then I'm going to evaluate this decision diamond do I have a release in progress. And I move over to the right. And that points me to evaluate my protective action recommendation in accordance with Attachment 7.2.

Man: Dave, can I just back you up for a second. You used the word evaluate per Attachment 2. But your procedure says evacuate per section 7.2.

Dave Brown: Right.

Man: Attachment 7.2.

Dave Brown: So - so the direction is to evacuate sections where EPA PAGs are projected to be exceeded based on dose assessments. Attachment 7.2 is the dialogue or expectations in the procedure that I have to consider a shelter-in-place if extreme circumstances are warranted. That's where I was just getting ready to explain.

So with any release that we have, it doesn't matter if it's a planned release or an unisolable leak, I'm in this box. And I'm going to evaluate - or I'm going to evacuate sectors - excuse me, I used the wrong word in accordance with Attachment 7.2. Did I clarify your question?

Man: Well, I just wanted to make sure that we were speaking the same language. And to me, if I'm following the procedure and I read the words evaluate per 7.2, then I think I've got to go to 7.2 and evaluate what the right PAR is. But when I read the word in the procedure evacuate where the PAGs are being exceeded for 7.2, then I'm not going to 7.2 to assess whether I'm going to shelter.

I'm going to 7.2 to access what parts to evacuate.

Dave Brown: Okay.

Man: That's the part I'm trying to understand is if we're using this as tool to say we would get the 7.2 and consider shelter, are we following the procedure. That's what I'm trying to understand.

Dave Brown: Yes. So let me - let me clarify that. So next slide is Attachment 7.2. And let me point out something. So, back to my training and experience. So we have the standard PAR that we issue for general emergency. Zero to 2 miles, evacuate. Evacuate downwind. Shelter remaining sections. That's our standard PAR.

I've been thought use the Attachment 7.2 to decide if you need to deviate from that standard PAR. And it gives some specific considerations here. "Where Sheltering may be the preferred protective action when it will provide protection equal to or greater than evacuation. I've read those words for 17 years. They are not - they're not any different last year than they are today. And I - like I said, I've been thought in training. I've been coached on it.

That in certain circumstances like severe weather, you don't evacuate. You do need to consider sheltering. And so that's really what it amounts to is the direction is to evacuate. That is our standard PAR. The procedure also tells me to consider these other circumstances.

Man: Two questions on that if you would. The first is I thought it was heard earlier that you agreed with your offsite authorities that in circumstances such as severe weather, there might be pediments that you were not going to consider those as part of your process.

Man: So with the exception on that slide, with the exception of radiological release scenario.

Man: So how would you discuss (unintelligible).

- Dave Brown: Okay so with the release in progress, we do go to this chart - this Attachment, excuse me. Based on the circumstances, I tend to want to point over here. But I know that's hard for you guys to read.
- Man: Can I just make a -address one point. Paul, I know you mentioned something that we said. If you look on Slide 25, it specifically says there that we retain consideration for sheltering in adverse weather conditions during a radioactive release. Maybe we didn't emphasize clearly when we were at that slide but on Slide 25.
- Man: (Unintelligible) the description of the process. The second question goes to the first part of the note...
- Man: Go back to...
- Man: To 7.2.
- Dave Brown: Attachment 7.2. Slide 39
- Man: Slide 39.
- Man: Right. That's first where it starts one shelter may be the preferred in red. As the management (unintelligible) individual, what process do you have to know whether protection is greater or equal as far as sheltering? It doesn't seem to provide you with tools to making that decision.
- Dave Brown: Right. So the - the tools that we have available, I talk to my team including at the table. We have offsite representation. So they can weight in if they have particular details that we don't have in terms of impediments. They can bring that up. As far as those - the radiological emergency manager and I talk about it. We use the dose assessment tool that we have in front of us for that release.
- And use that as a - use that to help us make our decision. So part of what we are able to do with our dose assessment tool is show how far into the emergency planning zone are we above 1 REM or 5 REM SETI. Excuse me. So that's just a - using different dose assessments, you can - you can show where the plume's at in the planning zone.
- And you can make a decision from there.
- Man: So does your dose assessment tool provide you with an assessment of the dose under the shelter option - the shelter-in-place option versus the dose under the evacuate option to make the comparison?

Dave Brown: The dose assessment tool doesn't tell you what to do. You use your professional judgment. So right now what we're doing is we're considering these impediments, including you know roads that might be closed due to severe accident or competing disasters and things like that. That's something our security manager might be privy too as he's talked to the local law enforcement.

So this is clearly a judgment space that we're in when we're using Attachment 7.2 applying it to the circumstances. We're using our collective experience and our tools. Any other questions on that?

Man: Yes. I have a question here. If I heard you correctly, this evacuate sections were EPA PEGs and there's reference to Attachment 7.2 are projected to be exceeded, that's where you go to 7.2 and you evaluate whether you should evacuate or shelter-in-place. Am I hearing you correctly?

Dave Brown: So like I said, I've interpreted this table for many years to apply that the direction in Attachment 7.1 says evacuate sectors above 1 and 5. I've interpreted this table. And I've been reinforced it in my training that you evacuate unless you meet one of these thresholds for sheltering. Then you shelter.

Man: Yes. I appreciate that because when I read that evacuate sections where EPA PEGs Attachment 7.2, that tells you what the EPA PEGs are. The 1 to 5 Rem TEDE or 5-25 Rem CDE thyroid or 50 to 500 Rem skin. If those PEGs are exceeded or are projected to be exceeded based on the doses, estimates or actual survey readings, so you are evacuating those sections. Plus, if not previously recommended, then evacuate all sections 10 miles downwind and shelter remaining sections.

And it's been your contention that shelter remaining sections meant shelter-in-place. It's not clear to me why you're going through this evaluation of shelter-in-place when you've got specific direction here that tells you you're going to shelter all the other sections in place. It seems like this is inappropriate given the direction.

So now you're telling me - and I'm speaking to understand, you're telling me that this evacuate sections where EPA PEGs and because it has reference to Attachment 7.2, that has been your trigger point to go to 7.2 and determine whether evacuation is appropriate or shelter-in-place. Independent of the subsequent guidance there that would tell you to shelter all sections, remaining sections.

Dave Brown: Yes. So I believe I said that. And it is my position that the shelter-in-place discussion is really pertinent to the downwind sectors because our standard

PAR is to shelter remaining unaffected sectors. So what we're applying Attachment &.2 to is that downwind sector. Do we evacuate? Or do we shelter that section?

Everything else - every other sector 2 miles to 10 miles is being sheltered.

Don Gregoire: I do want to mention that you know when this was first brought to our attention on the phone call I believe it was in February timeframe, me personally as a Reg Affairs manager, I had some concern. Was our staff interpreting that step there and disregarding or feeling like that did not or they should not consider sheltering-in-place in Attachment 7.2.

Knowing that our staff hadn't been interviewed in this process, I wanted to know for myself from a safety perspective, how are they using the table? So we interviewed all of our - the four emergency operations facility emergency directors and how they would use the procedure. And if under certain scenarios and maybe this is leading.

But I wanted to know does the procedure work for them. How do they get to shelter-in-place? And they all pointed to using this box, this section. That Attachment 7.2 as what they would use to introduce shelter-in-place considerations for a planned release.

Man: Don, you said 4. We actually interviewed 3. And then we did a (unintelligible).

Don Gregorie: Yes. So we actually had 3 that were on site. And the fourth one was out for medical reasons. And when he came back, we actually dry ran him through a scenario and table top. I'm sorry, and he was able to use the procedure to reach a shelter-in-place consideration.

Robert Kahler: I'm sorry. Bob Kahler from NRC headquarters. I guess than during the inspection process to better understand what the actual individuals would do during a real event following the changes or maybe between Rev 17 or Rev 18, the question started coming up discussion turned to training modules as to the change that was incorporated in Rev 18.

And what was intended to change in the training modules to reflect that change. Now I understand what you're talking about in the past that was associated with Rev 17. What we're discussing is the Rev 18. And it was my understanding that during the discussion with the staff at Columbia that a discussion on the training module occurred. And a lot of action items that had not yet been completed the training, that it intended to train individuals with removal shelter from even the judgement piece.

