

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

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THE GENERIC LETTER ON GRID RELIABILITY

PUBLIC MEETING/WORKSHOP

+ + + + +

TUESDAY,  
JANUARY 10, 2006

+ + + + +

BETHESDA, MARYLAND

+ + + + +

The meeting was held in the Waterford Suite at the Hyatt Regency Bethesda, 7400 Wisconsin Avenue, Bethesda, Maryland, Mr. Chip Cameron moderating.

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A-G-E-N-D-A

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

8:30 a.m.

1  
2  
3 MODERATOR CAMERON: The NRC Staff has  
4 asked me to remind you that they would like you to  
5 sign in again today even if you signed in yesterday.  
6 And we do have something that's formally called a  
7 feedback form which is really meeting evaluation  
8 forms, if you could just give us the benefit of any  
9 suggestions for improvement in meeting process  
10 issues.

11 I believe the forms are already frank so  
12 you just to put them in a mailbox or you can leave  
13 them with us. I just wanted to summarize a couple  
14 of points from yesterday and go through the plan of  
15 attack, so to speak, for this morning.

16 We did discuss a number of wide ranging  
17 issues yesterday. And keep in mind that we do have  
18 that recorded on a transcript. And we're taking a  
19 transcript this morning also.

20 Some of the issues we've discussed  
21 included specific recommendations for changing the  
22 way certain questions in the generic letter are  
23 phrased. And Mike Mayfield reiterated a commitment  
24 I think that we heard from Jim Dyer and Brian that  
25 we would be considering.

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1           Considering I guess, is the emphasis  
2 there, considering those suggestions. NRC Staff,  
3 Paul Gill, Steve Alexander, Ronaldo, Tom Koshy,  
4 provided an explanation of what the intent behind  
5 some of the questions are.

6           The so-called higher goal, as Tom phrased  
7 it. We had excellent information from our panelists  
8 yesterday. The issue on what's permissible under  
9 the FERC rules, there we have our FERC  
10 representative with us this morning, I think still  
11 had a little bit of some ragged edges on it in terms  
12 of clarification for everybody.

13           But Frank Koza's comments from PJM may  
14 have put that in perspective for us. Today we have  
15 an industry panel on their perspectives on the  
16 generic letter and that's going to give us an  
17 opportunity to revisit some territory from  
18 yesterday, perhaps in a little bit of a more  
19 systematic way.

20           And we're going to start with that in a  
21 few moments. We have Clair Goddard from INPO, Alex  
22 Marion from NEI, and we have Mike Mayfield Division  
23 Director, NRC for where this GL is being developed.

24           We have some parking lot issues from  
25 yesterday to revisit to see if we capture them this  
26 morning, and we do have one more slide that Frank

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1 Koza presented yesterday on some specific language  
2 in the GL.

3 And we did get a question yesterday that I  
4 think is just worthwhile noting because it seems  
5 this is a threat or concern that runs through, or  
6 that ran through a lot of the discussion yesterday.

7 And I'll just read this, how can NRC claim  
8 in the GL that quote, no back fit is either intended  
9 or approved in the context of this GL, and continue  
10 to insist that the purpose of the GL is to simply  
11 gather information and not push for particular  
12 answers.

13 And I guess that's that last phrase, not  
14 push for particular answers because I think we heard  
15 time and time again yesterday from the NRC that at  
16 least the intent was not to push for particular  
17 answers.

18 But I think that that's going to be a  
19 theme again today, and I think that Alex and Clair  
20 would -- they'd like to get out of this discussion  
21 this morning, and will be useful for us -- is to  
22 come up with something we're calling topics for  
23 consideration in our best bureaucratic mode instead  
24 of action items or punch lists, but specific issues,  
25 including the ones that we talked about yesterday  
26 for the NRC to consider.

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1           And we're going to take a break at 10:15.  
2           We're lucky enough to have Mr. Jim Dyer and Mr.  
3           Brian Sheron with us. They'll be leaving at the  
4           break so we want to get going. We were supposed to  
5           stop at 12:00 today, and we're going to try to make  
6           that.

7           As with yesterday, we'll go over a little  
8           bit, but we will adjourn by lunchtime, 12:30,  
9           something like that and let you get on with your  
10          plans. Now any agenda questions before we go to the  
11          panel process issues?

12          Okay, great. We're going to start with  
13          Clair Goddard, INPO. Clair?

14          MR. GODDARD: Okay. Thank you, Chip, and  
15          good morning. And while that's being loaded --  
16          okay, we can leave it there for a minute. I'd like  
17          to start by saying, and it will be readily apparent  
18          rather quickly that I do not intend to specifically  
19          talk about the generic letter, but rather provide  
20          you with an update of the activities that INPO is  
21          taking on behalf of, and more importantly with  
22          support of the industry in the area of transformer  
23          switchyards and grid reliability.

24          Okay, can you hear me in the back okay?  
25          Okay, thank you. So what I'd like to -- what I  
26          intend to do is provide a little bit of a background

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1 of our transformer switchyard grid program, which we  
2 refer to as TSG, and along the way talk a little bit  
3 about the applicable significant operating  
4 experience reports, current review visit overview  
5 and focus areas, and then at a high level talk about  
6 the results that we've seen as a result of  
7 conducting those visits over a period of just over a  
8 year now.

9 And then in the end I'm going to show you  
10 an event trend on reactor scrams induced by grids  
11 which are transformer induced events over a multi-  
12 year period. It accurate -- or current through  
13 2005.

14 I will point out that as you all probably  
15 are aware, our operating experience reports,  
16 including significant operating experience reports,  
17 and the results of all our interactions with our  
18 members are private, so I'm by necessity going to  
19 talk at a high level without a great deal of detail.

20 That may frustrate you, but that's  
21 intentional. You're a little bit ahead of me so  
22 just hold on there. Going back to the purpose, the  
23 slide talked about the purpose of this presentation,  
24 but more importantly the purpose of our activities  
25 are to assist our members in minimizing both the  
26 frequency and significance of events induced by grid

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1 switchyard and transformer problems, and then more  
2 specifically to help improve the reliability of  
3 large power transformers.

4 Okay. These bullets on this slide show  
5 parts of the INPO cornerstone activities that are  
6 specifically related to this effort. And it, just  
7 at a high level, it starts with our analysis of  
8 operating experience.

9 Our operating experience program is a  
10 voluntary reporting of events from our member  
11 utilities to INPO. And in a typical year we will  
12 receive near to 3,000 separate reports of events.

13 And we are continuously evaluating those  
14 event reports for trends and areas where we might  
15 share lessons learned with the industry to help  
16 improve. And a number of lower level operating  
17 experience documents are issued.

18 One was referred to yesterday by Mr. Nevius of  
19 the NERC when he talked about topical report 440. I  
20 don't intend to address that. That's not a document  
21 that we would necessarily follow-up on or ask for  
22 commitments from our members.

23 But the significant operating experience  
24 reports are, and those as you know are based on the  
25 more important industry events, the ones where it's  
26 worthwhile to evaluate and make specific

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1 recommendations to prevent a recurrence of those  
2 events, and to minimize their significant should  
3 they recur.

4 And then in the review visit area our  
5 plans beginning in 2005 are to conduct about 10 to  
6 12 of those per year. And they're about a four  
7 member team, will get lead by INPO.

8 I'm going to go into more detail on those.  
9 And they are very focused. They're comprehensive  
10 and focused on the specific issues as they relate to  
11 reliability and nuclear safety.

12 And then in the plant evaluation  
13 cornerstone we certainly will review aspects of grid  
14 switchyard and transformers during plant evals, but  
15 that we've put these review visit programs in place,  
16 that is our particular method for looking at those.

17 And we will during subsequent plant  
18 evaluations follow-up with our members during plant  
19 evaluations to see how they resolved our  
20 recommendations for improvement. Next slide.

21 This is just an overview of the  
22 Significant Operating Experience Reports that have  
23 been issued on the topic. As you know, back in 1991  
24 the original SOER 99-1 was issued.

25 Some of you may not be aware that that was  
26 a World Association of Nuclear Operators, SOER. It

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1 was the, I believe, the first one that was ever  
2 issued by WANO. And it was based upon experience  
3 worldwide.

4 Several events overseas and international  
5 went into the development of that document and its  
6 recommendations. In 2002 we issued the large power  
7 transformer reliability SOER, and that was to  
8 address an adverse trend of transients initiated by  
9 transformer failures.

10 In most cases those lead to extended plant  
11 shutdowns. And then as was stated several times  
12 yesterday, after the August 2003 grid we, with  
13 industry support, looked at how those affected  
14 plants responded. And as was stated all plants  
15 responded as they were designed to.

16 However we felt, and the industry felt  
17 that there were a number of lessons learned from  
18 that event at all those effected stations that could  
19 be used to further improve industry performance.

20 And as such we developed an addendum to  
21 the SOER which was issued in late 2004. I already  
22 stated but it's worth mentioning again that the  
23 purpose of the recommendations are to establish  
24 barriers to minimize the potential for recurrence of  
25 events, and also to minimize the consequences of  
26 those events should they occur.

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1           And equipment reliability is a principle  
2 focus of both of those SOERs. As a commitment of  
3 membership our members are obligated to implement  
4 SOER recommendations and to do so with timeliness.

5           Based on the significance of an SOER they  
6 will have up to six months to develop action plans  
7 for addressing the recommendations. And after that  
8 six month period we will begin reviewing those  
9 recommendations, typically as part of a plant  
10 evaluation.

11           However, when we revised SOER 99-1 and  
12 increased its scope, we felt that the review visits  
13 were beneficial to allow us to look into those  
14 recommendations with much greater depth, so that was  
15 a strategy we implemented.

16           And this slide provides an overview of the  
17 review visit. They are, as I've already said,  
18 separate from plant evaluations, but we do treat  
19 them as an evaluation. They are entirely evaluative  
20 in nature.

21           They are one week, in-depth, very  
22 comprehensive review onsite. What's not on the  
23 slide is the preparation time that the team will put  
24 into getting ready for the visit based on plant  
25 specific operating experience reviews, data reviews,  
26 and that sort of thing.

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1           The team is lead by INPO, and I'd like to  
2 introduce to the group, for those of you who don't  
3 know him, Mr. Shawn Simon, and he's standing in the  
4 back there.     He is Senior Evaluator in our  
5 Engineering Configuration Management Group, and he  
6 does serve as the INPO lead on most of these visits.

7           But he is heavily supported with industry  
8 peers. And I know also that many people in this room  
9 either have already participated on a review visit  
10 or intent to in the future.

11           I highlight that because the peers are an  
12 extremely valuable aspect of this program. They not  
13 only provide real time experience and in-depth  
14 knowledge on the technical details of these areas,  
15 but by participating on this effort they are able to  
16 not only transfer their knowledge to the plant where  
17 the review visit if occurring, but to also take back  
18 lessons learned to their own utilities for sharing  
19 within their organization.

20           The review visit is conducted using our  
21 INPO performance objectives and criteria, and in  
22 addition we have developed technical guidance for  
23 this program that's also used.

24           But in both cases we're reviewing these  
25 programs to standards of excellence.     So we're

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1 looking for every worthwhile improvement to further  
2 strengthen those barriers to events.

3 We share our guidance. It is posted on  
4 out member website so that throughout the industry  
5 we're only doing 10 to 12 of these review visits per  
6 year. But our intent and our expectation is that  
7 our members will use that guidance when they conduct  
8 their own self-evaluation activities in this area.

9 And we're looking for them not to not only  
10 use it, but to provide us feedback. And then I've  
11 already mentioned the follow-up during next --  
12 during next -- during the subsequent plant  
13 evaluation.

14 That's an important part of this program,  
15 to put the hook into our member to take actions on  
16 the recommendations that we believe is part of this  
17 activity. These are the focus areas of the review  
18 visit.

19 First of the communication coordination  
20 between the nuclear power plant and its grid  
21 operator. And within that scope we're looking at  
22 maintenance planning and coordination, requirements  
23 for notifications between the plant and grid  
24 operator, and the formal agreements and implementing  
25 procedures to guide those activities.

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1           Second area is the adequacy and  
2 operability of offsite power, which includes a  
3 verification of design assumptions for reliability  
4 and stability of the grid. Look at the plant  
5 engineering's understanding of the effects of plant  
6 and grid changes on offsite power needs and  
7 adequacy, and then thirdly looking at the predictive  
8 and preventative maintenance activities for large  
9 power transformers and switchyard equipment.

10           And we're looking at the equipment that  
11 supports the reliability of the offsite power supply  
12 and is in addition to those things focused  
13 internally. So far we've completed 14 visits.

14           The first two were done late in 2004 and  
15 we conducted those as pilots. And we did that as  
16 part of a utility effort for self-assessment. And  
17 out of that we developed this review visit program  
18 that really started in 2005.

19           And we've done 12 reviews this year. One  
20 of those was a self-assessment of utility that we  
21 supplied an individual as a member of that self-  
22 evaluation team and credited it to this program  
23 because the utility did a very thorough job, used  
24 our guidelines, and did develop good recommendations  
25 for improvement which -- and we received a copy of  
26 the report to follow-up on.

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1           As a said, we're really focused on  
2 identifying areas for further improvement, so out of  
3 these review visits it wouldn't be a surprise that  
4 most of our recommendations are focused in that  
5 area, about 86 percent.

6           And we have written over 150  
7 recommendations as part of this program so far. And  
8 we've also identified some beneficial practices,  
9 about 14 percent of the findings. In the beneficial  
10 practice area it's important to state that the  
11 things that we're going to identify in this category  
12 are only those things that we think are particularly  
13 useful for sharing across the industry.

14           Many activities that we review when we're  
15 onsite are done adequately and we don't see problems  
16 with. But we're not going to share those with the  
17 industry just because they don't really add much  
18 value.

19           We're looking for the value added here,  
20 the innovative ways of doing business. All of our  
21 beneficial practices and recommendations are posted  
22 on our members website similar to the guidance for  
23 performing these review visits so that at any time a  
24 plant who is -- has not had a review visit, or even  
25 if they had one early on, can go to the website and

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1 see what the teams are identifying now in these  
2 areas.

3 And we're also working on a letter to send  
4 to our members that will share the results of this  
5 program to date. So these are the highlights of the  
6 recommendations, and again these are areas for  
7 improvement.

