

Group P

FOIA/PA NO: 2014-0027

RECORDS BEING RELEASED IN PART

The following types of information are being withheld:

- Ex. 1: ☐ Records properly classified pursuant to Executive Order 13526
- Ex. 2: ☐ Records regarding personnel rules and/or human capital administration
- Ex. 3: ☐ Information about the design, manufacture, or utilization of nuclear weapons
☐ Information about the protection or security of reactors and nuclear materials
☐ Contractor proposals not incorporated into a final contract with the NRC
☐ Other _____
- Ex. 4: ☐ Proprietary information provided by a submitter to the NRC
☐ Other _____
- Ex. 5: ☒ Draft documents or other pre-decisional deliberative documents (D.P. Privilege)
☐ Records prepared by counsel in anticipation of litigation (A.W.P. Privilege)
☐ Privileged communications between counsel and a client (A.C. Privilege)
☐ Other _____
- Ex. 6: ☒ Agency employee PII, including SSN, contact information, birthdates, etc.
☐ Third party PII, including names, phone numbers, or other personal information
- Ex. 7(A): ☐ Copies of ongoing investigation case files, exhibits, notes, ROI's, etc.
☐ Records that reference or are related to a separate ongoing investigation(s)
- Ex. 7(C): ☐ Special Agent or other law enforcement PII
☐ PII of third parties referenced in records compiled for law enforcement purposes
- Ex. 7(D): ☐ Witnesses' and Allegers' PII in law enforcement records
☐ Confidential Informant or law enforcement information provided by other entity
- Ex. 7(E): ☐ Law Enforcement Technique/Procedure used for criminal investigations
☐ Technique or procedure used for security or prevention of criminal activity
- Ex. 7(F): ☒ Information that could aid a terrorist or compromise security

Other/Comments: _____

Perkins, Richard

From: Bensi, Michelle
Sent: Friday, December 23, 2011 12:44 PM
To: Beasley, Benjamin; Perkins, Richard
Subject: RE: Ben's list of GI-204 activities
Attachments: Arkansas_Nuclear.pdf

Ben and Richard,

With regard to my tasks:

One of my tasks is to "Assemble a copy of references and send to the Regions." I started working on that today. While I have all the information available to me at my desk in hard copy, it is not an insignificant task (time-wise) to assemble the individual pertinent pages into electronic format to provide to the regions (though it is faster than assembling them in hard copy and scanning). As an example, I have attached the compiled file for Arkansas Nuclear (Richard has already seen the file and likes the methods of "highlighting" information in the document).

I will continue this task when I get back to the office on Tuesday, Jan 3. However, I do not anticipate that the amount of time available in the morning will be sufficient to compile the documents for all 20 sites before I need to head up to Region I in the afternoon. I will need to take my hard copies with me to Region I and continue working on the task there.

There are also two other tasks listed in the "to-do" list (related to comm plan and report) to which I've been assigned. I will need to assist Richard with these tasks remotely from Region I. Can we meet briefly Monday morning to discuss the logistics of this? I will be in the office around 9am on Tuesday (I have an appointment in the morning and will be in right after).

Thanks,
Shelby

From: Beasley, Benjamin
Sent: Thursday, December 22, 2011 5:22 PM
To: Coe, Doug; Perkins, Richard; Bensi, Michelle
Cc: Ibarra, Jose
Subject: Ben's list of GI-204 activities

Attached is the list of activities I recorded from meetings over the last couple of days. I indicate the responsible party by the task. You may consolidate / integrate this with your lists.

Ben

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(b)(5),(b)(7)(F)

Perkins, Richard

From: Perkins, Richard
Sent: Wednesday, January 04, 2012 10:59 AM
To: Beaulieu, David
Subject: Communication plan Update

Hi David,
Yes. We can make changes to the communication plan at any time. Please send me the new text and I will place it.
Richard

From: Beaulieu, David
Sent: Wednesday, January 04, 2012 10:34 AM
To: Perkins, Richard
Subject: RE: GI-204 Status Update
Importance: High

Richard,

(b)(5)
(b)(5) Is it too late to
change the Communication Plan?