That was in table 7.2 to continue on. And then all the training was yet to take place, training changes were yet to take place. Some of them had occurred already to discuss the shelter being removed from the - from the attachment 7.1 where you go through the flow chart, it no longer discusses the use of sheltering even after ten miles so and the fact that I believe during that discussion it was discussed what was meant by sheltering outside of that zero to two and down the wedge that the shelter was not the same as it was previously and a difference of how that shelter would be looked at in the future was to be made and it was only to be monitored and prepared. So the changes have not yet been made to the training module.

So can you explain a little bit about that discussion and where maybe the discussion that I guess we heard and that you said may have a difference in what was made between rev 17 and 18 and what was planned to occur during the training modules as per the action item that you had initiated?

(Kurt): Sure. So I'll start this out.

Man: I went around in circles there but...

(Kurt): And maybe (AJ) can jump in here. He's in charge of the training program but we recognize when we're going through the process and through discussions that our training required some additional updates. When we talked with Mr. (Elkman) we recognized that we put all of our training on hold. No one had received any training and evaluated the training module and it does need updated to incorporate the changes that we made to revision 18 - incorporating the 0654 guidance. So that's really the way that the discussion went. I can't recall any additional conversation. I don't know if (AJ) can jump in.

Man: You need the microphone so do you want to come up here?

(AJ Famastock): So I'll jump in at (Kurt)'s position. My name is (AJ Famastock). As (Shawn) mentioned, I work for him in emergency preparedness. So the discussion was about some changes that we had made to the training materials which were moved - the reference to what was I believe attachment 7.3 which had times associated with it - evacuation time estimates associated with it and was referenced to section 4.3.5 in the procedure that talked about the use of those evacuation time estimates for puff release.

That had been sequentially removed from the procedure and we had some dialogue about the process by which that was done. We didn't end up writing a condition report prior to that conversation about the timing of that removal. It was something that did not meet our standards at the station - the timing of the removal did not. Again that was to align it with the procedure changes that were made in June of 2014.

The discussion having to do with shelter in place was not as crisp - certainly not as crisp as it could have been. In fact we came back to the table on a subsequent phone call and provided information directly out of our county's EAS messaging system - follow-on message for EAS broadcast - and in fact read the language directly out of that follow-on message and if you like, I can repeat that here today.

This is our county - this is the EAS follow-on message that (Shawn) referenced earlier having to do with shelter in place and it actually describes the actions that the publisher should take for shelter in place and while we recognize that that discussion may not have been as crisp as it needed to be, we did initiate a follow-on dialogue to clarify that position on a subsequent phone call and I can read you that language if you'd like.

Okay so this comes right out of the county EAS message and it states if you live or work in an area that was asked to take shelter, go into a house or other well-built structure, close all windows and outside doors. Close anything else that might bring air in from the outside which would include HVAC potentially such as fireplace damper, range fan, bathroom vent or clothes dryer vent, turn off range fans and clothes dryers. And it goes onto provide additional information that's not really relevant to the conversation here.

But in short the public is told a shelter which involves a shelter in place. Go in doors. Close off access to outside air and that was communicated subsequently.

Man: So just so I'm clear - this is an important point in my mind.

(AJ Famastock): Yes.

Man: In practice and during the exercises and you contended an actual event and you're following attachment 7.1, you would evacuate all sections zero to two miles and ten miles downwind and you would shelter in place remaining sections and that message that you just referred to is what would be shared as part of the protective action recommendation and Mr. (Brown) this evacuate section where EPA pads are projected to be exceeded based on dose assessments that you looked at attachment 7.2 and when you were just considering the downwind sector, that's when you decided whether it needed to be shelter in place or evacuation, you know, even though this would say evacuate sections where EPA pads are exceeded and that's how you applied this guidance here in attachment 7.2.

So you expected to evacuate zero to two miles downwind, shelter all other sections - right - shelter in place for all other sections because that's what this

guidance says. And the shelter in place comes into play there for in terms of any discretionary decision is downwind.

(Kurt): So yes and let me clarify what I mean by downwind. So the dose assessment would show us which sectors are affected from the ongoing release. It could be more than one. So when we say downwind, we're talking about those sectors where the dose assessment has projected dose rates above one (remsedi), by (remsedi). So when I say I would consider sheltering the downwind sectors, I'm talking about those sectors that are potentially affected by the offsite release.

Man: So your point is where it says evacuate sections where EPA pads are exceeded, you would look at shelter in place, right?

(Kurt): As it pertains to the special circumstances on this slide - yes I would. So...

Man: Okay and the expectation is that you evacuate zero to two miles - ten miles downwind - and you shelter all the other sections so the discretionary aspect are those sections where the EPA pads are exceeded and you have the option of shelter in place.

(Kurt): Yes, I do.

Man: Okay so that's how you applied that.

(Kurt): Yes and like I mentioned, this attachment really hasn't changed in all my years as a licensed operator. It has not changed.

Man: And it doesn't sound to me from listening to the discussion that your plan training would reinforce that expectation. It sounds like there was a disconnect there in what your planned training was. Is that right?

(Kurt): Well I've been taught that for years so...

Man: No, I'm talking about the change for implementing revision 18. I would offer - from what I heard - would not be consistent with what you just said was how you would practically apply that direction in that box.

Man: Yes, we recognize it. We didn't - in the revision process we didn't do a good job in training on the subject of what we implemented. In the interview process we specifically asked them what kind of training did you get on this and it really wasn't very much training on it to make any changes in how they would use the table. So there was no - nothing that would alter how they would use it.

Man: So it's worth mentioning (unintelligible) that the training that had previously been provided on attachment 7.2 which was not as involved and lengthy as what had been provided on the section I spoke of that was removed has not changed. That has not - as Mr. (Brown) pointed out - has not been altered in the last period of time. I don't know that I can quote 17 years the way you did but it has not hit on it.

Man: Okay. The reason why I am engaging to the degree I am on this is because you've got an inspection team that interacts with your staff, walks away with a certain understanding here. That's the basis for the apparent violations and the basis for the preliminary significant determination, right and what I'm hearing here is how this guidance was intended to be applied, how it's always been applied and how it would be applied as a result of revision 18 is that shelter in place is part and parcel of your protective action recommendation process and the implementing revision 18 in accordance with new reg 0654 supplement three didn't change that.

That's a disconnect from what we obviously preliminarily concluded. That's why you're challenging that but I'm really trying to understand how we were so disconnected here between the inspection team's findings based on interaction with the staff and what your position was communicated based on those interactions and what I'm hearing here today.

Now going forward it's important that we understand what your position is and then we're going to have to make a value judgment quite frankly whether we agree with that, whether we think that's reasonable, etcetera. Okay?

Man: Yes and - like I said - we agree that the communication process along the way - we certainly could have improved it. We could have gathered a better understanding of really what the issue was because it really wasn't until late where it was formulated that this is what the issue was. Up to I believe around the February timeframe it was more of an information gathering. We were trying to address questions the best we could. So we realize there are some areas for improvement in our interaction there.

Man: Yes and because again I'll say the - maybe an example (Mark) was your interaction asking us - and I thought what I was gaining from it was - okay when we say shelter, do we mean shelter in place? In essence what's our definition? At least that's what I thought you were getting and my team answered about four or five different other things before they finally answered your question.

So again I'll take that back with our interactions during the, you know, the inspection. I think that was a lot of, you know, what was going on. We weren't thinking to really understand the question well enough and we were

answering what we thought the question was and then, you know, maybe the inspector was receiving the question or the answers to what he thought he was asking and again they just kind of missed each other or something.

I wish I had a better explanation but again I just saw another exhibition of it when you asked the question on shelter and I, you know, again what the question was and even back to the procedures - I agree when you say evacuate, you know, sections - okay how do we come up with an evaluation on that? But again it's here and we've got it consistent from the other emergency directors that we got. That's how they were trained, you know.

You can go pull that, you know, section 7.2 and you're going to evaluate, you know, so again I wish I had a better explanation.

Man: I appreciate that and I have to tell you I'm struggling with this shelter remaining sections to mean shelter in place here when you're talking about a wind direction that doesn't impact those particular sectors and you're communicating what shelter in place is. And quite frankly I am struggling with is that what you truly intended or did you intend this monitor and prepare because the monitor and prepare makes sense to me.