8 The first is that we've noted some  
9 improvements are needed in interface procedures.  
10 And that specifically is there's a need for clarity  
11 for operator actions and grid operator time  
12 requirements involved with notifications.

13 And I say this, this is not necessarily to  
14 mean that in every review visit we identify all  
15 these issues, but these are the more prominent  
16 recommendations. Secondly is improvements are  
17 needed with procedures for exchange review and  
18 analysis of engineering data, and specifically as it  
19 relates to offsite power requirements.

20 We've seen some cases where the procedures  
21 at eh plant site and at the grid location have  
22 different data or different acceptance criteria.  
23 And last, improvements are needed with communicating  
24 the status of the real time contingency analysis  
25 program for those plants that do have it, or those  
26 TSOs that have it.

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1           In the area of adequacy of offsite power  
2 we found some issues with design calculations. And  
3 in the most extreme case we found where a design set  
4 point calculation indicated that the plant could  
5 unnecessarily separate from the preferred offsite  
6 power supply and start and load to the diesels, when  
7 obviously the offsite power supply is acceptable.

8           We've seen some cases where design changes  
9 have been made in the switchyard area that were not  
10 conducted under the plant's design change process  
11 and therefore bypassed a 50.59 process.

12           And then last grid operator analysis tools  
13 and plant design calculations -- again at the  
14 nuclear power plant versus the TSo we found  
15 differences in post-trip bus voltage requirements.

16           And the predictive and preventative  
17 maintenance area, we've -- in the first one, this is  
18 specifically focused to the main power transformers,  
19 large power transformers. We've seen some  
20 weaknesses in the utilities, having identified spare  
21 transformers and in having good plans to replace  
22 those transformers should a failure occur.

23           It's particularly important because there  
24 are a number of utilities who are experiencing high  
25 gassing in their main transformers, which is an  
26 indicator that a failure may be imminent.

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1           And then in the area of risk assessment,  
2 we're looking at this more broadly than just looking  
3 at the probabilistic risk assessment area. We're  
4 also looking at operational risk for the plant in  
5 reviewing this area.

6           And we've seen the following issues crop  
7 up, and that is system component maintenance  
8 deferrals by the transmission operator are not being  
9 always included in the risk analysis.

10           The component operational limitations  
11 similarly not included. And more importantly, at  
12 the plant site we've seen the detail of some of the  
13 work packages was insufficient to support a thorough  
14 risk analysis, particular for operational risk.

15           In the beneficial practice area a few  
16 things worth highlighting. The first is that  
17 several utilities and their TSOs have established  
18 oversight committees for the grid and switchyard  
19 work.

20           And they have worked together quite well  
21 to share information focused on achieving high  
22 reliability and safety in the switchyards and  
23 transformer and offsite power supply. Guidelines for  
24 communication and work planning, and particular for  
25 those plants that have established single points of

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1 contact for funneling all those activities through,  
2 we see that as a positive.

3 And then the risk assessment model  
4 including substation details certainly enhances the  
5 ability to do a thorough review. This last graph is  
6 current through 2005. What this shows is the number  
7 of scrams that were caused per year.

8 And looking left to right at these various  
9 histograms, you see the robin egg blue is the number  
10 of scrams that were induced by the grid. And in  
11 that category what we mean by that is the part of  
12 the switchyard and beyond there the nuclear power  
13 plant has very limited control of the equipment or  
14 activities.

15 Next, in the darker -- or in the green are  
16 the number of scrams caused by switchyard problems.  
17 And those include the activities and equipment which  
18 are directly under station control.

19 And then last, the gray is our scrams  
20 caused by main transformer and support systems  
21 problems. And then the black bar is the total  
22 number of scrams for all those categories.

23 So you can see that obviously in 2003,  
24 2004, we had a higher number of events, and it has  
25 been said multiple times, even if you back out, the

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1 August 2003 blackout, the data there was still  
2 anomalous on the high side.

3 But the good news is since 2003 we've seen  
4 a steady improvement, 2005 is actually the fewest  
5 number of scrams caused by these factors since 2001,  
6 2002, which were the best years in this data.

7 We at INPO, we do look at this information  
8 quarterly to make these assessments and these data  
9 points. So we have it quarterly but this happens to  
10 go through the year.

11 Before I close I just have a couple things  
12 I also want to mention. They're not on a slide, but  
13 I mentioned the peers already. But I guess what I'd  
14 like to make not is a plea for those of you who may  
15 not have participated on a peer review that we could  
16 use your help.

17 And if you are interested I'd appreciate  
18 you talking to Shawn or me at the break. And then  
19 secondly is that we have seen a positive impact of  
20 the owner's group and the switchyard committees to  
21 move from knowing what is required based on the  
22 Significant Operating Experience Reports that were  
23 issued to now putting that into practice, how to do  
24 it, and in implementing those procedures and  
25 information exchanges more effectively.

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1           And through this program we are getting  
2           that information shared out through our member  
3           utilities.

4           MODERATOR CAMERON: Okay, thank you Clair.  
5           As Clair noted, is presentation was on INPO  
6           activities and not directly on items in the generic  
7           letter. You will get a chance to ask Clair  
8           questions about his presentation.

9           And I think Alex is also going to pool in  
10          some of the INPO information perhaps, into his  
11          presentation. But I just want to tell you that if  
12          you want to ask Clair questions there will be an  
13          opportunity for that. And Alex, are you --

14          MR. MARION: Yes, I'm ready.

15          MODERATOR CAMERON: -- ready?

16          MR. MARION: Good morning. Good morning,  
17          okay. There are a number of points I want to bring  
18          up. I don't have a presentation package per say.  
19          But yesterday afternoon I received some input from  
20          some of the utilities here on things that they felt  
21          needed to be raised relative to what's going to  
22          happen with this generic letter going forward.

23          But before I go into that I'm going to  
24          take a minute and explain what NEI does. And you  
25          may all think oh no, here we go again, but I think

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1 it's important to understand that there are two  
2 things that we focus on on behalf of there industry.

3 One is an understanding of the technical  
4 issue that the NRC is struggling with, or the  
5 regulatory issue, if you will. So you can translate  
6 that to the safety concern or the compliance  
7 concern.

8 And Gordon Clefton, who's here with me, he  
9 and I don't sit in our office and just make these  
10 things up when we submit comments to the NRC on a  
11 generic communication. We receive a significant  
12 amount of input and guidance from the utilities on  
13 what positions to take with the NRC.

14 And this not only relates to generic  
15 communications, but it also relates to rulemaking,  
16 inspection findings, resolutions of generic issues.  
17 We spend a tremendous amount of time working with  
18 the NRC and trying to get a problem definition, if  
19 you will, or an understanding of what the concern is  
20 or an understanding of the issue.

21 Ninety-nine percent of the time when  
22 that's established the solution is straightforward  
23 relative to what the NRC needs to do as a regulatory  
24 body, or what the industry needs to do in areas that  
25 fall within the governance of INPO for example.

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1           In the case of grid reliability it should  
2 be clear that the industry has undertaken a number  
3 of initiatives, most of which are focused under the  
4 INPO organization with these review visits.

5           And that's a positive, proactive effort on  
6 out part. And as all of you know, when you start  
7 looking at programs and processes and activities,  
8 you are going to identify things.

9           You're going to have findings, and those  
10 findings will be put on the table, evaluated and  
11 resolved, and that process is in place on the part  
12 of the industry. I do want to say that right now it  
13 appears that there's an impasse between the industry  
14 and the NRC.

15           And it's just a perception, but the issue  
16 gets down to a full, clear, definitive understanding  
17 of the regulatory process, especially with regard to  
18 generic communications.

19           And I'm not talking about this generic  
20 letter specifically, although this is one example  
21 and there are several others that are currently in  
22 process in which the industry submits comments based  
23 upon our understanding of the safety aspect of the  
24 concern or the regulatory compliance aspect of the  
25 concern, and then we find out in the final analysis

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1 when the NRC issues that the final product that our  
2 comments are essentially dismissed.

3 In a separate effort, I've suggested to  
4 the NRC that we need to have a public meeting after  
5 the comments are submitted, hopefully before the  
6 final decision is made, to get a clear understanding  
7 of what the rationale is relative to NRC's  
8 disposition of industry comments.

9 We need to get that understanding, because  
10 right now I see an impasse and I don't see that  
11 being bridged at all at this particular point in  
12 time. So I'd like to put that on the table, and  
13 that's something that we will be following up  
14 separately with the NRC.

15 So it gets down to where are we in this  
16 particular topical area, and I must admit from the  
17 discussions yesterday and some of the discussions  
18 we've had over the past several months with NRC  
19 senior managers including the Commissioners, there  
20 are several perceptions that exist.

21 And I'm not going to say whether they're  
22 right or wrong, but I just want to put these on the  
23 table. There's a perception that the grid is  
24 unreliable. There was a perception stated  
25 yesterday, I think by one of the NRC Staff

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1 presenters, that diesel generators or emergency AC  
2 power sources may be unreliable and unavailable.

3 There's a perception that during the  
4 summer the grid is more susceptible to problems.  
5 And then there's a perception that utilities are not  
6 in compliance with NRC regulatory requirements.

7 And I characterize that as a perception  
8 because it's been recently documented by the NRC in  
9 independent studies that they are in compliance with  
10 the regulatory requirements.

11 So that leads to what I think we have is a  
12 sense of confusion and some uncertainty on part of  
13 the licensees in terms of what the NRC expectation  
14 is. Again, I don't think the problem has been  
15 defined.

16 I don't think the concern has really been  
17 clearly articulated. But be that as it may, there  
18 were a lot of comments yesterday relative to the  
19 anxiety level on the part of the licensees in  
20 responding to this generic letter.

21 And we didn't really get into that  
22 discussion in terms of why, but I do want to capture  
23 that thought and I would ask the licensees after  
24 this session is over, during the Q and A session, if  
25 you want to offer your perspectives it would be  
26 greatly appreciated.

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1           But let me just indicate there should be a  
2 clear basis for NRC requesting information from a  
3 licensee on an emergent issue that's been  
4 identified, an issue that raises a question about  
5 the safety of the plants, or a question about  
6 regulatory compliance.

7           And given that, it should raise a question  
8 about the adequacy of the licensing basis of the  
9 plants, which includes the NRC's regulations, as  
10 well as the responses and commitments and  
11 obligations the utilities have to implement those  
12 regulations.

13           And such an information request should be  
14 focused on the information that the NRC needs to  
15 they can make a decision as a regulatory body on  
16 what future actions they need to take.

17           And the information requested in the  
18 generic letter focuses on things that -- things, by  
19 things I mean programs and processes and activities  
20 that are not in control, or under the control of an  
21 individual licensee.

22           Made it very clear yesterday that the grid  
23 that the plants are connected to today is different  
24 than that which the plants were licensed to.  
25 Granted, that's a fact. The configurations, the

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1 hardware if you will, between the plant and the grid  
2 are probably for the most part the same.

3 The key difference is the responsibility  
4 for operating and maintaining of the grid in many  
5 cases, I think it's about two thirds of the industry  
6 is controlled by other entities than the licensees.

7 So I think the reality is that we need to  
8 -- the NRC needs to come to grips with, given that's  
9 the environment today what changes need to be made  
10 in their regulations to deal with that kind of  
11 environment, recognizing the licensees are not in  
12 control today as they were 25, 30 years ago.

13 If you give me a few minutes I'll be able  
14 to give you an answer to that question. But I think  
15 that's one of the questions that the NRC needs to  
16 come to grips with. The current use of the  
17 provisions of 50.54(f) in generic communication  
18 results in the legally binding commitment on the  
19 part of the licensee to respond under oath and  
20 affirmation that the answers to the questions and  
21 that the information is valid and correct.

22 Again, you're asking the licensees to make  
23 -- to docket a commitment on things, programs and  
24 activities, that they don't have direct control  
25 over. I think that is the greatest contributor to  
26 the anxiety level that you sensed yesterday.

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1           And again, I would ask the utilities to  
2 offer their perspectives on that. But more  
3 importantly, the request for information should  
4 focus on existing information that was used by the  
5 NRC as a regulatory agency to grant an operating  
6 license to that power plant.

7           And that suggests that the information  
8 should be bounded by the current licensing basis.  
9 The subject matter of some of the questions does not  
10 relate to the licensing basis information.

11           It's fundamentally clear to the industry,  
12 and it should be fundamentally clear to the NRC. So  
13 you've got this potential regulatory commitment that  
14 a licensee is expected to make over things that the  
15 licensee does not have control over.

16           That creates some anxiety within the  
17 industry. And I would think -- we heard yesterday  
18 from a couple of the Staff presentations they  
19 acknowledge that some of the questions don't relate  
20 to things that are part of the regulatory  
21 requirements, okay.

22           We seem to have an understanding of what  
23 arena we're playing in here. We need to come to  
24 grips with a better understanding of what needs to  
25 be done going forward. And I would offer from our  
26 sense of the comments that were raised yesterday,

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1 there are several areas that are extremely important  
2 relative to further clarification.

3 There was a suggestion that definitions of  
4 terminology would be really helpful because certain  
5 terms used in a nuclear power plant do not mean the  
6 same thing when you go outside the fence and beyond  
7 the switchyard.

8 And by that I mean the terminology means  
9 something different or it means nothing at all to a  
10 transmission systems operator. And we talked about  
11 PRA risk analysis.

12 To suggest that a licensee has to assure  
13 that a system operator's going to assess the risk of  
14 the grid on the plant makes no sense. It makes no  
15 sense at all. So again, what is it that we're  
16 trying to address and how's the best way to address  
17 it.

18 We already talked about the TFCs. I  
19 preferred action items, but I'll settle for TFCs. I  
20 received some input from utilities yesterday that  
21 the 60 day comment period may not be sufficient,  
22 primarily because again they have to work with other  
23 organization who have their own priorities and  
24 schedules and get information so that they can  
25 provide a timely response to the questions.

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1           And some of you utility attendees have  
2           specifics in that regard. I'm sure that would be  
3           appreciated. There is still some confusion on the  
4           FERC standard of conduct issue.

5           I sensed from the discussion yesterday  
6           that it's clear that the utilities can provide --  
7           well, the utilities as generators, generator owner  
8           operators, can provide information to other  
9           stakeholders in the grid.

10           But it's not clear that the other  
11           stakeholders can provide information back to the  
12           generators. And I think given that the NRC has an  
13           MOA with the Federal Energy Regulatory Commission  
14           and the North American Electrical Reliability  
15           Organization that you can pose a question and get an  
16           answer to that sooner than later.