DAVID BEAULIEU PROJECT MANAGER NRR/DPR/PGCB
(bowl-yr) 301-415-3243 | O12H17 | David.Beaulieu@nrc.gov

U.S. Nuclear Regulatory Commission

From: Perkins, Richard
Sent: Tuesday, December 20, 2011 6:02 PM
To: Barker, Allan; Bartley, Jonathan; Beasley, Benjamin; Beaulieu, David; Bensi, Michelle; Burnell, Scott; Cahill, Christopher; Caverly, Jill; Chaput, Peter; Coe, Doug; Compton, Keith; Correia, Richard; Emche, Danielle; Erlanger, Craig; Felsher, Harry; Ferrante, Fernando; Gaddy, Vincent; Hills, David; Hilton, Nick; Holian, Brian; Ibarra, Jose; Imboden, Andy; Kauffman, John; Khanna, Meena; Logaras, Haral; Maier, Bill; Marciano, Jonathan; McNamara, Nancy; Meghani, Vijay; Miller, Chris; Mitman, Jeffrey; Mrowca, Lynn; Perkins, Richard; Philip, Jacob; Pohida, Marie; Raione, Richard; Riley (OCA), Timothy; Rosenberg, Stacey; Ruland, William; Sancaktar, Selim; Schmidt, Wayne; Screnci, Diane; See, Kenneth; Sheehan, Neil; Tift, Doug; Trojanowski, Robert; Virgilio, Rosetta; Wilson, George; Wilson, Peter; Woodruff, Gena; Wray, John
Subject: GI-204 Status Update

GI-204 Communication Team,

I have received many inquiries as to when GI-204 might be approved (given the upcoming holidays with many individuals taking leave). This topic was covered at today's teleconference on rollout planning. The issue will not receive approval before the New Year.

Happy Holidays,

Richard H. Perkins, P.E.
Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Division of Risk Analysis
Operating Experience and Generic Issues Branch
Phone - 301/251-7479

Perkins, Richard

From: Ferrante, Fernando
Sent: Wednesday, January 04, 2012 4:59 PM
To: Mitman, Jeffrey; Vaughn, Stephen
Cc: Manoly, Kamal; Perkins, Richard; Bensi, Michelle; Weerakkody, Sunil
Subject: RE: Optional request for Action: Comments on Communication Plan for OCO
GI-204.docx - Due January 9/2012
Attachments: Comm Plan reply - GSI-204.docx

All,

I worked briefly on the questions for GI-204. Steve had already started developing answers to questions 3 and 4, so I simply took his input and tried to translate it into plain language terms. I also developed an answer for question 2.

I would suggest that Jeff and Steve take another look at these to make sure they are acceptable, as well as give the GI folks in RES (Richard and Shelby) a chance to see these, in case they have any additional comments.

Thanks,
Fernando

From: Weerakkody, Sunil
Sent: Tuesday, January 03, 2012 7:13 AM
To: Mitman, Jeffrey; Ferrante, Fernando
Cc: Khanna, Meena; Bartley, Jonathan
Subject: Optional request for Action: Comments on Communication Plan for OCO GI-204.docx - Due January 9/2012

Jeff & Fernando,

This is an optional assignment (i.e., higher priority should be given to ROP related work). If you have any comments, please send them to Jonathan by January 13th. Please put me on CC.

*Sunil D. Weerakkody
Branch Chief, PRA Operational Support Branch
Division of Risk Assessment
Office of Nuclear Reactor Regulation
US Nuclear Regulatory Commission*

*Tel: 301-415-2870
Email: sunil.weerakkody@nrc.gov*

From: Ferrante, Fernando
Sent: Friday, December 30, 2011 11:48 AM
To: Weerakkody, Sunil

Cc: Mitman, Jeffrey; Khanna, Meena
Subject: FW: Communication Plan for OCO GI-204.docx

Thank you, Meena.

From: Khanna, Meena
Sent: Friday, December 30, 2011 11:26 AM
To: Manoly, Kamal; Stang, John; Ferrante, Fernando
Subject: Fw: Communication Plan for OCO GI-204.docx

Fyi, and Fernando could you pls fwd to Sunil, thx

From: Bartley, Jonathan
To: Ledford, Joey; Hannah, Roger; Woodruff, Gena; Stang, John; Wilson, George; Khanna, Meena; Salgado, Nancy
Cc: Rapp, Curtis; Stamm, Eric; Sabisch, Andrew
Sent: Fri Dec 30 11:21:22 2011
Subject: Communication Plan for OCO GI-204.docx

Gena, Roger, Joey, John, George, Meena, Nancy,

Attached is a draft communication plan we drafted to prepare for the public interest in Oconee we expect to get when GI-204 (failure of upstream dams) is released. I would appreciate any comments/improvements on the document, especially the Q&As.

The release date for GI-204 is still up in the air but I don't see it being issued any earlier than mid-January. There was some talk about releasing it at the same time as the orders and 50.54(f) letters for Fukushima which is scheduled for late March.

I would appreciate comments back by January 13. Please cc Curt and Eric.