Sheltering in place - every other unaffected sector here I struggle with and doing that is a dose avoidance protective action recommendation when you already know the areas for which you have projected pad, you know, dose levels that would exceed the pads. You've already got the zero to two miles. You've got the ten miles downwind in every other section. Was your intent to shelter in place?

You know, when you go back and you look at the generic guidance and it talks about monitor and prepare and this is language that you've had in your procedures so I'm going to assume every exercise you've conducted, you clearly communicated when you had a general emergency that all other sections other than zero to two miles and ten miles downwind you would shelter in place and that was part of your PAR and we should be able to go back and validate that that's what you recommended during the exercises.

Man: I do want to point out that the monitor and prepare language actually showed up in the 2011 new reg document so prior to that time it really wasn't - maybe it had a different form but that term monitor and prepare actually showed up in that document and it is something that - like I said - we've considered as far as moving forward and how we're going to adopt that in our process.

Man: Right but the point there is that you always adopted the shelter in place for that, you know, whether 2011 there's specific reference to monitor and

prepare. What was your behavior and your behavior is what I'm hearing is the shelter in place.

Man: That's right.

Man: Independent of this monitor and prepare language introduced in 2011.

Man: That's right.

Man: Which brings me to the curious question as to if you're discussing supplement three and I heard at the beginning of the conference that if we met what supplement three provided to us in guidance, you would be in compliance with regulation. You had thought that everything that was in supplement three but yet the piece on monitor and prepare was not adopted.

So I guess I need to know more about why you're saying now that you did not adopt monitor and prepare and you're saying the shelter in place that you will do for the rest of the remaining EPZ is the same as if it were to be for dose avoidance. On supplement three one of the major differences from supplement three and any previous guidance was to identify that rest of the EPZ to monitor and prepare and that was a major change and was identified on such numerous occasions before it was issued.

You adopted and you say you used everything else out of supplement three but you didn't use that piece. What was the reasoning behind that and why you're continuing to say that your shelter in place for the remainder of the EPZ is the same as if it was for dose avoidance?

Man: So we were working through the monitor and prepare language and working with the outside response organizations and adding it to - adding it to the programs. When this came up we kind of stopped discussions to understand what the regulatory issue was last August and it is our intent to include the monitor and prepare language with the offsite authorization collaboration to include it. We think it's an appropriate tool.

So we're working towards it. We recognize we had some terminology differences and we stopped after we were informed of the, you know, issue.

Man: You're saying you had not completed all of your changes to your PAR strategies meaning...

Man: The only one that we didn't...

Man: With the guidance provided in supplement three through August of last year?

Man: The additional language of monitor and prepare into the strategy impacts messaging, public documentation and those kinds of things and we had not done that yet.

Man: (Unintelligible).

Man: I wanted to turn a little bit to the training (unintelligible) and to the corrective action document that (AJ) mentioned a couple of minutes ago. We did ask for a training module that underlies essentially at 7.2 with the power procedures that was the one - the version that was changed in June of 2014. And going through there, we looked at it and noticed that nothing was added to that module, that references to shelter had been deleted and then in January of this year we were provided a corrective action report that says that you intended to remove additional references to shelter essentially that you didn't complete in the initial revision.

It kind of - just to be clear - the current training for PAR - if you go through that computer based module - there is no explicit reference to this attachment 7.2 and in particular to the notes associated with it. Is that correct?

Man: We don't have a copy of the training material right here before us. That's something we can follow-up on on that material.

Man: It is important to note all of the training - the CPT (unintelligible).

Man: It is important to note that the CPT is currently on hold and has been since (unintelligible).

Man: And with training we've given to you - you have an annual training requirement for your (unintelligible). How have you been fulfilling it if your training module's on hold?

Man: So that was actually in progress at the time that we made the determination on it and it was near completion so that did go forward and was completed with that - with the current materials - but that was almost complete at the time we noted the discrepancy and generated the condition. Since then that has been on hold.

Man: I think that it kind of gets to the - it really gets to the intent of whether 7.2 - task 7.2 would not be used if you intended not to reference it in training. That would make it difficult to understand why you think it would be used if it wasn't being trained on.

Man: I think I've heard the acknowledgement that your training was not what you expected here, you know, and if you are going to use 7.2 as part of the

decision process and that's a tool that you have for your decision makers then it would be appropriate to reference that in your training.

So what I'm hearing is from the (unintelligible) is that while there's the recognition that the training module did not capture 7.2, it's your view that individuals that have served in that command and control function would have in fact exercised the guidance like you said Mr. (Brown) you know, with the shelter in place considerations. That's what I've heard. Is that correct?

Man: That's correct.

Man: And I know we haven't gone onto slide 40 but just to make sure here that if there's no release in progress, you still would have sheltered all the remaining sections with the shelter in place even though there's no release, right. That's the expectation. That's what you exercised and...

Man: That's correct and - excuse me - I will walk through the rest of my procedure presentation if you're ready for that.

Man: Yes, sure.

Man: Okay. So the next slide - so here's a case where we're looking at initial PAR's in a general emergency with no release in progress. We do work through the attachment 7.1 in a similar fashion, go down the general emergency path, evaluate release in progress. The answer to that is no and then we issue the standard PAR - evacuate all sectors zero to two miles, ten miles downwind and shelter remaining sections.

So even though we don't have a release in progress, our dose assessment will show us a downwind sector and that's what we used as a basis for issuing this standard par. Any questions on that? Okay. So I'll move onto a discussion about the updating pars.

Man: We did just put this in here because there was as reference in the inspection report that with regard to how we handled the plan release. In regard to step 4.4.4 in the last statement it said that it concluded that a discussion intended to assist offsite authorities is not equivalent to a protective action recommendation and we agree with that but that's referencing those steps. You'll find that later on when we speak to step 4.4.6 that that does provide the protective action recommendation.

Man: So next slide. So in the case that I was just discussing if we're in a general emergency and we have no release in progress and then we decide to either do a planned release or a release develops, I would be using the updated PAR section of the procedure and I'll point to step 4.4.2 which says to determine

the appropriate offsite PAR by preparing again your dose assessment data to attachment 7.2 and use the guidance in attachment 7.2 to make your decision.

So updating PAR's - I would do the same thing. I would get a dose assessment. I would look at attachment 7.2 for any special circumstances and then I'd move on in the procedure. The next slide shows where step 4.4.4 is - if we plan on doing a planned release, I would discuss with the off-sites. So I've already made my decision on the PAR - the updated PAR at this point.

What I'm talking to them about is we're going to do a planned release that has a finite duration to protect our primary containment and we're going to do that as directed by the emergency operating procedures after the emergency director who is myself has concurred with that action as the control room is wanting to do it.

But as it relates to the off-sites, what we are doing is we're giving them advanced notice that we're going to update our PAR for this particular scenario of a planned release and that helps them with their planning and you can see the step language. It says to assist them with their protective action implementation.

The next step or when you turn the page in the procedure, I communicate the updated PAR with a new CNF form - classification notification form - in step 4.4.6. So that's how we officially notify the off-sites of that updated par. Any questions on that? Okay, next slide. I'll move onto - okay.

Man: Again, you know, I see 4.4.4 that talks about discuss the proposed activity with offsite authorities but show me where it is in your procedure again that you would make a PAR because I...

Man: Okay so the PAR - the PAR is actually made in step 4.4.2. So if I go back to the previous slide, I'm making my decision for the updated PAR in step 4.4.2. Again I'm going to be directed to consider special circumstances that might be defined in attachment 7.2.

Man: Let's step back. You've got a planned release. This isn't updating a PAR based on new information. You have a planned release. Where in your procedure does it have you recommend a protective action - provide a protective action recommendation associated with a planned release?

Man: So looking at the title here, it says updated offsite PAR's based on projected doses.

Man: Okay.

Man: So it's assumed that if you're having a planned release, you're going to have a dose to go with that.

Man: Okay.

Man: So again we mentioned earlier that it's not speaking directly but it is inferred in our existing guidance that is there.

Man: But so whether we open the valves and do the release ourselves or whether the release occurs, it is a release and so my path from that point is the same. We do a dose assessment, we look at the consequences and we update the par. And this discussion with the off-sites - step 4.4.4 - is to help them with that PAR implementation. (Paul) did you have a question?