17           There was one of the questions that was  
18           raised about making an operability determination  
19           when you lose the -- when you have a loss of the --  
20           and I'm drawing a -- RTCA, thank you -- software.

21           And that's an interesting one because it  
22           leads to the perception that everyone is relying on  
23           a software package. And it think the comments from  
24           Frank Koza from PJM were very insightful in terms of  
25           what they have within the PJM in terms of redundant  
26           software.

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1           And remember Frank said that PJM has  
2 backup software and they also, if they lose the  
3 backup, the transmission system operators, and it  
4 think there are 16, 18 of them, have the same  
5 software.

6           So they have backup and backup. And that  
7 -- the statements that I think that Mr. Koza  
8 provided in his one slide in response to that  
9 question should be adequate and sufficient and  
10 clearly responsive to what the NRC is asking, I  
11 think, based upon, okay, based up what our  
12 understanding is of the question.

13           Now granted, that only applies to the PJM  
14 utilities. It doesn't apply to everyone, okay. And  
15 I also think the other perspective is that Mr. Koza  
16 offered on the questions -- other questions were  
17 very useful.

18           We need to come to grips with that,  
19 otherwise the NRC's going to get responses to the  
20 questions, and the NRC's not going to be able to  
21 disposition those responses without follow-up  
22 activity.

23           And we're going to be back here next year  
24 going through the same thing. And it's shameful if  
25 we do because there's no reason why we can't come to

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1 a common understanding of what the expectations are  
2 and what's the best way to gather that information.

3 One can argue that it seems if the NRC is  
4 interested in getting information on a programs and  
5 processes and activities of transmission system  
6 operators, then why can't you request that  
7 information through FERC and NERC, given that you  
8 have a memorandum of understanding, a memorandum of  
9 agreement.

10 I don't know, but that's something that  
11 should be considered. General design criteria 17 is  
12 a huge influence in terms of the regulatory basis.  
13 The plants were licensed. The configurations, for  
14 the most part, are still there.

15 The question is how do we operate and  
16 maintain the grid to provide some assurance that  
17 you've got preferred offsite power sources. I think  
18 what you heard yesterday from the work that's being  
19 done by NERC under the -- and implementing the  
20 provisions of the Energy Policy Act of 2005, as well  
21 as the work that's being done by the North American  
22 Electrical Reliability Council relative to  
23 developing the reliability standards, and we got an  
24 update yesterday, as well as them becoming the  
25 Electric Reliability Organization, which is one of  
26 the requirements of the Energy Policy Act, make it

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1 very clear that there are efforts within the bulk  
2 power system stakeholder community, and I apologize  
3 if that doesn't represent them but that's the best I  
4 can come up with right now, that there are a lot of  
5 things that they're doing to improve the situation  
6 of the grid and respond to the recommendations from  
7 the U.S.-Canadian Task Force that investigated the  
8 August 14th, 2003 event.

9 So there's a lot of work going on in that  
10 arena. We -- finally we have a task force. One of  
11 the things that we do is get together a group of  
12 industry experts on a topical area.

13 And on grid reliability we have a task  
14 force of utility experts, and many of them are here  
15 today. And we're having a meeting this afternoon  
16 and we're going to talk about what have we gained  
17 from this workshop.

18 And one of the things that we may do is  
19 submit a letter to the NRC offering our perspectives  
20 as an industry with input from the task force on  
21 what should be clarified with regard to the  
22 questions posed in the generic letter as we  
23 understand the generic letter.

24 And that's the one that was issued in the  
25 SECY paper. And I would ask the task force members  
26 to give it some thought because when we get together

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1 this afternoon we want a definitive course of action  
2 in that regard.

3 That completes everything I wanted to put  
4 on the table today, and I'd like to thank you for  
5 the opportunity. I don't know if you want to  
6 respond.

7 MODERATOR CAMERON: Okay.

8 MR. MARION: Oh, there is one more item,  
9 can I -- I'm sorry.

10 MODERATOR CAMERON: I'm sorry, you've  
11 stopped.

12 MR. MARION: I can't remember who made the  
13 comment yesterday on a temporary instruction being  
14 developed, or under development or being considered.  
15 And this question I have for Mike is given that it's  
16 imminent that a generic letter is going to go out in  
17 some form or another, what is the role of the  
18 temporary instruction relative to the generic letter  
19 and the kind of information that's being gathered?

20 Recognize the TI hasn't been drafted yet,  
21 but I wonder if you can speak to that in some  
22 manner.

23 MODERATOR CAMERON: Mike?

24 MR. MAYFIELD: Let me deal with the last  
25 one first. The role of the TI, I -- because of the

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1 timing of the generic letter, we didn't get it out  
2 as early as we would have liked.

3 Our preference would have been to rely on  
4 the generic letter, the responses, our assessment of  
5 them, and use that as the basis for going into the  
6 summer of 2006. Timing didn't permit that.

7 So we've already stated looking at putting  
8 together a TI that will probably look much like the  
9 one from last year, to assess -- and building on  
10 what we did and didn't learn from last year.

11 So it's probably going to look much like  
12 the one from summer of 2005. Looking at a snapshot,  
13 so if we're going to do that with the TI why proceed  
14 with a generic letter, the TIs are a snapshot, a  
15 look at some specific item.

16 The generic letter takes us to a greater  
17 level of depth that will hopefully provide a basis  
18 as we go forward so that we're -- the ideal  
19 situation is we're not really doing this each and  
20 every year, or if we're having to do something each  
21 year it's a lot more focused than where we're been  
22 able to be.

23 So what are we going to do? It's probably  
24 going to look much like last years, but we haven't  
25 drafted it yet, we haven't put it together. We  
26 haven't had consultation with the regional

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1 inspectors that are going to have to implement this  
2 thing.

3 So it would be a little premature to try  
4 and be specific about what it is or isn't, but it's  
5 going to be a snapshot to let us look forward into  
6 the summer of 2006, and to be able to provide the  
7 Commission some confidence that utilities are ready  
8 to move forward.

9 Your comments on the process for public  
10 meetings, Alex, that's something that with both Jim  
11 Dyer and Brian Sheron here, I suspect they've heard  
12 that view before, so we'll look at that as -- in  
13 terms of process space as we go forward.

14 Your comment that the generic letter is  
15 asking licensees to commit to programs and processes  
16 over which they have no control, I don't think we  
17 see it that way. Rather we see it as requesting  
18 information about the programs and processes you  
19 have for your stations that relate to assuring  
20 compliance with the regulations that we've talked  
21 about, that the interaction with the grid operators  
22 so that you assure yourselves that you have a  
23 reliable source of offsite power.

24 It's not us trying to get you to control  
25 the grid or us trying to control the grid, it's  
26 asking you what do you do, what questions do you

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1 ask, what programs do you have that deal with  
2 assuring yourselves that you have a reliable source  
3 of offsite power.

4 So it's not -- if the source, you know, a  
5 source of angst with the generic letter is asking  
6 people to commit to processes over which -- that  
7 they don't control, that's not what we think we're  
8 asking.

9 We think we're asking about what programs  
10 do you have at your station. What programs and  
11 processes do you have for interacting with the grid  
12 so that you do in fact have a reliable source of  
13 offsite power?

14 The terminology issue we heard, we  
15 understand, we'll -- that struck us, sort of struck  
16 a nerve. We want to make sure that we're writing  
17 down definitions as we understand that, and then at  
18 least be clear on it.

19 So if there is a different understanding  
20 between the nuclear power plants and the grid  
21 operators that that difference in understanding,  
22 difference in terminology can be worked out as part  
23 of their interface activities.

24 The 60 day comment period one, we need to  
25 move on with this, the notion that gee it's going to  
26 take a lot longer to sort these things out. We

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1 think that, and there was a lot of discussion  
2 yesterday about communication between the plants and  
3 the TSOs being key.

4 We agree. I guess when I was hearing that  
5 dialog I found it somewhat comforting that indeed in  
6 some form or another that dialog it basically taking  
7 place. Given that the dialog's taking place, I'm  
8 not clear on why we would need, why you would need a  
9 whole lot longer than 60 days to put that together  
10 and answer the questions.

11 The FERC standard of conduct issues, as I  
12 said yesterday afternoon, if you are seeing that  
13 interface, there's some legal prohibition to the  
14 exchanges, you need to write that down.

15 That's a pretty good answer to that  
16 question. And then with those specifics we can go  
17 and engage FERC. And I think you heard Susan Court  
18 say yesterday that yes, that's something.

19 One, she was expressing some frustration,  
20 I think was her word, at the dialog, at what she was  
21 hearing back. At the same time I could clearly hear  
22 frustration from many of you over what you saw or  
23 have been told is a legal prohibition.

24 So if in fact you see that -- you see that  
25 as a legal prohibition, that'd be a really good  
26 answer to that question, and it gives both us and

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1 FERC something that we can work on as we move  
2 forward.

3 As we want information about how the  
4 transmission system actually operates, as Alex has  
5 suggested, we have a pretty good dialog with both  
6 FERC and NERC. And we can and have gotten that  
7 information.

8 What we're trying to do with the generic  
9 letter is go to what you're doing in your  
10 interactions with that transmission system operator,  
11 and how you are dealing with that interface, how you  
12 assess seasonal variation for -- as you put that  
13 into your maintenance activities, and how you're  
14 dealing with station blackout issues.

15 So it's not gee what's your ISo doing  
16 other than the degree you need to engage with that  
17 to be able to reassure yourselves if you've got  
18 reliable offsite power, that you know what you're  
19 doing and how you're assessing seasonal variation,  
20 weather related issues.

21 One of the things that did come out is,  
22 gee there's something going on in all four seasons.  
23 Yes, there's something going on in all four seasons.  
24 So the issue is how do you decide.

25 What's your process for assessing when to  
26 impose maintenance versus when to back away from it,

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1 reschedule it, or once you're into an evolution back  
2 out of it? So our interest is what's your process,  
3 not what's the TSOs process, but what are you doing.

4 So I've probably missed some of your  
5 points, but hopefully we got to the key one.

6 MODERATOR CAMERON: Okay, thanks Mike.  
7 And I guess I just, before we open it up to  
8 everybody, would just make a few comments based on  
9 yesterday. And even though, as Mike is giving you  
10 the NRC's understanding perspective on some of the  
11 issues that Alex raises, I think that when the Staff  
12 goes back to evaluate the results of this workshop,  
13 the Staff will be looking at some of these issues.

14 Alex started with the clear understanding  
15 of terminology. Jennifer gave us a couple of  
16 examples yesterday on problems, and one of the big  
17 ones that Dick from Southern California Edison,  
18 raised is this whole difference between system or  
19 service reliability and grid reliability.

20 And I don't want to lose track of the fact  
21 that we spent a lot of time on question 2f in the GL  
22 yesterday, the whole issue of the RTCA and whether  
23 it's operability or risk.

24 Mr. Thorson raised that. Initially Keith  
25 had a suggestion for revising the language of 2f,

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1 and also the suggestion was made to move it from  
2 operability to risk. So that is in the transcript.

3 Another issue that Mike said we would take  
4 a look at, this issue of periodic checking with the  
5 TSo, the whole do we expect there to be a call  
6 center set up. And I think Mike squashed that idea.

7

8 MR. MAYFIELD: Yes.

9 MODERATOR CAMERON: That wasn't within the  
10 intent. But that's another issue that came up  
11 yesterday. And there was a lot of discussion about  
12 that when it became clear from the NRC Staff  
13 explaining well here's the intent of the question,  
14 here's what we're trying to determine, that there  
15 were a whole lot of things that the industry was  
16 worried about, do we need to do this, do we need to  
17 answer this, that there were some suggestions that  
18 maybe it might be good to context what's not  
19 expected, even in a general way.

20 And with that I'll just open it up to all  
21 of you to either emphasize, amplify on some issues  
22 that Alex brought up, to bring up other issues that  
23 the NRC should consider in deciding whether and how  
24 to adjust the GL.

25 And we'll go to this gentleman right here.  
26 Yes, sir?

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1 MR. LEAKE: I'm Harvey Leake with Palo  
2 Verde, and I wanted to point out a couple of issues  
3 in the generic letter that I think demonstrate some  
4 of these points. 2h is an example of something  
5 that's outside of the licensee's control.

6 It says if an RTCA program is not  
7 available, the NPP's TSo, are there any plans for  
8 the TSo to contain one, if so when? First of all,  
9 the NRC had stated that the intention is not to  
10 require licensees to utilize RTCAs, and I'm not  
11 quite sure why this would be a relevant question, if  
12 the licensee is able to demonstrate that there are  
13 other means to ensure operability of offsite power.

14 And obviously installation of RTCA is  
15 something that would be done by the Transmission  
16 Organization, not the nuclear plant. And even if  
17 the nuclear plant had this information, I'm not sure  
18 they'd necessarily want to share it with the NRC.

19 The other one is 3 alpha, which gets into  
20 a whole new definition of operability that we've  
21 never seen before, which is that if tripping of a  
22 transmission line causes low voltage at a nuclear  
23 power plant, then offsite power is inoperable.

24 The definition of operability in  
25 regulatory guide 1.93 is the capability to affect a  
26 safe shutdown and mitigate the effects of an

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1 accident. If you take this to it's logical  
2 conclusion you'd say that all nuclear plants now  
3 have inoperable offsite power be the lines coming  
4 into the plant, if they were to trip, would put that  
5 bus line to diesel.

6 So I think this is an example of a new  
7 requirement, a back fit type thing that's kind of  
8 crept into this.

9 MODERATOR CAMERON: Thanks Harvey. I take  
10 it from your first point about 2h is just amplifying  
11 on Alex's point in terms of the RTCA and the PJM  
12 discussion. All right, and let's go to -- let's  
13 hear from Bruce from -- on FERC issues, Bruce Poole,  
14 FERC.

15 MR. POOLE: Yes, Bruce Poole from FERC. I  
16 would like to ask Mr. Goddard a question. On the 14  
17 evaluations you've done, was anybody from NRC or EEI  
18 involved on the team?

19 MR. GODDARD: The question was any EEI or  
20 --

21 MR. POOLE: NERC.

22 MR. GODDARD: NERC personnel on our teams.  
23 And I'm going to defer to Shawn. I do not believe  
24 so. I think we've worked with NERC and have --  
25 okay. And I'd like to wait until he gets back.