Jonathan

GSI-204 Communication Plan – Questions 2, 3, and 4

(b)(5)

Perkins, Richard

From: Coe, Doug
Sent: Friday, January 06, 2012 1:55 PM
To: Ruland, William; Brown, Frederick; Giitter, Joseph; Hiland, Patrick; Cheok, Michael; Evans, Michele; Howe, Allen; Lund, Louise; Kinneman, John; Bailey, Marissa; Weaver, Doug; Chokshi, Niles; Flanders, Scott; Skeen, David; Taylor, Robert
Cc: Beasley, Benjamin; Perkins, Richard; Correia, Richard; Bensi, Michelle; Holian, Brian
Subject: GI-204 context - followup from DEDO briefing on 12/21/11
Attachments: GI-204 screening analysis FOREWORD.docx

Good afternoon Division Directors/Deputies,

This note is in regard to the GI-204 (Upstream Dam Failure) screening analysis report that will be made public as part of the GI program.

One of the take-aways from subject briefing was to develop a new 1-2 page document that would provide regulatory context for the public reader of the screening analysis report, which was written for an internal audience but that would be made public as part of the GI program process.

The attached is forwarded to you for information and in advance of its dissemination to the inter-office GI-204 communications team members. Since Bill Ruland has agreed to be its signator (as he was the Chair of the screening panel), he has asked for any editorial comments to be provided directly to him **by COB Monday 1/9/12**.

Other ongoing activities include plans for a Commissioner's TA briefing and a briefing to the Fukushima Steering Committee on Tuesday to coordinate a possible GI-204 rollout with the Fukushima 2.1/2.3 50.54(f) letters public meeting on January 18.

Please contact either me, Rich Correia (DD), Ben Beasley (BC), or Richard Perkins (Lead PM) with questions, comments, or concerns.

Many thanks,
Doug

Doug Coe
Deputy Director
Division of Risk Analysis (DRA)
Office of Nuclear Regulatory Research (RES)
U.S. Nuclear Regulatory Commission
Rockville, MD
301-251-7914
doug.coe@nrc.gov

Foreword

(b)(5)

(b)(5)

William H. Ruland
Chairman
Generic Issue Screening Panel

Perkins, Richard

From: Bartley, Jonathan
Sent: Monday, January 09, 2012 4:21 PM
To: Khanna, Meena; Wilson, George; Kulesa, Gloria; Stang, John
Cc: Bensi, Michelle; Perkins, Richard; Rapp, Curtis; Stamm, Eric
Subject: Communication Plan for OCO GI-204.docx
Attachments: Communication Plan for OCO GI-204.docx

I updated the communication plan based on inputs received in Region II and NRR (Fernando Ferrante). Eagerly awaiting other feedback. I would like to move the date up a bit to January 11, due to rumors of GI-204 release in the next couple of weeks.

Please cc Curt Rapp and Eric Stamm on any feedback.

Thanks,

Jonathan Bartley
Chief, Reactor Projects Branch 1
Division of Reactor Projects, Region II
U. S. Nuclear Regulatory Commission
jonathan.bartley@nrc.gov
Office: 404.997.4607
Cell: (b)(6)

(b)(5)

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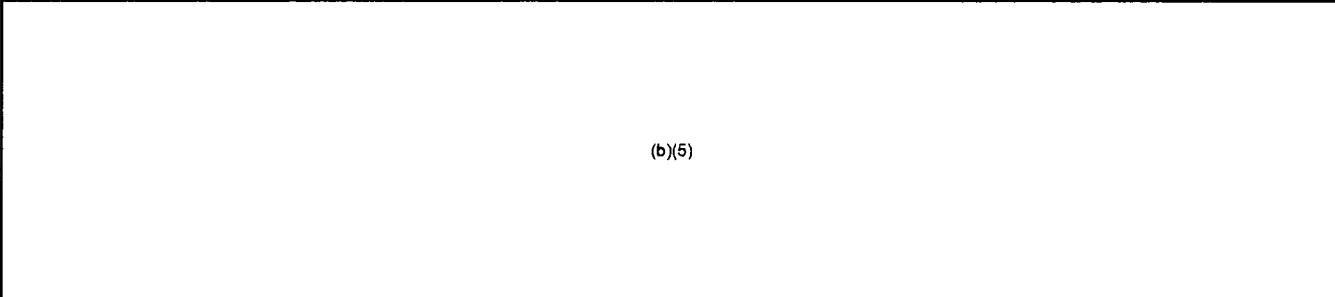
(b)(5)

(b)(5)

Perkins, Richard

From: Bens, Michelle
Sent: Tuesday, January 10, 2012 5:51 PM
To: Beasley, Benjamin; Perkins, Richard
Subject: RE: attempting to improve legibility of Figure 6
Attachments: Figure6_legibility.docx