(Paul): Yes, I'm looking at that step. Who supposes you have those to look at? If you go to your dose assessment procedure, you have direction in there on how to estimate the radiological consequences of the planned release but you don't have rad monitor data. The inputs for dose assessment or a release occurring (unintelligible) by accidental reasons.

You've got either a direct field measurement or you have a radiation monitor number that you would put into dose assessment. That ends up producing dose but do you have direction for doing that (unintelligible) released for so many minutes and so much pressure and so much source term in there so that you actually arrive at a dose assessment for the projected release that you could trust.

Man: So to answer your question, I think I'd have to defer to someone who's a little bit closer to the dose assessment - the nuts and bolts of doing the - entering the data into it. So I don't know if (AJ) if you could answer his question.

(AJ Famastock): I know this is going to come into the category that (Don) mentioned earlier. We don't have a copy of the dose procedure here with us today so it would be speculative of me to speak to that answer.

Man: Okay so (Paul) we can owe you that information. I think it's a very good question. I apologize I don't have it off the tip of my tongue.

(AJ Famastock): Let me make one other point about it and that is that the (unintelligible) I'd say this alters what I said earlier but the software has been ready to run dose projections based upon our understanding and our radiological emergency manager's understanding of what those instrument readings are likely to be and given containment readings, they would be able to formulate that reasonably well. But again we don't have a copy of the procedure with us so we can't definitively answer your question.

Man: If I can, before we go onto - it looks like you're getting into your concluding type of area. You're talking about lessons learned. Just - we'll be able to go over slides 33, 34 and 35 related to the control room and exceeding the ten mile EPZ because we kind of skipped over top of that as we went to the implementation procedures just to make sure we cover all of that too because there is some items in there I think we need to hear about.

Man: So if I might if I can finish my section then we'll go back and finish (Shawn)'s section on the procedure changes because he's going to talk to that point.

Man: Just so we don't forget about it.

Man: That's right. Okay, I'll move us on then to the next slide. We're talking with the off-sites, letting them know about the planned activity. Next slide. I'm completing the updated PAR with the - related to the planned release - and then the next slide is a copy of our classification notification form.

So what we've got here - I just wanted to highlight a couple of aspects of this form. One is that very little of the information is automatically populated, okay. So the user - in my case this is filled out by the assistant EOF manager and then presented to me and we may - we have quite a few discussions as we feel it out but I'll highlight two aspects of the form that are not auto populated.

When we select the emergency action level that we're in - in this case it's an intentional dent of containment - we then select the offsite release yes and put in the time of that offsite release starting. So that's not - that's not a default value so I just wanted to highlight that.

And over in the PAR area for general emergency - when you select the general emergency - this is all blank, okay. All these fields - you have to manually select each one. So I'm making decisions on zero to two miles we click the evacuate button. For the affected sectors - sections - excuse me - I'm making a decision shelter or evaluate all the way across the board and we just wanted to highlight that as part of our communication with the off-sites but then nothing's really taken away from me, okay.

And with regard to the procedure changes, you know, it's my professional judgment that the procedure change did not put me in a corner as the emergency director. It didn't really change the way that I evaluate whether I shelter or evacuate.

The - excuse me - right. So the point I was trying to make is that when the condition report was written at our station for this violation, we entered it into

- we developed a compensatory measure for the emergency directors and emphasized the fundamentals of shelter in place as it pertains to the planned release activity or other rapidly developing activity. And when I read that, I said this doesn't change any guide - I already have this direction. Why do I need a count measure? That was my reaction, okay.

So I'm here to tell you today that I can use this procedure to arrive at a shelter or evacuation PAR based on circumstances and it really, you know, definitely there are changes in the procedure but it doesn't change the way I look at it. It doesn't change the way that I perform when it comes down to it.

So that's what I wanted to leave you with as it relates to the procedure changes and how I use them.

(Mark): Okay, this is (Mark) here. Before we leave this slide, I just want to I guess one more time achieve clarity. When you click the button shelter for anyone of those sections, it means the same thing to the off-sites for making their protective action decisions and that is that it means to go into the house, shut the door, close the windows, turn off the ventilation as was read by (AJ) regardless of whether it's a downwind sector or an unaffected sector.

The word shelter on that form gives the same direction to the same recommendation to the outsiders which would translate to the same actions for the public whether they're in an affected downwind zone or an unaffected downwind zone. Is that true?

Man: You are correct.

Man: Okay.

Man: Okay so I think you wanted to go back to...

Man: Slide 33.

Man: The procedure changes.

Man: Before we leave that topic, can I ask one last question? I'm interested in, you know, we talked a lot about the test of 7.2 and how it existed a long time prior to June 2014 for use in radiological emergencies. Did you look at whether in actual drills or exercises you have any record of an exercise in which a shelter recommendation (unintelligible) user attachment 7.2 advice, 7.1 and evacuation?

Post 2014 you probably haven't run very many exercises so you may not have much exercises there but certainly, you know, given your discussion that that

attachment hasn't changed in a very long time and its understanding hasn't changed, one would expect some history on it actually being used in practice so did you look at that?

Man: Yes. Well we did go back and look at that and I think we went back 12 years and to see if we had any scenarios that would have driven a mercy director to make a shelter protective action recommendation and we did not have a scenario that would have driven him to a - driven him to a shelter.

The only one that we did have was during causal action based exercises where they issued a shelter but it was an appropriately issued and critiqued in the (unintelligible).

Man: In the last 12 years you've not had a general emergency with a release as part of an exercise?

Man: We've had a release but not a scenario that drove the emergency director to make a shelter protective action recommendation for the downwind.

Man: (Unintelligible).

Man: Yes.

Man: I thought when you have a release in progress and you had a general emergency, you're evacuating zero to two miles and ten miles downwind and sheltering all the rest.

Man: Sheltering all the rest. I'm talking about down winds. I'm sorry - down winds section.

Man: They have not run an exercise where they (unintelligible).

Man: Okay.

Man: So I would also clarify that I know we've had discussions during my role as the emergency director during drills. I've definitely talked with my team about whether it's appropriate for shelter or evacuation and that's why I've circled back to that comment many times during our presentation today.

Whether we finally concluded that sheltering was more appropriate in that circumstance, I couldn't point to. But I know that that's part of our discussion.

Man: This is just a follow-on question and I appreciate you're providing your perspective as a person that has acted as the emergency director and readied the facility but you're confident that you've engaged others that would be in

that position and they would apply the guidance system manner as we've heard from Mr. (Brown)?

Man: That's correct. We - like I said - when it was first asserted that our staff would not use that, it raised concerns for me as the reg affairs manager, you know. Are we not using or can we not use it and through the interview process we determined that they would all use that, even through a tabletop. It demonstrated that they would use that for the unique situation - again like I said - keeping in mind our EPZ is very - most folks are on the extreme - on the outside area but yes, they would still use it for that consideration.

Man: Alright, thanks.

(Mark): I guess - this is (Mark) again. Before we leave that topic I guess one of the questions that's still lingering in my mind is hearing the testimony from Mr. (Brown) for what he would do and what it means to him and then understanding what we see in the training module raises the question is the perspective that Mr. (Brown) has a legacy of better training in the past and are new emergency directors going to continue that perspective because the text in front of us doesn't lead us to logically draw those conclusions?

Man: That's a very good question and it's something we will look at going forward but I mean all of this raises our awareness that there are people that could step into this, look at it differently and for us to reevaluate, go back and see if there's some improvements we can do in this process but we kind of wanted to see this, you know, play all the way out. We're not - we have currently a number of staff people right now that have gone through the previous training but we agree with you on that point.

Man: (Unintelligible).

Man: Yes, I think our youngest emergency director is about two years qualified and then the most - and they all average out to somewhere around five to seven years. I'm sorry. I should be specific. Those were the emergency operating facility emergency directors.

Man: Yes, I think an important point I was asking Mr. (Hare) here because you indicated Mr. - how do I pronounce your last name?

Man: (Greguar) like jaguar.