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1 I'm certain that we have not had personnel  
2 from EEI participating.

3 MR. POOLE: Okay.

4 MR. GODDARD: Maybe Dave can help with.

5 MR. NEVIUS: I'm sorry, I couldn't hear  
6 Bruce's question.

7 MR. GODDARD: The question was have any  
8 NERC personnel participated as a peer on one of  
9 INPO's review visits.

10 MR. NEVIUS: No.

11 MODERATOR CAMERON: We need to get this on  
12 the record so I'm going to borrow this back and go  
13 to David and Shawn as needed to answer the question.  
14 David, you heard the --

15 MR. NEVIUS: Yes, NERC has not  
16 participated on any of the INPO evaluation visits.  
17 We have sent a couple of our folks to some of the  
18 INPO training sessions because we're doing a  
19 somewhat similar evaluation through our readiness  
20 audit process.

21 We have had some INPO people participate  
22 in NERC readiness audits and give us their feedback  
23 on our process, so we have done it that way. Shawn?  
24 I don't know whether Shawn wants to jump in on it.  
25 You didn't hear the question, but --

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1 MR. SIMON: That's okay. All right, in  
2 the early stages we sent folks to support NERC to  
3 get their program up and running.

4 MR. GODDARD: Shawn, the question was have  
5 we had any personnel from EEI participate on any of  
6 these review visits?

7 MR. SIMON: Not that I'm aware of.

8 MODERATOR CAMERON: Okay. Thank you. And  
9 Bruce, I'm assuming that answers your question. And  
10 let's go to Mr. Thorson for either new or old  
11 comments.

12 MR. THORSON: A new one this time. James  
13 Thorson, Detroit Edison. I'm looking at question  
14 2g, which essentially asks after an unscheduled  
15 inadvertent trip of the nuclear power plant are the  
16 resultant switchyard voltages verified by procedure  
17 to be bounded by the voltages predicted by the RTCA.

18 And to me this seems like it's essentially  
19 asking the question are you benchmarking your  
20 software to make sure the RTCA results are worth  
21 looking at, all right. So you take actual plant  
22 data, compare it to your RTCA, and then hopefully  
23 one would make changes in the RTCA to make it more -  
24 - I guess more useful.

25 Again, here's cases where -- I understand  
26 the NRC is asking -- they're stating we're not

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1 trying to regulate the grid operator, but it sounds  
2 like you're trying to use the licensee to regulate  
3 the grid operator.

4 And that -- I just would like to hear your  
5 comments on that.

6 MR. MAYFIELD: Well let me try it a little  
7 differently. You, as a plant operator, have an  
8 expectation based on your interactions with the grid  
9 operator, what your post-trip switchyard voltage is  
10 going to look like, right?

11 I mean it think everybody has that, at  
12 least you should. At least I think you should.  
13 Everybody's got that. You trip, and that voltage is  
14 substantively lower. Seems to me that's something  
15 that should distress the plant, never mind the grid,  
16 that your expectation, the boundaries of your  
17 operation aren't living up to what you thought you  
18 were going to have.

19 And it strikes me, that's something that  
20 you'd want to -- you'd want to come to deal with and  
21 we want to know how you're, you know, do you look at  
22 it, and how do you satisfy yourselves that you're  
23 within the bounds that you've anticipated for your  
24 operation.

25 MODERATOR CAMERON: Okay, let's get some  
26 other perspectives on that, and --

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1 MR. MAYFIELD: Ronaldo -- Chip, Ronaldo  
2 acted like he had something he wanted to say.

3 MODERATOR CAMERON: Yes, that's -- right  
4 here for Ronaldo -- and I just wanted to -- and then  
5 we'll go to George. I just wanted to make sure that  
6 -- we need to capture everything in the microphone  
7 for the transcript, and just one person at a time  
8 speaking so that we can do that.

9 Let's go to Ronaldo and then we'll go over  
10 to George.

11 MR. JENKINS: Ronaldo Jenkins, NRR. The -  
12 - sometimes when folks are not dealing with this  
13 particular issue, many of the -- it seems like as if  
14 we're pulling this out of the air.

15 There's a long history, a long regulatory  
16 history of where particular -- these questions are  
17 coming from. For example, the last one that you  
18 noted, 2g, the -- in the power system, the PSB-1,  
19 which is part of the standard review plan, having to  
20 do with the section on adequacy of station voltages,  
21 and this goes back to the old issue of will safety  
22 related equipment operate under the voltages that  
23 are being provided from the switchyard.

24 One of the sections there talks about a  
25 recommendation from the Staff that if you're going  
26 to do computer analysis that that computer analysis

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1 be validated. And there's a -- I think it's 3  
2 percent tolerance between what the actual  
3 occurrences, that is the actual events, what the  
4 program predicted, and what -- basically what the  
5 program predicted and what the actual results are.

6 So by the way, we also brought that up  
7 under the 2001, 2000 period when we were talking to  
8 NEI on this issue as far as verifying models are  
9 correct. So the idea behind this 2h is that if you  
10 have a computer program that you're relying on,  
11 there's implied verification.

12 And here's a way that you, in fact, can do  
13 that. So it's not implying a particular requirement,  
14 it's asking if you have information that validates,  
15 or some way of knowing that that program is in fact  
16 doing what you would expect it to do.

17 MODERATOR CAMERON: Thanks Ronaldo. And I  
18 think we're back into the -- we're looking for  
19 information versus people thinking that we're  
20 implying new requirements here. Do you have --  
21 before we go to George do you have one more thing to  
22 say on that? Is this a new issue?

23 MR. THORSON: No, same one. Just a  
24 follow-up, I guess, and that is if the intent is to  
25 make sure that the grid operators are in fact doing  
26 a good job of validating their models based on post-

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1 trip data for nuclear power plants, perhaps the new  
2 NERC guidelines are getting set to come up for TSOs.

3 It might serve the industry better if  
4 those NERC guidelines contain some sort of  
5 recommendation or requirement that post-trip  
6 validation in software occur, because I don't have  
7 control of that.

8 MODERATOR CAMERON: Okay, we'll see if  
9 David from NERC has anything to say on that point  
10 after we here from George. George? This is on this  
11 --

12 MR. ATTARIAN: Thank you, George Attarian,  
13 Progress Energy. I am on the same theme, and I do  
14 take exception to what Mr. Mayfield said with  
15 respect to what are you doing as a licensee as  
16 opposed to getting involved in what transmissions  
17 and the ISOs are doing.

18 If you read the purpose of the generic  
19 letter item number 1 and some part in item number 2  
20 talks about the use of protocols between the nuclear  
21 power plant, the transmission system operator, TOS,  
22 independent system operator or reliability  
23 coordinator authority, and the use of real time  
24 contingency analysis software, and equivalent state  
25 of the art software program by TSOs to assist  
26 nuclear power plants monitoring the grid.

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1           You are absolutely right. It is a  
2 condition that when we have to look at offsite power  
3 we have to make sure that that offsite power is  
4 within the limits of the analysis that has been  
5 performed.

6           However, I have to disagree with respect  
7 to our level of what you're expecting on this  
8 generic letter and what is coming forth from the  
9 other side of the organization. As a good licensee I  
10 could take the approach of just basically saying  
11 calmly when I'm in trouble because they have these  
12 analyses.

13           I trust their organization to do that.  
14 That answer is not going to be accepted. The answer  
15 that we're going to be looking at -- looking for, or  
16 as a good licensee that I would be looking for is I  
17 have to know how they're doing it.

18           I have to know what the bounds of those  
19 limitations are. I need to know how they're  
20 operating their grid in support of these  
21 limitations. Otherwise I can't accept an answer  
22 just call me when you're outside these bounds.

23           So I feel as if I have to know that I have  
24 to have some level of understanding. And when I  
25 respond to this generic letter on the 50.9 where  
26 organizations do not have the same level of

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1 procedures that I can control or I can see that they  
2 do not have an appendix B calculation program that  
3 does the analysis to determine this for me.

4 I find it very difficult to make a  
5 statement what are you doing as viewed as a licensee  
6 as opposed to we have to know what they're doing on  
7 the other side to respond in a 50.9 sense.

8 MODERATOR CAMERON: Okay, thank you.  
9 Thank you very much George. David, did you want to  
10 say anything about what Mr. Thorson said? I think  
11 he does. David?

12 MR. NEVIUS: Yes. Dave Nevius, NERC. The  
13 draft standard that we have underway -- I know Terry  
14 is still here, yes. It doesn't explicitly refer to  
15 validating the models with actual results, but I  
16 think it's something that the drafting team would be  
17 glad to consider putting in there more explicitly as  
18 a requirement.

19 It's certainly -- modeling is an issue.  
20 Model validation is an issue throughout the bulk  
21 electric system. It's not unique to the nuclear  
22 plant requirements. And we learned a lot from the  
23 2003 blackout that not all the predictive models  
24 were perfectly accurate.

25 And we are developing some overall  
26 standards in another area on model validation in

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1 general, but there's no reason there couldn't be  
2 something included in this standard and in the  
3 agreements between nuclear plants and transmission  
4 system operators regarding this specific point. I  
5 think it's a good one.

6 MODERATOR CAMERON: Thank you Dave. Okay.  
7 Let's hear from other people on either amplification  
8 of some of the issues of concern that have already  
9 been brought up or new issues.

10 We have one of our key NRC Staff people,  
11 Paul Gill, who wants to say something here. Paul?

12 MR. GILL: Paul Gill from NRR, electrical  
13 branch. Just in response to Mr. Leake's concern  
14 about question, I think it was 2h, the thing is that  
15 if you look at the generic letter, RTCA is the term  
16 that we use to identify any online, offline type of  
17 programs that you can use to do predictive type of  
18 analysis, such as grid stability, load flow,  
19 whatever it is.

20 Okay, so let's not get hung up that it is  
21 RTCA is a program, a particular one, okay. It's  
22 anything that you -- it's a tool that you use to  
23 predict, you know, the grid in terms of, you know,  
24 how stable it is.

25 Now you're reading the question 2h in sort  
26 of a, you know, in absence of looking at question 2i

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1 and 2j, okay. So you need to read the whole context  
2 of the question 2h is being asked.

3 If you go to 2i it says okay, if you don't  
4 have the RTCA program does your TSo perform periodic  
5 studies to verify adequate offsite power capability,  
6 including accurate NPP post-trip switchyard  
7 voltages.

8 Okay, it goes on to say are the key  
9 assumptions and parameters of those periodic studies  
10 translated into the TSo guidance. So what we are  
11 saying is that if he doesn't have an RTCA that's  
12 fine.

13 Is he going to get one? No. That's fine.  
14 Does he do periodic studies? Yes. Does the  
15 assumptions that he uses in that study are  
16 translated to the operation site of that  
17 transmission system so that you can then assure  
18 yourself, or the TSo can assure that your licensing  
19 basis, assumptions in your licensing basis are met  
20 and kept, you know, current.

21 That's what this whole question is leading  
22 to. It's not just 2h. It's not 2h or -- you know,  
23 you need to read 2h, 2i, and j. Okay. Now, and  
24 going onto question 3a, as you mentioned, now as I  
25 discussed yesterday in my discussion, the licensing  
26 basis of every nuclear power plant when the license

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1 was granted it included the loss of the largest  
2 supply, and I said we could assume that to be the  
3 nuclear unit which happens to be the largest one, or  
4 the critical transmission line, or the largest load.

5 Now that's basically question 2a is  
6 talking about. It's not a new requirement, it is  
7 your existing current licensing basis. And what we  
8 want to make sure is that now since the grid is no  
9 longer under your control, it's being operated by a  
10 third party.

11 So therefore if that third party tells you  
12 you're not going to meet your minimum voltage  
13 requirements in the switchyard, what actions are you  
14 going to take? Are you going to declare your  
15 offsite inoperable or not?

16 Now we have had notification for a number  
17 of licensees last year that came in and said, gee  
18 TSo told us that you're not going to meet your m in  
19 voltage requirements so therefore we -- they entered  
20 into the tech. specs.

21 And then they came out of it after, you  
22 know, system was restored to where they would have  
23 adequate voltage. So 3a is basically asking what,  
24 you know, your existing requirements.

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1           This is not a new requirement. It's not a  
2 new, you know, regulation that we are imposing upon,  
3 okay? Thank you.

4           MODERATOR CAMERON: Okay, thanks for that  
5 clarification, Paul, on both 2h and 3a. And we'll  
6 have some pushback so to speak on that in a minute.  
7 I want to give -- Brian Sheron has a question or a  
8 comment on something Alex said. Brian?

9           MR. SHERON: Yes. This is Brian Sheron.  
10 I just want to reiterate, because I've heard,  
11 listening to the discussion here, a lot of concern  
12 about, gee you're asking us to control something  
13 that we don't have any responsibility for and the  
14 like.

15           And I want to point out, you know, we  
16 understand that. We understand that you may not  
17 have any control over your transmission system  
18 operator in terms of your transmission system  
19 operator may say no I don't want to have a protocol  
20 and alert you or whatever, and the like.

21           That's fine. That's a legitimate answer  
22 to the generic letter, okay. What we're looking --  
23 we're not saying you're not in compliance. Alex  
24 seemed to think that we were saying you're not in  
25 compliance.

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1           What we're concerned about though is that  
2 if then, if you tell us I don't have any protocol, I  
3 don't know what's going on with my grid because my  
4 TSo is not obligated to provide me certain  
5 information.

6           But then if you go into a maintenance rule  
7 for example, and say -- which says I have to assess,  
8 okay, and take action, whatever, okay, if you make a  
9 decision that says even though I don't know what's  
10 going on with my grid, I'm going to take this piece  
11 of equipment out of service and put the plant in a  
12 high risk situation, then yes, there may be a  
13 violation of regulations and we may go forward with  
14 enforcement.

15           Okay, so you need to understand that we're  
16 going to be looking at this from there standpoint of  
17 not so much, you know, if I don't have a protocol  
18 with my TSo then I'm in violation, but it's going to  
19 be how do you operate your plant under those  
20 conditions, okay.

21           We may have to go back and look and see if  
22 you have a tech. spec that we granted that allows  
23 you a 14 day diesel generator allowed outage time  
24 that says you can tear up your diesel and everything  
25 while you're online, for 14 days, okay, and then we

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1 get some indication that you may not know what the  
2 condition of your grid is.