Man: I'm sorry. Okay, got it. I won't ask if you own one here but, you know, you made the comment that when you heard from the team that your emergency directors wouldn't follow the guidance, you wanted to know if there was a gap there. Well that was based on a read of the guidance and trying to follow it,

not based - as I understand it - on interviews with emergency directors regarding, you know, how they would apply that, okay.

Man: Yes and we understood that and we knew that at that time none of our staff had been interviewed and there was a conclusion that was being reached that - and it was just from the offices to how they were looking at it so yes, we understand that.

Man: Okay, yes. Thank you.

Man: Are we ready to go back to slide 33? Okay, this is a point we wanted to emphasize again with regard to protective action recommendations that are beyond the emergency planning zone. This is a section of the procedure that refers to the updated sections for beyond the EPZ.

Anyhow so in the inspection report on page four it states that we removed the responsibility of the emergency coordinator in the control room to the shift manager to make protective action recommendations for areas outside the plume face.

As we'll show, we actually didn't change anything in the procedure and it's been that way since 1999. As far as the conclusion, we disagree on the conclusion itself. Again I want to emphasize this section relates to updated PAR's for beyond the emergency planning zone and when, you know, one thing that we've learned from industry events is that accurate information to federal, state and local agencies is important as the event continues on and that the further you get away from the plant's med towers, the more difficult it is to be accurate.

So what we're speaking about here is a subsequent period where environmental measurements would permit an accurate assessment. I want to point to the two sections in our emergency plan as called out in the inspection report. Section 2.1 speaks to the responsibilities for the emergency direction and control and how that for protective action recommendations this is normally transferred from the shift manager to the EOF manager or the emergency operating facility manager.

And then I also want to introduce section 5.5.2 which is language is common to actually the previous version of the new reg but we didn't change this and we believe it's still consistent with the current version of the new reg that protective actions - these supplemental protective actions beyond those that where you've already evacuated says these protective actions should be based on field monitoring data and dose projection in areas beyond those that have been evacuated.

So when you take section 2.1 and 5.5.2 together, they help support what we have in the procedure and our procedure incorporates both of these provisions and does not allow delegation of classification, notification or PAR's to any nonemergency director. Our procedure doesn't allow that and our field teams are deployed as part of our technical support center or emergency operations facility.

And so therefore the protective action recommendations would be based on the field team data that we would get for this beyond the EPZ. Again we want to emphasize that this is consistent with industry practice and that when you get beyond the EPZ, there's a lot more that's going to be required for the - to determine where you should actually make your PAR recommendations.

And in this kind of a scenario if you can imagine that we're talking, you know, if it's still in the control room, it means to some regard that the emergency response organization hasn't been implemented yet but it must be a rapidly progressing scenario - something pretty severe to be happening where the shift - on shift folks - would need to be handling and managing the event as well as trying to determine what the protective action recommendations are. But anyhow, I'll turn it over to (Shawn) to walk through the procedure.

(Shawn): So this is revision 17 and 18 of the procedure and nothing changed in this section of the procedure like (Don) said since 1999 and this is aligned with section 5.5.2 of the emergency plan and additionally it was aligned with section 2.9 of the procedure.

The procedure doesn't delegate protective action responsibilities but transfers the responsibility to a qualified emergency director with augmenting staff support. Additionally the use of field team data to formulate protective action recommendation beyond ten miles is in alignment with our emergency plan and aligned with a large majority of the industry.

So it's really supported by the EPFAQ 2013 tax 004 essentially not burdening the on shift or control room staff decision makers - minimizing the demand on it so they can stay focused on mitigating the emergency at hand.

Additionally the accuracy of PAR's beyond, you know, ten miles for those initial folks - it's going to be affected beyond ten miles and you have the potential of actually evacuating people into the plume zone without, you know, real accurate analysis.

In the EOS our dose assessment team would be responding in their approved times and our field teams would be responding in their approved times in

accordance with our plan and we'd use that data to support our protective action recommendations beyond the EPZ.

Man: And any other questions on that? If not, we'll move onto...

(Mark): No, this is (Mark) here. I've got a question on this. So I think I may have pointed this out earlier but our primary concern here with this text - and I appreciate that you're highlighting that the text was also present in reg 17.

And we may not have caught that but the concern that we have with the text - regardless of how many years it's been present - is that if I'm the emergency director by default in the control room because it's early in the event and your emergency response facilities have not stood up and are not ready to receive a transfer of the emergency director authority, it's possible that a rapidly progressing severe accident could put the control room staff in the position of needing to face protective action recommendations for outside of ten miles.

And if I'm your emergency director in the control room, this procedure puts me in a quandary - as we read it - it puts me in a quandary of saying in order to follow the procedure, I've got to wait until the EOF and the TSC are stood up before PAR's can be made and I don't think that's consistent with what the guidance and requirements are.

Man: I'd like to say two things with regard to that. The first is accurate pars. When you get beyond the EPZ, it's very difficult for the control room without having the benefit of field teams to be able to give accurate PAR's and I think accurate is a piece of the protective action recommendation. You want to continue demand of protective action recommendation.

And the second point is - and I really - I understand the concern. I guess maybe if this moves on, I would ask maybe a consideration for a generic, you know, approach to this because I believe this is a common industry practice and I think it, you know, this may reflect on a generic approach and how you deal with these updating PAR's beyond the EPZ and dealing with accuracy and the demands you're putting on the control room in a very short period of time and the concerns for nuclear safety as a matter of fact.

So I guess I would just ask for some consideration - maybe a generic approach - if you continue to move forward in thinking, you know, want to raise this as a finding for us.

Man: Well is it your view then that other licensees have the same type of language?

Man: Yes, very similar.

Man: Got it.

Man: I'm trying to envision a scenario rapidly progressing where you have a release of such a magnitude here that you've got indications based on dose projection that you're exceeding the pad at ten miles and we need to look at protective action recommendations beyond ten miles. That's what you're talking about.

Man: That is - that is the left side of the chart for the severe accidents - those accidents that are so severe, early in the stages and that's how we answered the FAQ where it is - the probability begins to increase as to pads being exceeded beyond ten miles - those types of accident scenario sequences in which the control room would be in the position for determining that PAR for that type of accident in the initial stages and getting the initial dose projection that said it exceeds one rem beyond ten miles.

That's what we're discussing here and it would appear as if what you have in your procedures would permit the control room emergency director to provide that PAR up to ten miles...

Man: Yes.

Man: But await the TSC and the EOF even though the dose projection indicates it is exceeded beyond ten miles greater than one rem.

Man: Yes, keep in mind the med tower that we have is right there at the station. If you get beyond the ten miles and you're not going to find the med towers beyond the EPZ that you would find here. And as (Shawn) had mentioned, there is concerns for are you evacuating the right people. Are you moving them into a plume area when maybe they shouldn't be moving into that area?

So again I would just emphasize the need for accuracy beyond the EPZ as well as reducing the burden on the control room to have to try to go figure it out geopolitically - getting all the information - without having the benefit of a field team to make those accurate pars.

Man: And what I hear you saying then is it would be appropriate for the shift manager in this case to wait until the TSC or EOF remand is what you're saying.

Man: Yes.

Man: And I guess our view when we have to look at this is, you know, are there scenarios where that shift manager may have to make a decision because of the severe accident nature there. I understand accuracy - the information is

paramount but it's got to be balanced with what your dose projection's telling you based on, you know, so I understand the point.

You would expect in most scenarios that the TSC would be manned or the EOF to make a more informed assessment.

Man: We do indicate to the outside response organizations as well that dose pads may be exceeded and the additional notes on the conservation notification reforming - if that was the case - they're trained to identify that to let the ops center response organizations understand.

Man: And I assume too you have confidence in your shift manager that if they found themselves in that situation, they're going to make a recommendation that they think's appropriate and not say well the TSC isn't manned yet, the EOF isn't manned yet and I'm going to wait on that even though the procedure might imply that could, you know, that could potentially be problematic from the way the procedure is written.

I sure would hope that your shift manager as the emergency director is going to do what they think is the right thing to do there, right?

Man: I would say yes based on again what we've learned from the (unintelligible) you know, how the operators and what they were thinking - their mindsets so yes.

Man: So if I could add just one clarifying point, I think what's been said is accurate. I was a shift manager and as emergency director I feel that it's my duty to accept the responsibilities as soon as my center's manned. For the control room they're directed to notify the off-sites that the pads may be exceeded beyond ten miles and that's what they do. But the rest of this procedure - it is hard for them to implement from the control room.