3 We may have to go back and revisit that  
4 decision, okay, if that decision, if part of your  
5 basis for justifying that 14 days was a risk  
6 argument and a reliability of your grid.

7 So you know, please understand we're not  
8 saying you must have these protocols and the like  
9 that you say you don't have control over in order to  
10 be in compliance. If you don't have them, we  
11 understand that.

12 We recognize we can't force you. We don't  
13 regulate the TSOs. But we will take a hard look at  
14 how you are operating your plant in light of that.

15 MODERATOR CAMERON: Okay, thank you Brian.  
16 And we do have a couple of other NRC questions and  
17 comments. But I want to make sure that we hear a  
18 response to some things that Paul said in the spirit  
19 of trying to clarify some issues.

20 If there's still a problem with that we  
21 just want to hear them and get that on record, and  
22 then we'll go on. And as -- if anybody has some  
23 questions for Brian based on his comment now, we  
24 want to go there too.

25 Now Harvey, do you have something to say  
26 in response to Paul?

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1 MR. LEAKE: Harvey Leake, Palo Verde. I  
2 am hearing a little bit of what I'd call revisionist  
3 history here. If you really look back at the  
4 history, when plants were originally licensed, the  
5 concept of post-trip voltage was not there.

6 And if anybody has anybody documents to  
7 the contrary I'd like to see them. This was a  
8 realization that came up probably in the past ten  
9 years where the focus really became that we do need  
10 to ensure adequate post-trip voltage to avoid double  
11 sequencing and make sure that we meet the definition  
12 of operability per Reg. Guide 1.93.

13 Now the criteria that Paul was mentioning,  
14 tripping the largest unit, the most significant  
15 transmission line and so on, the load, these are  
16 from a branch technical position, PSB-1, and they  
17 had to do specifically with transmission grid  
18 stability.

19 And they required studies be in place to  
20 ensure transmission grid was robust enough to remain  
21 stable following those particular contingencies.  
22 Grid Stability is totally separate from post-trip  
23 voltage.

24 And studies are totally different than  
25 real time analysis. As a mentioned before, the  
26 specific definition of operability of offsite power

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1 from Regulatory Guide 1.93 is ability to affect a  
2 safe shutdown and mitigate the effects of an  
3 accident.

4 So the concern, or the contingency that's  
5 of concern is tripping of the nuclear plant, not  
6 other contingencies. And I thought this was very  
7 clearly stated at the workshop last year by the NRC  
8 that the only contingency that we need to be  
9 concerned with for post-trip voltage was tripping of  
10 the nuclear plant, so it's kind of a new spin on it  
11 to start throwing in tripping of lines for post-trip  
12 voltage.

13 And as I mentioned before, we couldn't  
14 meet it anyway because at least the lines coming  
15 into the unit, if they were to trip, would cause  
16 separation of that bus from offsite power.

17 MODERATOR CAMERON: Jennifer, related on  
18 this same issue?

19 MS. WEBER: Thank you, Jennifer Weber,  
20 TVA. Just one more quick clarification. When we  
21 look at operability of offsite power, it's not will  
22 your voltage be low in real time, it's would your  
23 voltage be low during a postulated accident.

24 So if you're saying you have to be  
25 operable following a line trip, you're looking at  
26 two unexpected events happening simultaneously, a

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1 line trip plus that, a simulated loca to determine  
2 operability.

3 MODERATOR CAMERON: Okay, thank you  
4 Harvey. Thank you Jennifer. Is there -- anybody  
5 want to ask Brian a question?

6 MR. MARION: I don't -- Chip, I don't have  
7 a question. I just want to comment. And I  
8 appreciate Brian's point about the maintenance rule  
9 and NRC review of 14 day --I'm sorry, this is Alex  
10 Marion -- NRC review of license amendments  
11 requesting a 14 day allowed outage time on diesel  
12 generators.

13 I would just only ask that the review be  
14 focused on the facts as opposed to the perception.

15 MODERATOR CAMERON: And when -- can you  
16 just explain what the fact versus perception, can  
17 you amplify on that?

18 MR. MARION: Well, yes, the facts based  
19 upon the risk assessment conducted by the utility in  
20 managing the risk associated with that maintenance  
21 activity and their coordination with the  
22 transmission system operator.

23 And I understand that's being done. But  
24 that's being done in different grades, if you will,  
25 based upon the kind of software and technical  
26 capabilities available to both entities.

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1 I have concerns if there's a perception  
2 that because somebody's taking a major piece of  
3 equipment or a system out of service in the summer  
4 time, then that activity is automatically suspect.

5 I think you need to look at the analysis  
6 that's done to support that activity before you draw  
7 conclusions.

8 MODERATOR CAMERON: Okay, thanks Alex.  
9 And I want to make sure that since we do have Jim  
10 Dyer and Brian Sheron here until 10:15 that they  
11 hear as much as possible from all of you in terms of  
12 concerns.

13 So I know that we have a couple of NRC  
14 Staff who have questions, observations. But let me  
15 focus on the industry now before the break. And  
16 we're going to go to this gentleman and then we'll  
17 go back there, then up here. Yes, sir?

18 MR. MATHARU: My name is Singh Matharu.  
19 I'm from Entergy. I had a related question to  
20 generic letter question 3 bravo, 3b. And I guess  
21 Mr. Gill's presentation yesterday, this is slide  
22 number 19, and it's related to offsite power system  
23 operability.

24 Given that the offsite power is a non-  
25 safety-related system, we can postulate multiple  
26 failures and varying levels of severity on the

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1 voltage and the duration of the time that the loss  
2 occurs.

3 Based on this, almost every unit, every  
4 plant, can be subjected to I guess delayed local  
5 LOOP and double sequencing. So the question 3 bravo  
6 seems to imply that we need to take care of delayed  
7 local LOOP or now simultaneous local LOOP as we were  
8 originally licensed.

9 So we had two things given yesterday that  
10 we are not trying to force RTCA, which may be  
11 related or not related. And the question is what is  
12 the motivation for question 3 bravo?

13 MODERATOR CAMERON: Okay, motivation for 3  
14 bravo, 3b. Who wants to -- Paul or Ronaldo?  
15 Ronaldo.

16 MR. JENKINS: Ronaldo Jenkins, NRR. Once  
17 again, the question is just a question. It is based  
18 on the fact that if you have information that can  
19 answer the question then you provide that  
20 information.

21 If you do not have information on the  
22 question, and this has come up before, you can  
23 provide the response you provided in the past, which  
24 is we are not evaluating this particular situation.

25 And that's the answer. You know, if you  
26 ask a question that does not automatically lead to

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1 I've got to run off and I'm going to come back with  
2 the ideal answer. The whole intent of the generic  
3 letter is to, as Mike Mayfield mentioned, is to get  
4 the landscape, to get the picture of what's actually  
5 going on.

6 What are the things you have in place? So  
7 you know, I don't know, maybe a big disclaimer in  
8 the beginning of the generic letter that says this  
9 is not intended to imply that there's any additional  
10 steps that are necessarily in order to pursue this,  
11 you know.

12 These questions are necessarily. I don't  
13 know, but that seems to be an overall type of  
14 response, you know, reaction we're getting.

15 MODERATOR CAMERON: Okay, thanks Ronaldo.  
16 We also have that possible suggestion. We're going  
17 to go to two people over here, and then we're going  
18 to go over there. And we'll go to you first, sir.

19 MR. HILL: Jim Hill with FPLEC Brook.  
20 This deals with question 7. Question 7 talks about  
21 it is expected that you have established an  
22 agreement with your plant's TSo to identify local  
23 power sources and transmission paths that could be  
24 made available to re-supply following LOOP events,  
25 and goes on if you have not established those  
26 agreements, talk about why.

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1           So most -- for instance, if a licensee's  
2 RTO has a blackout recovery, black restart procedure  
3 that uniquely identifies the necessity of re-  
4 powering nuclear plants on a priority basis, is this  
5 question trying to get at something other than that,  
6 additional from that?

7           MODERATOR CAMERON: I think we heard  
8 something on this yesterday also about the local  
9 power source. Ronaldo, are we going to you on this  
10 one again? Or -- okay, Ronaldo, you get the drift  
11 of he question?

12           Again, is this trying to get at something  
13 else more than what's just obvious with the  
14 question? With -- go ahead.

15           MR. JENKINS: Ronaldo Jenkins, NRR. Once  
16 again, and this was one of PJM's comments on --  
17 generic letter opened questions on from the grid  
18 perspective. And we did look at this particular  
19 comment and we're looking at how to clarify that.

20           But basically the intent is to look at the  
21 agreement. Describe the agreement. I hope that  
22 helps.

23           MODERATOR CAMERON: Terry we need to get  
24 you on the record. Let me just put that on the  
25 record. Could the question be rephrased to get what  
26 you wanted? Do you want to say it?

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1           Ronaldo we're coming right back to you  
2 here. We'll give Terry the opportunity since PJM  
3 did comment on this.

4           MR. CRAWLEY: Terry Crawley with Southern  
5 Company. Yes, I think what bothers me about the  
6 question, I'm hearing and I think I've heard others  
7 comment on this, that the questions are not intended  
8 to imply this or they're not leading questions when  
9 some of the questions do seem to be leading  
10 questions driving for a particular, you know,  
11 stating -- not stating a requirement but basically  
12 there's an implication here that if you don't do  
13 this you're going to have to answer no to this  
14 question.

15           So what's going to be the outcome of that?  
16 So I think I've heard some clarifications to some of  
17 the questions to say no, we really intended to -- we  
18 just want the information.

19           So my question is can these questions of  
20 interest be rephrased to be made more generic or  
21 more open-ended rather than close-ended. They seem  
22 to be very close-ended.

23           MODERATOR CAMERON: Okay, and Terry thank  
24 you for that characterization, because I think it's  
25 a good characterization of some of the problems  
26 generally with the questions, that they seem to be

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1 as you put it leading questions that are driving for  
2 a particular result rather than just information.

3 And I think the Staff has that on their  
4 radar screen for consideration so I don't think we  
5 necessarily need to go back to Ronaldo right now.  
6 Let's -- I'll get to you. We're going to go right  
7 here, then we'll go over to the green shirt.

8 MR. COUTU: Tom Coutu, Exelon Nuclear.  
9 One of the things I think that we're still sensing  
10 here is a degree of angst about answering the  
11 questions. And I'm going to throw something on the  
12 table for discussion.

13 A follow-up to the generic letter will be  
14 a temporary instruction. I think the problem that  
15 everybody's having is what will we be held  
16 accountable to when the temporary instruction goes  
17 out.

18 And here's the issue. When the last  
19 temporary instruction went out, answers came back to  
20 the -- they were conducted primarily by the  
21 residents. And some utilities did not even know  
22 that this temporary instruction was being conducted,  
23 nor did they have an opportunity at the time to  
24 review the answers that were being communicated back  
25 to the Commission.

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1           And as such, when they saw the tabulated  
2 results of those temporary instructions, they were  
3 somewhat surprised at the fact that they did not  
4 have an opportunity to clarify the responses to the  
5 questions provide the level of detail that was  
6 necessarily.

7           So here's what I'm proposing. Number one,  
8 we ought to understand very clearly what are the  
9 potential outcomes of the temporary instruction with  
10 regards to, I think we all know with regards to  
11 design basis where we can end up.

12           But we keep hearing these are just  
13 questions. Then we're going to develop a temporary  
14 instruction. We're going to come inspect. And out  
15 of that there's going to be an outcome.

16           What are the potential outcomes to the  
17 answer to these questions that we're just providing  
18 answers to that don't align with what you think the  
19 answer should be. That's really where I think the  
20 angst comes from.

21           And you guys can correct me if I'm wrong,  
22 but I'd like to hear some discussion on that.

23           MODERATOR CAMERON:       Okay, so this  
24 potential for licensee answers to the questions that  
25 don't align, as you put it, with the expectations  
26 perhaps that the NRC has is that where the battle is

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1 going to be joined or the problem is going to happen  
2 is when we get to the temporary instruction. Mike,  
3 you talked a little bit too --

4 MR. MAYFIELD: I think Alex had something  
5 he wanted to say.

6 MODERATOR CAMERON: Do you want to amplify  
7 on that a little bit, Alex?

8 MR. MARION: Alex Marion, NEI. Tom raises  
9 an excellent point. We work with the NRC to get the  
10 results of the 2005 temporary instruction publicly  
11 available. And we sent that out to utilities.

12 And then we had a follow-up conference  
13 call with site vice presidents. And there was a lot  
14 of anxiety, if you will, about the process in which  
15 the answers were developed. And Tom's right, some  
16 utilities were never contacted by the regions,  
17 others were.

18 And the information or the conclusions  
19 that were drawn were non consistent with the  
20 utility's understanding of the question and the  
21 utility's response to the question had the utility  
22 had an opportunity to respond accordingly.

23 And I know the NRC understands that  
24 process concern and we've articulated. So I just  
25 wanted to reinforce that, Mike.

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1           MODERATOR CAMERON: And that's one of your  
2 larger issues that you started out with. Mike do  
3 you want to say anything on this one?

4           MR. MAYFIELD: Well, two pieces. One --  
5 well at least two. First, we do understand there  
6 were some inconsistencies both here and in the  
7 regions about how last summer's TI was handled.

8           And that's a lesson learned for us, so one  
9 of the things we're going to be working on is that  
10 coordination internally so that we are consistent in  
11 the way this gets handled.

12           The other piece was I think there's a --  
13 you misunderstood. The TI is going to be developed  
14 independent because it's in parallel with the  
15 responses to the generic letter.

16           So we're going to have to go back out  
17 because of the timing. We can't wait on the 60 day  
18 responses and then go do the TI. So those things  
19 are going to be handled in parallel.

20           So it's not that we're going to look at  
21 the responses to the generic letter and then craft  
22 the TI, the two things just because of the timing  
23 have to go forward in parallel.

24           So it -- that one doesn't feed from the  
25 other as nice and tidy as that might be. It's just  
26 not the way it's going to be able to work.

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1           MODERATOR CAMERON: But you get the drift  
2 of the concern that Tom raised?

3           MR. MAYFIELD: We do, and we understand.  
4 One of the things Ronaldo and his staff spent a lot  
5 of time iterating with the regions to try and make  
6 sure we understood the responses and that they  
7 weren't just simple yes/nos.

8           And that got to be a pretty good challenge  
9 so we spent a lot of time going back and forth. The  
10 fact that some licensees didn't engage as much as  
11 they might have liked. We'll work on that as much  
12 as we go forward on how that inspection procedure  
13 evolves.

14          MODERATOR CAMERON: Okay, we have one more  
15 comment on the TI issue, and then we're going to go  
16 to Charlie for a response to something he heard from  
17 Paul Gill earlier.

18          MR. HEFFNER: Ken Heffner, Progress  
19 Energy. A lot of the information in the generic  
20 letter relates to the TSOs and the grid operators.  
21 Do you anticipate that the TI would have the Staff  
22 interacting with those folks as well as the  
23 licensee, and what the logistics of that would be?

24          MR. MAYFIELD: Our interaction is with the  
25 licensees.

26          MODERATOR CAMERON: Okay.

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1 MR. MAYFIELD: And how that interface  
2 works is sort of between you and the TSO. We may  
3 want to know how you made that work, but it's not  
4 where we're going to be reaching out to the TSOs.

5 MODERATOR CAMERON: Okay, Charlie, one  
6 second because I think David wants to comment on  
7 that, right David? MR. NEVIUS: Yes.

8 MODERATOR CAMERON: All right.

9 MR. NEVIUS: Dave Nevius, NERC. I've been  
10 sitting here with this comment written down. I  
11 think when you come out with the TI, Mike, it might  
12 be useful to give us a heads up so we can alert the  
13 transmission system operators that this is happening  
14 so that whatever interaction between the plant  
15 operator and the grid operator that's necessary to  
16 help address questions, we'll be wired from both  
17 directions.

18 MR. MAYFIELD: I guess the one -- I  
19 understand. The one thing I would -- sort of the  
20 corollary, when the generic letter comes out it  
21 might be useful if you guys also let the TSOs know.

22 MR. NEVIUS: Absolutely.

23 MR. MAYFIELD: So that -- try and  
24 facilitate the interaction.

25 MODERATOR CAMERON: Okay, great, great.  
26 Charlie?

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1 MR. VARTANIAN: Charlie Vartanian,  
2 Southern California, Edison Transmission Planning.  
3 And my comments are directed towards Mr. Paul Gill.  
4 And from the perspective of a technical staffer who  
5 may assist in responding to these questions from the  
6 transmission side, a lot of the questions seem to  
7 lay out scenarios that are very specific.

8 And our particular practices may not fit  
9 into these -- the framework of how the very specific  
10 questions are laid out. For example, our focus on  
11 determining inoperability is really in advance after  
12 a system event and minus one of a line with loss of  
13 the remaining sums unit, send the system into an  
14 inoperable condition, not necessarily loss of  
15 aligned and inoperable.

16 So we're always on deck or with the loss  
17 of that unit -- result in inoperability. So my  
18 comment is maybe a more general framework of, you  
19 know, not characterizing specific, calling out  
20 specific scenarios to respond to, but more to how do  
21 you generally address the issue of inoperability.

22 Another comment on the RTCAs. You know,  
23 you lay out the framework up front or other  
24 processes, but to return always to the very specific  
25 terminology would prevent a literal response to the  
26 questions.

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1           Maybe once your analytic process is  
2 defines, you know, give us latitude to always use  
3 our analytic process, not in terms of RTCA. Because  
4 I'm very confident in our processes even though they  
5 are not RTCA based.

6           And in fact, to answer stability questions  
7 you would not use RTCA. And if your constraint was  
8 stability or post-trip and voltage issues, that may  
9 not even be the appropriate tool.

10           But I wanted to conclude this comment with  
11 saying, you know, once we declare you lost your unit  
12 to the plant, may send our grid into an inoperable  
13 condition, we do take a series of actions including,  
14 as a last resort to maintain system integrity,  
15 consider as a last resort dropping of load.

16           This goes back to a general sort of  
17 founding. The studies cited yesterday talked about  
18 blackout. One slide on the -- EPRI slide caused me  
19 concern. Grid weakness, and they compared the  
20 cascading loss August 2003 to a managed drop of load  
21 within WECC to manage the situation.

22           Now you take blackouts as a tool, I'd say  
23 it would be very informative to NRC Staff to take a  
24 cut on the data and look what was a system event  
25 that was managed versus unmanaged.

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1           We might have dropped load, triggered a  
2 recorded NERC type event that maintained system  
3 integrity, and from a transmission side the grid was  
4 no less reliable. In fact it was a demonstration of  
5 maintaining reliability because we took proactive  
6 action.

7           So I want to get that out, reinforce some  
8 of the earlier comments on that. And that's once  
9 again from the grid perspective. So Staff collected  
10 a lot of good NERC data.

11           If that data provides that filtering I'd  
12 say make a cut, managed event versus unmanaged. I  
13 think the danger to you are unmanaged events.  
14 Higher grid stress from higher utilization is  
15 triggering, in my opinion, more managed response.

16           We've got higher flows and we're saying  
17 hey, you've got to drop load if you're going to  
18 maintain those imports or this activity. A managed  
19 action is much different, from a grid perspective,  
20 than an unmanaged event. Thank you.

21           MODERATOR CAMERON: Thank you, Charlie,  
22 for that suggestion. And I will put your  
23 recommendation up on the flip chart in regard to  
24 perhaps being -- using 3a as an example perhaps,  
25 being a little bit more general. Okay good, we'll  
26 do that. Yes, sir?

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1 MR. KOKOLAKIS: Peter Kokolakis, Entergy.  
2 I think Brian very eloquently simplified the, excuse  
3 me, the TSo interface question. And if that was the  
4 question, most of us if not all of us would not have  
5 a problem responding to it.

6 I have an agreement. I have -- I'm  
7 confident that it works, and I have -- you know, and  
8 I have data to that effect. That question though  
9 has seven or eight other questions associated with  
10 it.

11 And that's where we get the uncomfortable  
12 feeling, the -- whatever words you want to use here.  
13 Where are we going with it? There's 64 questions  
14 that could be reduced to four or five generic  
15 questions.

16 And I think we all would be very happy to  
17 respond to those questions. I can't talk for  
18 everybody, but for most of us I know I could talk to  
19 respond to them. It's these other little questions,  
20 why this, why that, you know, the ands, ifs, or buts  
21 that gives us that problem. And I agree with the  
22 gentleman before about --

23 MODERATOR CAMERON: Okay, thank you Pete.  
24 And NRC is listening to this. David, do you want to  
25 say something on -- okay, on his last comment about  
26 managed versus unmanaged, all right.

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1 MR. NEVIUS: I've reviewed the NRC Staff  
2 analysis and they did use the NERC definitions of  
3 adequacy versus security, that is managed versus  
4 uncontrolled or unmanaged events.

5 And I believe if you look closely at it  
6 you'll see that they have divided them into those  
7 two buckets. That's not to say that more in-depth  
8 analysis would not be helpful, because I totally  
9 agree with you, those things that are managed, if  
10 the system operator finds there's a transmission  
11 overload, potential overload, one of the steps they  
12 need to take is to shed firm load.

13 And that's a managed situation. So even  
14 though it's a reportable event, it's one that's  
15 managed and not uncontrolled, as distinguished from  
16 August 2003, which became an uncontrolled, cascading  
17 event.

18 MODERATOR CAMERON: Okay. And let's take  
19 one more comment and then let's break. And then  
20 we'll come back. Dick, do you want to do that for  
21 us?

22 MR. ROSENBLUM: Thank you. Dick Rosenblum  
23 from Southern California Edison. I want to make one  
24 very brief interjectory comment and then try to  
25 summarize a couple that I've heard.

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1           The introductory comment is I'm pretty  
2           sure it was the national academy of sciences and the  
3           turn of the century to the 21st century who  
4           described the electric system as the most complex  
5           machine ever developed by man.

6           So the fact that we're here having this  
7           discussion is a very good thing. It is a very  
8           complex machine, requires a fair amount of  
9           understanding and communications in order for us to  
10          effectively do out job.

11          So I want to thank the NRC and everybody  
12          else for attending. By way of comments, in question  
13          five there is a series of questions that contemplate  
14          that seasonal variations are the driving issue  
15          behind risk to the supply to a nuclear power plant.

16          Generally speaking, I think those ought to  
17          be revised to simplify them and simply ask what are  
18          the regional drivers and how do you manage them,  
19          because it's the embedded assumption that causes the  
20          question to be a problem.

21          Second, just repeating what others said,  
22          service reliability managed low dropping and TLRs  
23          really aren't a very good measure of grid stress and  
24          grid reliability. And I think the research report  
25          could problem use a little bit more work there to  
26          separate those out.

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1 Third, in question 2 there is a number of  
2 references to RTCAs. I think the general sense of  
3 the questioning and the comments here have been that  
4 there are only one way to manage post-trip voltage  
5 and manage the grid.

6 And that whole series of questions which  
7 occurs in question 2 ought to be revised to  
8 recognize that one, there are other acceptable  
9 methods, and two, even those methods typically have  
10 backups.

11 So where you ask if the RTCA is not  
12 available do you do this, really ought to say if you  
13 average no effective methodology, just to give you  
14 an example. And last, there is a series of  
15 questions mostly in one about interface  
16 communications between the NPP and the TSO.

17 I think they ought to be revised to  
18 contemplate two types of communications. One,  
19 exception communications when there are pre-  
20 established interface requirements. Same thing PJM  
21 said.

22 And two, as needed communications for  
23 maintenance and related communications. So if  
24 there's come line out -- those two categories if it  
25 was revised in that frame, I think would help give -  
26 - allow people to give much more coherent answers.

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1           MODERATOR CAMERON: Okay, thank you Dick.  
2           And I will also put that up on the board. And my  
3           summary or characterization of your comments may be  
4           somewhat -- look somewhat cryptic, okay, but it's  
5           just a pointer, okay, to the transcript where the  
6           full dialog will be on the record for the NRC Staff.

7           Let's take a break now, and then we'll  
8           come back. It's about 20 after, let's come back at  
9           about 25 to 11:00.

10           (Whereupon, the above-entitled matter went  
11           off the record at 10:20 a.m. and went back  
12           on the record at 10:44 a.m.)

13           MODERATOR CAMERON: Matt McConnell from the  
14           NRC Staff, I think, had a question for you Clair.  
15           All right, Matt?

16           MR. McCONNELL: Yes, this is Matthew  
17           McConnell with the NRC. Clair, I had a question with  
18           regard to one of your slides which represented the  
19           review status of, I guess, the SOER 99.01 addendum.

20           You had mentioned I believe, or a slide  
21           had said that you had performed 14 visits to date.  
22           Does that include nuclear power plants units or  
23           sites?

24           MR. GODDARD: That would be sights, 14  
25           sites, so there could be multiple units.

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1 MR. McCONNELL: I'm sorry. And when does  
2 INPO plan to complete the review visits?

3 MR. GODDARD: We do not have a timetable  
4 for that at this time. We will continue them at the  
5 rate of about 10 to 12 per year. And we take a look  
6 at that at the end of each year and determine  
7 whether we will continue the program or sunset it.

8 There's a possibility we will begin a  
9 second round of review visits depending on the  
10 results, and industry feedback, quite honestly.

11 MR. McCONNELL: Okay, so possibly like  
12 maybe four or five years?

13 MR. GODDARD: Possibly.

14 MR. McCONNELL: Okay, thank you.

15 MODERATOR CAMERON: Okay, and we're going  
16 to go to Bill Raughley here. And Bill could you  
17 give us the information?

18 MR. RAUGHLEY: Yes. I think at the  
19 beginning today, Alex mentioned that they didn't  
20 have a good technical understanding of the issue, or  
21 more technical understanding is needed.

22 I think there's, in some cases, there's a  
23 very good understanding in the industry of the  
24 technical issue. What I have here is part of a  
25 transmission control agreement between one ISO and  
26 two of its nuclear power plants.

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1           And it answers very thorough, in-depth  
2 knowledge of operability requirements of the plant  
3 post-trip requirements down to the grid voltage  
4 shall recover to within 207 kV or above within 16  
5 seconds, including the trip of the nuclear unit.

6           And it has the communication protocols,  
7 when notifications have to be made both ways. It  
8 has to design inputs and outputs, and it comes from  
9 Dick's organizations, one of them, and they have a  
10 very good understanding.

11           You might want to talk with Dick. And  
12 I've worked with Jerry Nicely many years, and I'd be  
13 disappointed if he didn't thoroughly understand the  
14 technical issue here. I think you need to get with  
15 the people that have a good grasp of these -- the  
16 technical issue and I think you'd be ahead of the  
17 game.

18           MODERATOR CAMERON: Thank you, Bill, and -  
19 -

20           MR. ROSENBLUM: Thank you, Bill.

21           MODERATOR CAMERON: We're referring to  
22 Dick Rosenblum right here. And we're going to go to  
23 one more NRC Staff member, Tom Koshy. Tom, you  
24 wanted to put something on the record.

25           And then we're going to go to Parviz for a  
26 comment on grid for me.

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1 MR. KOSHY: This is Thomas Koshy from  
2 Electrical Branch, NRR. Recently there was a  
3 discussion about a TDC-17 as to if loss of a  
4 transmission line needs to be considered.

5 If you read the last paragraph of TDC-17  
6 that is clearly stated. But just for your benefit  
7 let me read those just three lines. Motion shall be  
8 included to minimum the probability of losing  
9 electric power from any of the remaining supplies as  
10 a result of or coincident with the loss of power  
11 generated by nuclear power plant, next one is the  
12 loss of power from the transmission network, or the  
13 loss of power from the onsite electric power  
14 supplies.

15 And this is the basis, in fact one of the  
16 primary bases asking for this process that you have  
17 in place to make sure t you have this offsite --  
18 reliable offsite power. Second subject I wanted to  
19 address was the LOOP local scenario that gentleman  
20 from Waterford was referring to.

21 This has a good operating experience  
22 background. When the model event happened where we  
23 had an IIT, when the entire power was lost, the  
24 operator did not know how to reset the sequencer so  
25 that they can get the safety system started.

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1           This is the background on which we came  
2 upon this question. So what we are saying is we are  
3 not imposing any new requirements because none of  
4 the plants were licensed to have a delayed LOOP  
5 local sequence.

6           It was considered that the worst case  
7 scenario would be LOOP and local simultaneously.  
8 That was considered as the worst-case scenario. But  
9 what this actual operating experience enlightened us  
10 is if this were to happen, if the operator cannot  
11 reset these things, and in a situation where you  
12 cannot even manually activate these things it is a  
13 big problem.