They need the assistance of the teams and the additional data that the teams can develop to be accurate in those parts. So that's really where we're trying to say is the balancing act is timeliness and accuracy.

Man: You were earlier in a severe accident where we see it in progress for a minute and you were just starting to notify the emergency response organization. So what kind of delay worst case are we talking about while we're waiting for the hero and the dispatch of environmental survey needed to come in?

Man: Our approved response time is 90 minutes.

Man: That's for staffing the facility?

Man: Correct.

Man: And then how long further after that to get a team out and the team to the northeast where the most population is?

Man: I'd be guessing right now if I gave you that. I can get it for you thought if you'd like.

Man: So I think that's where the procedure leads us to believe that you've removed - I understand (Dave) when you're saying you feel as if you would do the right thing but the procedure - and that's what we have to base a lot of what we're deciding upon and discussions with the staff - the procedure doesn't provide that latitude. The procedure directs the control room emergency director to wait for the TSC and the UF to be activated. So it does not provide that latitude and I'm sure that's the way it's trained upon and what your exercises have shown.

So I think that's our - that was the underlying concern that if the procedure provided a little bit more latitude with that control room emergency director rather than it being directing them to await the TSC and the UF activation as we're discussing here - no 90 minutes - during a severe accident. That would be our issue.

Man: And we understand that and like I said - knowing that we've had this in place for a number of years and we were concerned - are we unique? Are we an outlier? Are we treating this differently than many other utilities and we come to find out that we're in the majority of the way the industry treats this matter. So it's something that we can strengthen in the process and we agree.

Man: And with that and you've done some background information with it, it's something for us to follow-up on I'm sure to find out if clarification may be needed in that area.

Man: I didn't appreciate earlier when I made my rather definitive statement about what I would expect the control room shift manager to do, I didn't appreciate that it was that directive in nature, so.

(Mark): This is (Mark). Let me just add to the discussion that we - while we appreciate the desire for accuracy and the balance between delay versus accuracy, I'll note that your procedure - the one we're talking about right now - 13.2.2 - in section 4.4 it has a note for updating PAR's and the note says do not delay recommending offsite protective actions while waiting for field monitoring results to verify accuracy of dose projections and that's consistent with I think the way the agency views the need for early notification as opposed to delay for accuracy.

Man: Yes, if you actually would go a little bit further down in the procedure there - 4.4.3 - I'm sorry - 4.4.2 - bravo. It says if dose projections or survey results indicate a pad may be exceeded beyond the ten miles and refer to section 4.5. So it actually kicks you out of that section and then you go to the other section which then treats it in a little bit different manner. Okay, yes.

So I'll give it over to (Shawn). I mean - sorry - (Kurt).

(Kurt): When we looked at the different opinions surrounding this issue and this significant amount of time that's went into it, we ask ourselves what could we have done differently. Since this issue originated in August of 2014 with questions regarding our implementation of the new reg supplement three, we looked for areas we could improve our performance related to implementation of new federal guidance.

The first area I'd like to speak to is engagement with the NEI emergency planning working group. This working group provides an opportunity for benchmarking, industry alignment and engagement within certain issues affecting the industry.

For many a years in the past we relied on USA as our representation and voice rather than regularly attending ourselves. Over the last year though we've significantly improved our engagement with this working group with regular attendance. In fact our chief nuclear officer - Mr. (Brad Suwosky) - has recently been selected as the chair for the group and we feel will be significant in the world of EP going forward.

Man: My former job was a deputy in the Office of Nuclear Security and Response and I've attended several of those nuclear security - I should say - emergency preparedness working group and I didn't appreciate that your representative for Columbia was USA.

Man: Utility Services Alliance.

Man: Utility Services Alliance - I didn't appreciate that. I assumed it was one of your EP managers because I agree that's a very valuable forum for clarification like on this issue we were just talking about. I could see that being a forum where the industry raises that or (unintelligible) consideration.

Man: Yes, this - like I said - our CEO is now chair. I think he's been to three meetings as chair if not two or three. And over the past year we've had regular attendance there so...

Man: Okay, thanks. So he took over (Tom Joyce)'s spot on that?

Man: That's correct.

Man: Thank you.

(Kurt): The next - the next thing I'll speak to is an engagement with (unintelligible) itself. Section two reg guide 1.219 provides guidance on when prior discussion with NRC headquarters is encouraged before making changes to an emergency plan. While the guidance in this case doesn't specifically deal with the types of changes we made, we do feel that this would have been an area that we could have pursued maybe in this case and certainly we'll look at that in the future if we have some key implementation of guidance involving our emergency plan in the future.

(Don): I'd like to just speak to the last one since this falls under my organization. While we're not in total agreement with many of the items in the report - especially in those that reference conversations over the last nine months - and the interpretation of our procedure, we recognize that we - Energy Northwest - had difficulty in really gaining an appreciation or understanding of what was the issue underlying, you know, the NRC's concern.

And we also had difficulty effectively communicating our response or position trying to - as I mentioned earlier - trying to fit the discussion into the regulatory guidance, especially with planned puff releases. But we have been looking at how we can improve that in our - in our area - especially with having a more direct communication. Even if we have to, you know, come down here to try to have more face to face discussions to try to really understand what was going on.

We're taking that back as a need from my area to improve the engagement and understanding of issues, you know, speak before, you know, listen before you speak. We're doing a much better job at that so we're working on how we can improve that interaction. We certainly welcome any comments or feedback as to how we can improve that so that we can truly get to the root of the concerns and that we can be - especially in this subject here where, you know, it is to some degree a little bit complex that we can, you know, clearly communicate our positions and our - where we're at - and interpretations of our procedures and what not. Alright.

Man: So I just want to kind of add onto that a little bit now too. So as the manager of the department, you know, it's my responsibility to understand what the issues are in getting, you know, get the clarity that I needed, you know, and had some opportunities in there to really understand what the inspector was requesting from Columbia and clarify it. So just add onto what (Don) was saying.

Man: So in wrapping up our discussion - like I mentioned - we don't believe we have a performance deficiency in that the inspection report stated no longer - we no longer provided a mechanism to make a shelter and place protective action recommendation and again we pointed to attachment 7.1 and 7.2 as providing that means.

With regard to no longer having a protective action in the event of a planned release - as we mentioned - we would use the flow chart in attachment 7.1 as since the planned release would result in a release in progress. We'd use that flow path to help us consider the recommendations - protective action recommendations - which could include also shelter in place.

Next, the inspection report mentioned that we removed the responsibility. I won't belabor that point. In regards to the next slide - and if I'm moving too fast - this is just a wrap up of all of this. But in the next two slides deals with the specific statements in regard to our noncompliance with our emergency plan. Let me just spend a little bit more time on that.

So the first one points to this emergency plan section 2.1 and again if you consider the text in section 5.5.2, you'll find that, you know, it does include the need for field monitoring for making that assessment that our field monitoring is part of our augmented organization and that our procedure correctly refers to the protective action recommendation being developed with the assistance of the field teams which would be an augmented function.

With regard to the section 5.5, again we'd just like to emphasize here that section 5.5.2 and additional text in section 5.5 helped formulate how you actually develop shelter in place considerations. Section 5.5 states that protective action guidance - 5.5.2 provide that preplanned guidance. Section 5.5.2 points to the federal guidance and again we walked through how we would have used the guidance to develop what we have in place.

Again I would just like to summarize that although, you know, we may have some differences about how we can improve the procedure, how we can communicate more clearly on this matter. We still believe that there's not a performance deficiency involved here.

Man: I'll offer one comment. I think certainly I've explained the basis for your conclusion that you need to wait for field information if you will from your, you know, protective measure - your dose assessment measuring teams that go out in the field, right. I think we talked about there are scenarios where your dose projection is such that you may need to consider PAR's beyond ten miles.

You've indicated that your approach is consistent with how the rest of the - or the majority of the industry approaches that.

Man: Yes.

Man: And so we'll look at that but, you know, your comment about which requires field monitoring and augmented function of support conclusions - I'm not sure we're in full agreement right now with that but...

Man: We understand.