14           So what we are sharing with the industry  
15 is you should have something in place so that you  
16 are sensitive to this possibility, and that  
17 operators have the capability to deal with this  
18 issue.

19           And with the concerns on the grid, what we  
20 are understanding is this scenario may be more  
21 likely than we thought of before. But have a  
22 program in place in the sense -- sensitize the  
23 operators and make them knowledgeable so that they  
24 can deal with this issue.

25           And the third subject that I will quickly  
26 address is the TSOs RTCA program which we discussed

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1 at length. But what I want to share with you is the  
2 transmission people have a way of doing their  
3 business.

4 Relying on the RTCA how much, you know,  
5 some companies with a lot of resources may have two  
6 or three backups. That's well and good. But if  
7 they do not have that type of backup systems, they  
8 do have something in place so that they can remain  
9 operational.

10 They rely on certain indicators on which  
11 they average reasonable confidence they can proceed  
12 to operate. And the objective of this generic  
13 letter is not that you take ownership of how they  
14 operate their transmission system.

15 You borrow from that information and  
16 present to us so that you are aware of a confident  
17 outside power source, and that shared information  
18 with us, in turn, gives us confidence that you have  
19 a program in place to make sure that you have  
20 reliable offsite power.

21 So if they have a proceduralized program  
22 in which, even for -- let me add on to that,  
23 recovering from blackout if they have a procedure in  
24 place, you don't need to take ownership of that  
25 procedure.

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1           Share that procedure with us so that it  
2 becomes their ownership. You have knowledge of it  
3 and we have knowledge of it so that we can make our  
4 conclusions. I hope this helps, thanks.

5           MODERATOR CAMERON: Thanks, once again,  
6 Tommy. And there will be further readings from the  
7 GDC at four o'clock today in the cocktail lounge,  
8 and I don't know. But thanks Tommy. All right.  
9 Parviz?

10           MR. MOIENI: Parviz Moieni from San  
11 Onofre. Question 5a, believe it or not I still have  
12 a problem with this grid reliability evaluation  
13 terminology. I had a chance last night to look at a  
14 maintenance requirement Reg. Guide 1.182 or number  
15 93.01.

16           There is no mention of grid reliability  
17 evaluation in those requirements. It talks about  
18 offsite power availability. And this is a big  
19 difference between grid reliability evaluation and  
20 the status of grid and offsite power.

21           So let's say we want to take a diesel  
22 generator out today and I call the TSo and say how  
23 is the status of grid. And he tells me oh, we are  
24 working on some lines or some things, but from your  
25 viewpoint the offsite power is going to be  
26 available.

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1           So is this good enough, or because they  
2           are working on the grid or some of the stuff that  
3           they are doing, still they have to do a grid  
4           reliability evaluation? If this is the former, I  
5           think we are done because the offsite power is going  
6           to be available to those.

7           If I have to perform a grid reliability  
8           evaluation based on the information that I get from  
9           him and the things that he is doing, then this is  
10          almost impossible for me because as I said  
11          yesterday, it's an open-ended problem.

12          I don't know how to do it. We don't know  
13          where it stops because this is a grid thing. So I  
14          think this grid reliability evaluation, my  
15          suggestion is that it should, to be consistent with  
16          the maintenance requirement, it should be offsite  
17          power availability, or a status of grid, rather than  
18          grid reliability because it's, as I said, these two  
19          terms are completely different.

20          And then on 6, question 6, which is  
21          basically -- this is also related, 6a, it says  
22          maintenance activities that can have an impact on  
23          the NPP operation. NPP operation, I mean the --  
24          there are many things that could effect NPP  
25          operation, but I think the intent is that the things  
26          that will affect offsite power availability again.

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1           So if you make it as specific to offsite  
2 power availability, I think the problem can be  
3 defined a little bit closer than make it too generic  
4 as NPP operation. The -- also there is another  
5 question that is says, going back to -- sorry I'm  
6 flipping, flip-flop between 5 and 6, 5b, the grid  
7 status monitors.

8           Is it a real time monitor or periodic  
9 monitor? I think it's very important to also  
10 clarify this. What do we mean by monitoring the  
11 grid, the status of grid? Is it, again, if you have  
12 a real time system it's different from a tool that  
13 we can do it periodically?

14           That also helps to clarify that. And of  
15 course as Dick mentioned, and also yesterday it was  
16 mentioned, the term stress on the grid, it's also  
17 important to define that. Otherwise we come up with  
18 different things, different responses on this  
19 question.

20           Thanks. Sorry, one more thing. Yesterday  
21 Steve Alexander, I didn't see him today here, but he  
22 mentioned that this grid reliability, it can be done  
23 qualitatively. I personally don't think that even  
24 it can be done qualitatively when it goes to the  
25 grid because there are so many things can be done.

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1           There are so -- it's very complicated and  
2 I'm not sure even this can be done qualitatively.  
3 So I think this whole grid reliability evaluation is  
4 a misnomer and should be basically redefined or  
5 change. Thanks.

6           MODERATOR CAMERON: Okay, thank you very  
7 much Parviz. Let's make sure we go to people we  
8 haven't heard from perhaps on issues. Do we have  
9 anybody else over on this side who wants to make a  
10 comment? Okay, we'll go to Ken to respond to one of  
11 Tom's.

12           MR. HEFFNER: Ken Heffner, Progress  
13 Energy. Just a comment. You said that this  
14 question on the local LOOP scenario was sharing  
15 operating experience. I guess I would submit the  
16 appropriate mechanism for doing that is an  
17 information notice and not a generic letter that  
18 we'd have to answer under a 50.54(f). I think that  
19 question should come out.

20           MODERATOR CAMERON: Okay, thanks Ken. So  
21 what question do you think should come out? Which  
22 specific one was it?

23           MR. MAYFIELD: It's 3 bravo. It's already  
24 identified.

25           MODERATOR CAMERON: Okay, so essentially  
26 it's done. All right. How about others on this

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1 side that we perhaps haven't heard from? Can --  
2 yes, this is -- does someone want to clarify the  
3 it's done part here?

4 MR. MAYFIELD: Yes. It's done means we  
5 heard you and we'll take it back under advisement.

6 MODERATOR CAMERON: Okay.

7 MR. MAYFIELD: It doesn't mean the  
8 questions gone. It means we heard you. That was  
9 the commitment we made going in, we would listen to  
10 you and take these things back and think seriously  
11 about them.

12 MODERATOR CAMERON: So don't get too  
13 excited if you hear it's done.

14 MR. MAYFIELD: So -- but, you know, I  
15 started hearing hearts go pitty-pat pitty-pat. No,  
16 no, we heard you.

17 MODERATOR CAMERON: Okay, it's done. Yes,  
18 he --

19 MR. MAYFIELD: I, you know, I was seeing  
20 eyes light up here.

21 MODERATOR CAMERON: Yes, can we get a copy  
22 of the parking lot TFC issues? I don't know if  
23 we're going to be able to get it Xeroxed, but --

24 MR. MAYFIELD: Well you have everyone's e-  
25 mail address.

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1           MODERATOR CAMERON: Did everybody give us  
2 an e-mail address? Then we'll e-mail them out.

3           MR. MARION: They'll e-mail them. Okay,  
4 all right.

5           MR. MAYFIELD: Logistically it would be a  
6 challenge to get you a paper copy to leave with  
7 today.

8           MODERATOR CAMERON: Okay. I just don't  
9 want to forget about a question that Steve Farkas  
10 asked yesterday about the need to get information  
11 from the TSo in order to, in a timely manner, to be  
12 able to schedule maintenance, I think.

13           And that's where we sort of wandered  
14 around a little bit about whether this was --  
15 whether it was acceptable for the TSo to provide  
16 information under those circumstances, I think, that  
17 Bruce, Susan was bringing up, Susan Court was  
18 bringing up, the emergency day to day operation.

19           So we know that's on the agenda. But the  
20 other point was is the type of information that's  
21 needed. And perhaps the best example is one that  
22 Steve told me about, is that nuclear power plant  
23 operator is going to be doing probabilistic  
24 analysis, and maybe the information available from  
25 the TSo is going to be deterministic information.

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1           So what do you do about those types of  
2 issues? And it may not be -- that's not, may not --  
3 I'm speaking from ignorance here, but may not be  
4 NRC's problem to solve.

5           But perhaps organizations like PJM or NERC  
6 might consider that type of thing. So I just wanted  
7 to put that on the record. Yes, sir?

8           MR. BONNER:     John Bonner from Entergy  
9 Nuclear Northeast.     Just a clarification from  
10 yesterday on FERC standards. I guess talking to  
11 some of the people after the meeting, there's two  
12 sets of codes of -- one's a code of conduct and a  
13 standard of conduct.

14           The standard of conduct is for affiliate  
15 units. The code of conduct is for non-affiliate  
16 merchant unit, merchant generators. And the  
17 standard of conduct has a nuclear exemption in it  
18 where you can provide information.

19           I do not believe the code of conduct has  
20 such an exemption for nuclear plants. And when the  
21 NRC and FERC are discussing the issues, they need to  
22 address both the standard of conduct and the code of  
23 conduct.

24           MODERATOR CAMERON:     Okay, thanks John.  
25 Let me see if Bruce wants to add anything on there.  
26 But also keep in mind that ask Mike Mayfield said

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1 yesterday, is that there is going to be a meeting  
2 between FERC commissioner and the NRC commissioners.

3 And these types of issues may be on the  
4 agenda. Bruce, do you want to amplify at all on the  
5 code of conduct versus standard of conduct?

6 MR. POOLE: I'm just saying we'll look at  
7 it.

8 MODERATOR CAMERON: Okay. That's -- it's  
9 done. You got to get the lingo down. All right.  
10 David?

11 MR. NEVIUS: Dave Nevius, NERC. On the  
12 same point that John Bonner raised, there's also a  
13 NERC operating reliability data confidentiality  
14 agreement, and we reissued a new version of it and  
15 we put a specific annex, or appendix in it relative  
16 to nuclear units.

17 And some entities have not been able to  
18 sign that agreement because of their concern with  
19 violation of either the standard of conduct, which  
20 is a universally applicable rule, or their code of  
21 conduct, which is a case by case code of conduct for  
22 a particular entity.

23 So I'm going to see that we approach this.  
24 I think it's important to find out. And maybe NEI  
25 can pursue this through its membership. Where any  
26 of their members feel there's any restriction that

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1 the transmission provider feels with providing all  
2 of the information you feel you need to safely  
3 operate your unit and to know what the status of the  
4 system is.

5 And we're going to need to pick these off  
6 one at a time. Some of it may be misunderstanding.  
7 Some of it may be misinterpretation. But we need to  
8 pick them off one at a time and solve them so that  
9 is not an obstacle to the free flow of information  
10 and communication.

11 MODERATOR CAMERON: Great, thanks Dave.  
12 That's very, very constructive.

13 MR. MAYFIELD: Chip, if I could amplify  
14 that --

15 MODERATOR CAMERON: Go ahead, Mike.

16 MR. MAYFIELD: -- just a little bit.  
17 Based on a quick conversation with Susan Court after  
18 yesterday's session, she also, as we felt the need  
19 to get this, specifics on the table.

20 And she said that she was absolutely  
21 confident that the two commissions would probably at  
22 the Staff level to begin with, but subsequently at  
23 the Commissioner level, work through this and get it  
24 resolved.

25 And I think the point David's making is an  
26 excellent one. But we need the specifics,

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1 anecdotes, what people think just isn't going to  
2 help us bring this thing to ground.

3 Nuclear safety issue is something we're  
4 going to go and engage on. And I'm sure that the  
5 FERC people, as well as David and his colleagues,  
6 will work, you know, as one unified organization to  
7 get this solved so that there isn't a nuclear safety  
8 issue.

9 And at the same time the competitive  
10 issues are protected. So two legitimate concerns,  
11 but I think we can all be confident that nuclear  
12 safety will carry the day. So we just need to get  
13 the specifics on the table so we can start working  
14 through them.

15 MODERATOR CAMERON: Great. Thank you  
16 Mike. Could we get the -- I just want to check in  
17 on those parking lot issues to make sure that we  
18 covered them all. And while we're doing that, Ed,  
19 do you want to tell people about the ANS meeting in  
20 July?

21 MR. SCHERER: Thank you. As it turns out,  
22 there will be an ANS executive conference on this  
23 very subject, grid stability and reliability. It's  
24 scheduled for Denver, Colorado, July 23rd to 26th.

25 You can leave your skis at home, but it  
26 should be a very interesting two day conference

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1 including Nuclear Regulatory Commission is going to  
2 be invited, EPRI, INPO, and utilities to talk about  
3 the issues involved in managing the nuclear power  
4 plants and the grid.

5 MODERATOR CAMERON: Great. And I assume  
6 that if you just go to the ANS website at some point  
7 that all the details will be there. Okay, let's  
8 just see. Okay, first bullet, the terminology --  
9 oh, what I need is yesterday.

10 Second bullet, common vocabulary, I think  
11 we heard that today. Let me just -- it should be  
12 easier for me to work with that, but just let me  
13 check back to some of these to -- okay.

14 This reliability and operability issue  
15 goes -- is an example of the common vocabulary or  
16 the terminology issue. In other words, are we  
17 talking about system or service reliability or grid  
18 reliability.

19 That's an issue that Dick Rosenblum  
20 brought up and we've heard a lot on that. I think  
21 we're clear on that. Spell out what is not needed  
22 was shorthand for the type of context or disclaimer  
23 that Ronaldo was talking about.

24 And there's a lot of ways to solve that in  
25 terms of revising the questions so that they're  
26 perhaps more general instead of lots of specifics.

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1 I'm not sure that first bullet on data on grid  
2 reliability -- I sort of lost the bubble on what  
3 that particular point was, but it was the first  
4 point we were talking about.

5 I'm just going to assume that we -- go  
6 ahead, Alex.

7 MR. MARION: Yes, there were a couple of  
8 points raised. It's the same thing as the one  
9 dealing with ways to arrive at consensus on data.  
10 And that's the difference in data assessment between  
11 EPRI and --

12 MODERATOR CAMERON: Oh, okay.

13 MR. MARION: -- the Office of Research.  
14 You know, and the -- we fully understand the  
15 rationale and the technical bases used by the NRC in  
16 their research studies. The concern that we have is  
17 taking that information and drawing conclusions  
18 relative to what is occurring on the grid, okay.