Man: But I do think you may want to look at does your emergency director - if it happens to be the shift manager for those rapidly developing scenarios where the dose projection would say the dose is going to be greater than the pad at ten miles. Does he have the latitude to make what he thinks is the right decision there if you find yourself in a case where the TSC is not manned, the EOF is not manned or (unintelligible) forgot to mention, you know, it's going to take a while before that field monitoring team - depending on the wind direction - gets you some meaningful data from out in the field. So you need to consider that I think.

Man: Right. We will take that as an action out of here to follow-up with our shift managers on their decision process.

Okay, in regards to the significance assessment - again this makes it a little bit difficult to speak to in that the statement is that the licensee can no longer make recommendations for the public to shelter in place when appropriate and that limitations could result in delays in making appropriate protective action recommendations as we mentioned before.

We clearly are, you know, believe that we have guidance in place and I understand we are going to go back and talk to our shift managers about the possibility for generating protective action recommendations for beyond the EPZ and we'll also - as a matter of fact we'll also engage with the working group to have further dialog on this.

So if you still agree that there's a performance deficiency here, I do want to make, you know, just a few comments with regard to significance. One in using the tool from new reg 654 which encourages site specific development, you know, our protective action scheme is site specific. It was developed in cooperation with our offsite response organizations - the county, the state, Department of Energy.

We've all agreed to the protective action recommendation scheme that we have currently in the procedure. In consideration of our topography, our very

low population density, our very short evacuation times, evacuation is the most appropriate PAR to insure that dose is avoided in most cases.

While we understand that our procedure could be viewed and interpreted differently, interviews with our staff, you know, emergency directors conclude that the use of the procedure can in fact help them reach a shelter in place consideration if the conditions warrant it.

Just a few examples we brought up here with regard to other stations. I don't have all the details. I'm not trying to state that I know all the facts behind it but I just - a little bit of comparison here. For example in 2015 the region one plant modified their procedures that would in essence recommend evacuation of downwind areas and many more emergency response planning areas than intended. It was determined to have very low safety significance.

And there's another example. Two region four plants - they both had a similar issue or concern that is not the same as Columbia but they failed to follow their federal guidance - EPA guidance - and they introduced automatic extended protective actions for - I'm sorry - based on plant conditions and changes in wind without considerations for dose.

In contrast just a couple of stations that did receive low to moderate safety significance findings - wide findings. Recently in 2015 our region four plant totally removed their PAR's or protective action recommendations for a certain portion of their EPZ. And secondly our region three plant - they had changed their PAR procedure to eliminate decision making process for PAR's beyond EPZ.

And again I want to emphasize that Columbia still has protective actions in place for all sections of the emergency planning zone and in most cases evacuation would be the clear choice however for very few cases shelter in place would still be a consideration.

For those very few cases at Columbia - attachment 72 - would have that - would have us consider shelter in place. So in summary it's our position that Columbia continues to meet the emergency plan commitments, that all considerations for shelter in place found in the applicable federal guidance in new reg 654 supplement three 2011 version were addressed and are implemented in our procedure and that supplement three clearly states that compliance with it demonstrate compliance with 5047 bravo ten.

And lastly I'd like to just emphasize that in our case public health and safety is appropriately protected with our current protective action scheme.

Man: I've just got a clarifying question Mr. (unintelligible) just to make sure I understood your point here in talking about the region one plant for which the assessment very low safety significance in comparison to where there was low to moderate safety significance here - region three plant, the region four plant which is the criteria for a white finding.

You're saying that if we decide the performance deficiency remains valid that you think the safety significance given these examples is more in keeping with the green finding versus the white. Is that the overarching point?

Man: Yes. If you continue to believe there's a performance deficiency here, we don't believe in our situation and all the circumstances compare to the plants that had the white finding but are characteristically more associated with those that are in the green area.

Man: Okay, thank you.

Man: So with that, I'll turn it over to (Grover).

(Grover): Okay, thanks. In closing I'd like to emphasize this issue's been under review since last August and it's really taken us some time to understand all the facts associated with it and even, you know, through our discussion today we can still see that, you know, maybe we're still gaining some understanding with this.

So because we - as we stated - our procedures were developed based on a good faith effort to implement the federal guidance as was done in collaboration with the offsite response organizations with the best interest of the public safety in mind.

You know, we believe our procedures continue to provide an option for filtering the place should the conditions warrant it to protect the public from the effects of a possible radioactive release. And as (Don) stated we, you know, we do not believe that there's a performance deficiency here but again if it is determined there is one, we do believe that it wouldn't raise to a level greater than green.

I'll also state though that, you know, we've talked about a couple of things here that we know are some strong learning's for us to go back and I'll say reflect on and take some actions on because again I think they were just reiterated here today when we talked about the clarity of our procedures. And I thought one, you know, perfect example is again with the attachment 7.1 that talked about - I think there was evacuation section instead of evaluate, you know.

When we talked all of our four emergency operating facility, you know, directors, they came to the conclusion oh, it was to evaluate, go to that and again I'll state too when we talked to them, we understand it wasn't a perfectly sterile, you know, test case either because again, you know, we had already started through the discussions and already put out the communications.

So again we understand it's not a, you know, it wasn't a perfect case study but also I'll say the interaction - the interface skills - definitely we've got to improve there because again just the simple question asked and trying to get us to answer, you know, is shelter the same thing as shelter in place, you know, the same meaning and we've kind of went through quite a bit of iteration before we finally answered what, you know, the question that was asked.

So again we understand that and we'll take the appropriate actions to insure that again that we get better in those areas with that. This does conclude our presentation and we do thank you for your time.

Man: Okay so at this point I think we're at the point in our agenda where we're going to step out for a separate NRC caucus next door so those members of the NRC who are participating over the phone - I believe you've been informed which bridge line to tie into. Members of the public can just remain on the bridge that they're on and we will reengage probably in about 15 to 20 minutes.

Now the intent of that caucus is to determine whether we have any additional questions, not to determine the significance but to make sure we have all of our questions answered. Thank you.

Man: Regulatory commission just letting the folks on the phone know that we're ready to resume the conference now that we've completed our separate NRC caucus. So with that in mind, we did develop a follow-up question that we wanted to ask and the context of the question is that we as an inspection team beginning in August - July or August - when we received the proposed change or the change that had been implemented to reg 18, we began to read it, to engage the Columbia staff to try to understand what does the change mean, what was the intent behind the change.

We had dialogue about that and interactions periodically for several months. So through the January/February timeframe we came away from those discussions with the understanding that the intent that Columbia had for implementing that change and their understanding - your understanding of the basis for the change which was interpretation of supplement three guidance

based on your evacuation time estimates that the evacuation was a better par given your evacuation time estimates for rapidly progressing events.

Our understanding of your intent for all scenarios was to remove shelter from your procedure and from your training and to stick with evacuation exclusively based on your evacuation timed estimates and your interpretation of sub three.

And we engaged, we asked the questions, we understand that our questioning impacted your process for continuing those changes, how you engaged the off-sites about whether you're going to change your wording from shelter to monitor and prepare and those sorts of questions. What we want to know here is what was your intent with the change that you began implementing with reg 18 and had we not asked any questions, what would your procedures and your training look like today. That's basically our question.

Man: So the intent of the procedure change was to implement the supplemental guidance.

Man: (Unintelligible).

Man: Oh, sorry. So the intent of the procedure change was to implement the supplementary guidance. That was the intent. And is your second question on the training?

Man: Right so given that intent, was it your intent to remove guidance to provide sheltering PAR's completely from your procedures and your training? We came away from our discussions with you thinking that was your intent.

Man: That was not the intent of the procedure revision.

Man: Might I add in a phone call in February these - when we walked through the procedure with these - with the NRC team that we showed them where the procedure still had it in place and so we had communicated that we hadn't taken out that portion of the procedure and that still that was there. So we had the conversation in February so I guess we were hoping from that conversation that the staff could see that as well that we hadn't removed that.

Man: That doesn't get to the intent though frankly. I mean that just is where you were at the time and we're trying to understand here because we're clearly at the inspection function here, right - the inspection interface here. The team that was involved with talking to members of your staff were clearly left with the impression that based on your interpretation of new reg 0654 supplement three that it was the station's intent to remove shelter in place as a mechanism for developing a protective action recommendation.

We're trying to understand was that the intent and then when we engaged and asked questions, you stepped back and revisited that and said okay and you looked at what your training module says. We're just trying to understand what was the intent there.

That doesn't get to whether or not you have that mechanism in place and I think you've explained to us and walked us through how the mechanism still exists and how it would be applied but it certainly was our understanding - at least with the team when they were onsite - that it was clearly the station's intent to remove sheltering in place given your evacuation time estimates and given your interpretation of new reg 0654 supplement three, not as just being applicable to a rapidly developing event but for all scenarios.

Man: So it was not our intent to remove shelter in place from our procedure.

Man: Okay. Do we have any other questions? Okay, thanks. With that, I'd like to close. Clearly you communicated your basis for concluding that reference to attachment 7.1 and 7.2 of your emergency plan implementing procedures, provide a mechanism to consider shelter in place as a protective action recommendation.

I think it's important that you look as an organization do you provide the tools for the staff to be successful. Does training reinforce those expectations and concepts? I think you've heard the team explain why when they looked at this evacuate sections where EPA pads are projected to be exceeded and you have reference to 7.2, one could interpret that where you go to 7.2 to validate the pad numbers if you will, right. And this reference to in shelter remaining sections and, you know, that was meant to mean actually shelter in place and not this monitor and prepare.

You know, I heard what you said the county supervisor would read and that's the bottom line. That is the outcome when you communicate that PAR about sheltering the remaining sections that it would translate to that county supervisor actually communicating the - what shelter in place means and that clearly is in the context of, you know, dose avoidance.

You know, I appreciate your statement there that it was not the intent to remove that and we got some conflicting information based on the inspection function and I appreciate your acknowledging that there were lessons learned regarding the inspection interface. Well we have some learning's on our side as well and I think, you know, (Mark) will step back and look at, you know, are there learning's in terms of how we communicated, what we communicated, when, who it is that we communicated our preliminary

conclusions to - our observations, etcetera - and what was the interaction subsequent to that.

As you said, this issue's been under review since last August, you know. We should be able to reach closure on an issue sooner than - I mean we're coming up, you know, it's June here, you know, like ten months and we're still trying to figure out where are we with this issue. What are the apparent violations and what is the safety significance?

So collectively we've got, you know, you spend resources at a regulatory conference. We spend resources. If this is something that could have been resolved sooner, we need to - both of us - look at both sides and see if there are any learning's there.

You know, I heard you - Mr. (Gregori) - mentioned that the procedure could be interpreted differently and based on your interviews you indicated that it can be implemented as intended regarding the, you know, shelter in place for downwind sectors. You don't have any exercises, right where you actually challenged the response team with that. It's based on discussions that you had with some of your emergency directors.

Btu when you look at the specific wording and my understanding of the your - the importance you place on procedural usage here - you could have a new - if you relatively knew, you know, emergency director here, is he going to have the same understanding as Mr. (Brown) has based on his years of experience and how he applied that guidance and you have to look back and say what's the training intent and are you reinforcing those expectations.

So I think you need to step back and look at that so independent of whether it was your intent or not and I think you have communicated why you think there is a mechanism in place and shelter in place if you will would have been considered as part of your protective action recommendation development. We'll take that information and look at it. I'm focusing on that aspect in particular because that's really what drives the potentially greater than green issue here is the protective action recommendation associated with shelter in place.

Regarding the other two aspects there, you know, regarding the control room and the shift manager and what responsibilities does he have and how would he approach it - I think you clearly explained to us your view that it is appropriate for that shift manager to wait until the EOF and TSC is manned. I think that's an issue that should be engaged, you know, should be further dialogued via the emergency planning working group.

You know, I don't know the validity frankly of your statement that that's how the majority of the industry approaches it. I don't know if that is the case but I think we need to understand that and insure that that shift manager is prepared if there is a rapidly developing event in the dose projections or such that you could be exceeding pads at the ten mile point. You don't have time to get meaningful accurate information from the dose monitoring teams and we need to look at that.

And then I think the last aspect there was do you still provide for protective action recommendations when there's a planned release? I think you explained why you feel the procedures - as they're currently structured - would provide for that assessment in a protective action recommendation that's appropriate to the planned release.

So we'll take that information on board here and we'll communicate to you via separately our final significance determination and our conclusions regarding the apparent violations.

So, you know, in summary, you know, by your own acknowledgement the procedure could be interpreted differently. I think you need to look at that to make sure you don't create the potential for a procedure to be interpreted differently and you have communicated to us clearly that you feel your staff would have followed that procedural guidance in the manner that was intended. Our staff looked at it and we came to a difference conclusion regarding what was the intent here, you know.

We didn't talk to the emergency directors to get their view how would you interpret this guidance - how would you implement that. We didn't do that back, you know, back in the original few months since we were developing this issue here. So, you know, we didn't have the opportunity to quite frankly test what I would call the as found condition. What is the actual behaviors that would have been exhibited at the time this issue was first communicated versus where are you now after there's been a lot of discussion internally here on your end regarding what the emergency directors would do?

But it gets back to are you providing them with the tools for success. So I want to thank you for the information that you provided us and the time you spent. I think we have a clear understanding of your position and the basis for that and we will take that under consideration there and we will communicate the results of those internal deliberations here via separate correspondence.

And I would offer in a reasonable timeframe here I'm sure we're going to be able to engage here in the next, you know, couple of weeks here and hopefully reach closure on this soon so we can communicate the results of our internal review. So with that, this concludes our regulatory conference here with

Energy Northwest and we now will proceed to provide members of the public that were on the phone an opportunity to ask questions so I'll turn it over to (Mark).

(Mark): Yes, thanks (Mark). Just a couple of required closing statements for the end of the conference. First the apparent violation discussed at this conference is subject to further review and may change prior to any resulting enforcement action and second, statements of view or expressions of opinion by the NRC employees at this conference or the lack thereof are not intended to be - to represent final agency determinations or beliefs at this time.

So if the operator would go ahead and queue up any folks that have questions on the phone, we will be standing by ready to receive those questions in the order you receive them.

Coordinator: Thank you. If you would like to ask a question, please press star 1 on your touchtone phone, unmute your phone and record your name clearly. If you would like to remove your question, press star 2. Again to ask a question, please press star 1. And we'll take a few moments for those questions to come through. Please stand by.

The first question comes from (Charles Johnson). Go ahead, sir. Your line is open.

(Charles K Johnson): Thank you. I'm (Charles K Johnson) and I'm the director of the joint taskforce on nuclear power for Oregon and Washington physicians for social responsibility.

I don't have a question. I merely have a comment which is that I'm glad to see that the Nuclear Regulatory Commission and Energy Northwest are discussing this issue of evacuation plans and some apparent failings in the current plan and taking it very seriously.

Obviously what happened in Fukushima in the aftermath of the tsunami - earthquake and tsunami - and the accident there illustrates how chaotic a situation can become. In an emergency situation you had people evacuated into high radiation zones and the authorities not knowing that for several days - until several days later - and you had confusion as to who was in charge of various operations of the plant including - I believe - some of the decisions on evacuation.

So I'm very pleased to have listened to this hearing. I believe that the NRC is taking this very seriously. I hope that Energy Northwest is as well and trust that they are and that's all I have to say. Thank you very much.

(Mark Dupae): Well this is (Mark Dupae). I want to thank you Mr. (Johnson) for your comment. I think it really underscores the importance of having a very specific emergency plan implementing procedure so that clear guidance and tools are provided to the decision makers regarding any protective action recommendation be it shelter in place or evacuations.

So, you know, you don't want to be making decisions on the fly when you're dealing with event response where there can be, you know, a lot going on if you will. So I very much appreciate your comment and thank you.

Coordinator: As a reminder if you would like to ask a question, please press star 1. We currently have no questions in the queue at this time.

Man: Why don't we put out one last request and make sure everyone that's on the phone had an opportunity to ask a question. So I'll give just about 30 more seconds. Are there any additional questions from members of the public that are listening to the conference?

Alright, well thank you. This concludes our question and answer session. Thank you, operator. You can disconnect us from the bridge line. Thank you.

Coordinator: That concludes today's conference. Thank you for your participation. You may disconnect at this time.

END