19 MODERATOR CAMERON: Okay.

20 MR. MARION: You have to understand the  
21 limitations of the data and the assumptions used,  
22 and the basis, and not overextend what the intended  
23 purpose of that data collection effort was.

24 MODERATOR CAMERON: Okay.

25 MR. MARION: And that goes back to this  
26 perception point I raised earlier.

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1                   MODERATOR CAMERON: All right, thank you  
2 Alex. And it's sort of a tie in, in a way, to the  
3 second bullet from the bottom about is there a  
4 better mechanism to try to achieve consensus on the  
5 data.

6                   Take into account industry efforts. We  
7 certainly -- we heard from Clair today, if you take  
8 a broader reading of industry. We heard some good  
9 information from Dave Nevius, from FERC, and also  
10 from PJM.

11                   And I know the Staff is thinking about all  
12 of those efforts. I think we really beat the no  
13 RTCA, Mr. Thorson's 2b issue. We heard a lot of  
14 good suggestions on that.

15                   The necessary and sufficient clarification  
16 -- I'm trying to remember exactly what that was, but  
17 I did check it off. I think we did discuss that.  
18 Anybody -- I guess the best thing, as you were  
19 working on mysteries without any clues here, is that  
20 if you see a bullet up there that you think has not  
21 been addressed, please let me know.

22                   Training procedures were not for comment.  
23 We got an explanation about what happened with that  
24 vis-à-vis the Commissioned SRM. Grid stress and  
25 LOOP frequency. This was, I think, Parviz mentioned

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1 that, following up on, I guess, Dick, did you bring  
2 that up? Is it what is stress?

3 MR. SCHERER: I don't think I did, but I  
4 would have.

5 MODERATOR CAMERON: Okay, he would have  
6 brought it up, all right. What are the constraints  
7 resulting from FERC regulations? Well we just had a  
8 discussion of that, and David's suggestion on how we  
9 might solve that. Is there anything else there?

10 MR. HEFFNER: The question was is there a  
11 correlation between grid stress and --

12 MODERATOR CAMERON: Okay, thank you Ken.  
13 Did we ever get any -- do we need to have any  
14 discussion on that? Is that important in terms of  
15 the GL at this point? Steve, let me bring you to  
16 the microphone.

17 This is Steve Farkas. Are you going to  
18 address that issue? All right.

19 MR. FARKAS: As far as the generic letter  
20 is concerned, it comes into the generic letter  
21 question number 8, which has to do with in effect,  
22 has your plant had a LOOP or an SBO.

23 The question on its face it silly. If we  
24 had a LOOP or an SBO, you have an LER. The LER told  
25 you why it happened, and what we're going to do  
26 about it to make sure it doesn't happen any more.

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1           If the NRC didn't like the answer they're  
2 going to come and inspect, and complain, and do this  
3 and that until we finally get to a resolution that  
4 the NRC and the plant can live with.

5           So this question number 8 is just  
6 redundant and useless. The NRC needs to ask  
7 questions where they don't already know the  
8 information, and we are uniquely able to provide it  
9 to them.

10           So this particular question is just -- it  
11 goes to the grid stress and the LOOP frequency and  
12 how often does it happen, and is it really a problem  
13 at the plant. If we actually have this kind of  
14 problem, the NRC is going to be the first one to  
15 know about it in about four hours when they call  
16 from the control room if it takes them that long to  
17 call.

18           MODERATOR CAMERON: Okay. I think that  
19 the NRC should understand that comment that the  
20 question is unnecessary. And Paul Gill, do -- Paul,  
21 do you want to share some of the thinking on  
22 question 8?

23           MR. GILL: Paul Gill from Electrical.  
24 Again, I would urge that -- don't read, you know,  
25 the sub-questions in isolation. I mean, if you read  
26 question 8a and 8b, it's asking you -- well the

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1 first step was have you had a total loss of offsite  
2 power.

3 Okay, if so, then have you looked at your  
4 coping duration evaluation, because if you did it's  
5 going to effect what the duration is, because as I  
6 pointed out in my presentation yesterday, that if  
7 you had a total loss of offsite power in say the 20  
8 year operating period, your offsite group is going  
9 to change from whatever it is today, or whatever it  
10 was when you did the scoping analysis, to P3.

11 Now if you go to P3, you need to go back  
12 and look at what the duration is going to be, okay.  
13 So the question is basically 8a, asking you that if  
14 you had suffered a total loss of offsite power at  
15 your site, have you gone back and looked at the  
16 station blackout rule requirements, okay.

17 So that's the gist of the question. It's  
18 not that we are asking you to tell us it you had a  
19 total loss of offsite power. I hope I make myself  
20 clear on that.

21 MODERATOR CAMERON: I guess the two  
22 questions there is that with Paul's explanation,  
23 does that alleviate the concerns around question 8?  
24 And the second question is that based on what Paul  
25 said, should question 8 be revised to capture the  
26 way he said it.

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1           Mr. Thorson, did you have -- you have a  
2 comment on this?

3           MR. THORSON:       Well, yes I -- James  
4 Thorson, Detroit Edison.    I guess my question's  
5 pretty blunt then.    Is it the NRC's interpretation  
6 of the guidelines is that you're allowed to be P2  
7 until you've had a LOOP, and then you're required to  
8 be P3?

9           MODERATOR CAMERON:   That's speaking in  
10 tongues to me, so Ronaldo?

11          MR. JENKINS:   The -- once again, the, you  
12 know, this is probably an unintended consequence of  
13 a public comment.    The public comment was you have  
14 all of these questions together, why don't you split  
15 them up into different parts and label them.

16          And so that's what in fact we did.   And  
17 now as a result of doing that, we see people who are  
18 taking an individual question and taking it all, you  
19 know, basically out of context of the main question.

20          In other words, describe how you are  
21 looking at your coping duration as a living  
22 analysis.   Correct.   As -- in other words, if you  
23 have a coping duration that was based on certain  
24 assumptions early on, and now those design  
25 assumptions have changed due to operating  
26 experience, then yes you should go back and read --

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1 at least ask yourself the question should you  
2 reevaluate that.

3 MODERATOR CAMERON: We need to get you on  
4 the record. Let me ask -- Ronaldo, let me ask, does  
5 that answer the blunt question that you asked?

6 MR. THORSON: No, not really. I think  
7 there's a connotation here in the literature and in  
8 the discussions. Not necessarily in the questions,  
9 but if you go back to the bases section that implies  
10 that if you're originally looking at a once per 20  
11 year frequency and you had one last year, or two  
12 years ago, as the case may be, that should  
13 automatically put you into P3.

14 MR. MARION: Chip, if I may.

15 MODERATOR CAMERON: Okay, Alex Marion.

16 MR. MARION: Alex Marion, NEI. I think  
17 the one thing that we need to focus on is the  
18 distinction between the regulatory requirement and  
19 the guidance. The regulatory requirement is to do a  
20 coping assessment of your vulnerability to a station  
21 blackout.

22 The details of the coping assessment are  
23 covered in the guidance. And there is a provision  
24 in the NUMARC guidance and I think it was also  
25 picked up in the Regulatory Guide that says the

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1 assumption was that -- and I think the average loss  
2 of offsite power was one every 20 years.

3 And in the coping assessment methodology,  
4 I think there's a recommendation that if you have  
5 more than one loss of offsite power within a 20 year  
6 period then you should be a P3.

7 But again, this is guidance.  
8 Fundamentally the implementation of that should be  
9 based upon the specifics of the loss of offsite  
10 power, and the holistic review of the capability of  
11 the plant to respond to that event, okay.

12 So you got to be careful about the  
13 difference between the requirement and the guidance.  
14 So I'd just solve for that. I think that will get  
15 to your point in clarification.

16 But this suggests de facto requirement of  
17 the Reg. Guide, and I suggest the Reg. Guide is just  
18 guidance. The specifics of the event and the impact  
19 on the plant is what should be the basis for the  
20 regulatory decision.

21 MODERATOR CAMERON: Okay, just let me make  
22 sure that -- does NRC have anything it wants to say  
23 in response to Alex's explanation on this, keeping  
24 in mind Mr. Thorson's question? Ronaldo?

25 MR. JENKINS: Ronaldo Jenkins, NRR.  
26 Granted that the Reg. Guide is in fact guidance, and

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1 of course there are -- as it's stated in the  
2 station blackout statement of considerations that  
3 was put out when the rule was issues, there are  
4 alternative ways of meeting any NRC guidance.

5 But plants did in fact submit analyses.  
6 Those analyses are reviewed and accepted by the  
7 Staff as part of their licensing basis. And  
8 therefore the question is asking whether or not the  
9 licensee has revisited that analysis.

10 And this is no different than if you have  
11 --something else changes in the plant. You would  
12 revisit the design basis and the licensing basis to  
13 ensure that you're still in compliance.

14 MODERATOR CAMERON: Okay, thanks Ronaldo.  
15 Anybody else have a comment on the GL or the process  
16 the NRC is using to develop the PL -- or GL? Okay,  
17 let's go over here to Ken.

18 MR. HEFFNER: Ken Heffner, Program Energy.  
19 Along with the terminology, I don't know if it was  
20 captured, but yesterday Steve Alexander gave us  
21 three bullets for what determine grid risk sensitive  
22 activities.

23 And I think they should be captured and  
24 put in the generic letter. Also I talked to Alex a  
25 little bit. One of the fears I have when the TI  
26 goes out is we've seen a lot of industry

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1 interpretation of what the generic letter says, and  
2 the Staff says that's not really what we meant.

3 I had a real fear of what happens when the  
4 regions do that. And we're going to have some  
5 serious differences of opinion. And I'm on another  
6 NEI task force for reactor oversight process, and  
7 our industry task force gets with the Staff to help  
8 resolve those differences of opinion.

9 And I recommended to Alex that he take his  
10 grid reliability task force with the Staff, at least  
11 on an interim basis, to look for those differences  
12 of opinion and try to resolve them quickly, and  
13 share that OE with the rest of the industry.

14 MR. MAYFIELD: Chip, if I could.

15 MODERATOR CAMERON: Go ahead.

16 MR. MAYFIELD: I don't know if you know --  
17 you may or may not recognize representatives from  
18 all four regions that have come to this meeting,  
19 specifically to assure or try to assure that dialog  
20 within the NRC headquarters and with the regions is  
21 effective.

22 So we very much appreciated the support  
23 from the regions. And part of that motivation was  
24 exactly to improve our internal communications so  
25 that we're thinking about this with one mind.

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1           MODERATOR CAMERON: All right. I think  
2 we're getting ready to wind up, actually, a little  
3 bit earlier here. And I would just thank you from a  
4 facilitator's perspective for not only all of the  
5 good comments, but how you tried to tie those into  
6 generic, overarching issues, and for following the  
7 ground rules.

8           And I'd like to go back to the senior NRC  
9 person to close the meeting out for us. And I think  
10 we're ready to do that. So Mike, I'll just give it  
11 to you.

12           MR. MAYFIELD: Well, we went into this  
13 meeting with the hope and expectation to have a  
14 fairly clear and frank dialog with interested  
15 parties, stakeholders, on what was in the generic  
16 letter, why we were asking questions, areas where we  
17 needed some clarification.

18           We were seeking that input. One of the  
19 points that I think Brian Sheron made is this was  
20 not an opportunity to reopen comment on the generic  
21 letter. That administratively gets to be important.

22  
23           But at the same time we've gotten a lot of  
24 good feedback, some things that we want to go home  
25 and think about. And I think there are plainly some  
26 areas where we're going to try to go in and simplify

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1 some of the questions to include some definitions  
2 and try and clarify what we're seeking and why.

3 We do believe this is an important issue.  
4 For me, one of the major things that came out of  
5 this was the stress that plainly you're feeling, or  
6 at least some of you are feeling, about the  
7 interactions between you and the transmission system  
8 operator, and the degree to which government  
9 regulation may be influencing that.

10 That's an important issue for us. And I'm  
11 sure that our colleagues from FERC feel the same way  
12 about it. So that was one that came out of this  
13 meeting for us that goes beyond just clarifying the  
14 generic letter that potentially has some serious  
15 ramifications well beyond just this particular  
16 request for information.

17 Hopefully we have clarified some of our  
18 concerns and the reasons we're asking some of the  
19 questions. I think Ronaldo and several other  
20 members of the Staff have tried to urge you to look  
21 at the sub-questions as part of a whole, not as  
22 individual entities.

23 I think if you do that you will go back  
24 and see the thread that we're trying to work down in  
25 each of the 8 questions. If you focus on just the  
26 sub-questions it's going to be a lot more difficult

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1 to see the rationale, and frankly will be more  
2 difficult to come up with answers to them, because  
3 you have to look at the key question and what that's  
4 trying to get to.

5 We talked internally quite a bit about  
6 whether we broke out all of the sub-questions, or  
7 did we stay with a smaller number of higher tier  
8 questions. One of the approaches that we  
9 consciously took was to try to cut off some of the  
10 rounds of RAI so that the questions in the generic  
11 letter would borrow down to things that if you just  
12 stated the higher level question you may very well  
13 simply get the lower tier questions when the Staff  
14 starts looking at your response to the generic  
15 letter.

16 That appears to have not played as well  
17 with you as it did with us. It seemed to us a  
18 matter of efficiency to try and guess what kind of  
19 answers we might get to the first question, and then  
20 guess where that might go, and then add the sub-tier  
21 questions to help pull that information out from the  
22 first set of responses.

23 That's one of the other things that we'll  
24 think about, certainly for any future generic  
25 letters, and we'll go back and look at this one and  
26 how it's structured, but I -- since I may have been

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1 at the bottom of urging Ronaldo and his staff to go  
2 down that direction, I'm not going to roll over  
3 easily on that one.

4 So -- but we do appreciate the time and  
5 effort and input that you provided to this meeting.  
6 Having that dialog helps us, and hopefully the  
7 feedback and insights we were able to give you will  
8 help you as you put together the responses.

9 So thank you very much for coming and  
10 participating. Have a safe trip home.

11 MODERATOR CAMERON: And just thank you to  
12 Clair and Alex, as well as our panelists from  
13 yesterday.

14 (Applause.)

15 (Whereupon, at 11:27 p.m. the above-  
16 entitled meeting was concluded.)

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