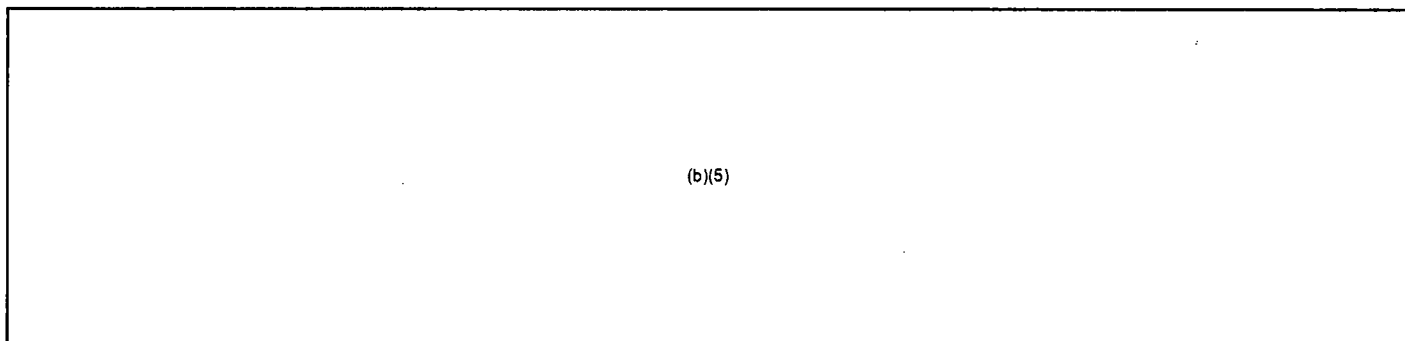
I have attached two more figure concepts:

-  (b)(5)
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Please let me know your thoughts.
Shelby

From: Bens, Michelle
Sent: Tuesday, January 10, 2012 9:47 AM
To: Beasley, Benjamin; Perkins, Richard
Subject: attempting to improve legibility of Figure 6

Richard and Ben,



Please let me know if you have any thoughts on whether the attached figure is more legible or if you have other suggestions for improvement. We might need to try a few different methods to see what works best.

(b)(5)

(b)(5) Please let me know your suggestions/opinions.

Thanks,
Shelby

(b)(5),(b)(7)(F)

(b)(5),(b)(7)(F)

Perkins, Richard

From: Beasley, Benjamin
Sent: Wednesday, January 11, 2012 11:56 AM
To: Ruland, William
Cc: Brown, Frederick; Coe, Doug; Perkins, Richard; Correia, Richard
Subject: RE: GI-204 followup from DEDO briefing on 12/21/11 and update on status
Attachments: GI-204 screening analysis FOREWORD with OPA comments.docx

Bill,

Attached is a clean copy of the Forward with Scott's comments incorporated.

Ben

From: Ruland, William
Sent: Wednesday, January 11, 2012 10:41 AM
To: Burnell, Scott; Coe, Doug; Perkins, Richard; Beasley, Benjamin; Bensi, Michelle; Correia, Richard
Cc: Brown, Frederick
Subject: RE: GI-204 followup from DEDO briefing on 12/21/11 and update on status

Ben and Rich,

Could you please send me a copy suitable for my review? I appreciate all the hard work that has gone into developing this latest document. A final version would help make my review more efficient. Also, send Fred Brown a copy.

Thanks.

Bill

From: Burnell, Scott
Sent: Wednesday, January 11, 2012 7:56 AM
To: Coe, Doug; Ruland, William; Perkins, Richard; Beasley, Benjamin; Bensi, Michelle; Correia, Richard
Subject: RE: GI-204 followup from DEDO briefing on 12/21/11 and update on status

All;

As I promised Doug, I've edited the foreword using "Track Changes" with an eye towards readability for the general public. Thanks.

Scott

From: Coe, Doug
Sent: Tuesday, January 10, 2012 2:18 PM
To: Miller, Chris; Wilson, Peter; Roberts, Darrell; Ayres, David; Croteau, Rick; Jones, William; Munday, Joel; Christensen, Harold; Reynolds, Steven; West, Steven; Shear, Gary; OBrien, Kenneth; Kennedy, Kriss; Pruett, Troy; Vogel, Anton; Blount, Tom
Cc: Correia, Richard; Beasley, Benjamin; Burnell, Scott; Perkins, Richard; Bensi, Michelle
Subject: GI-204 followup from DEDO briefing on 12/21/11 and update on status

Good afternoon Regional DRP/DRS Division Directors/Deputies,

This note is in regard to the GI-204 (Upstream Dam Failure) screening analysis report.

One of the take-aways from subject briefing was to develop a new 1-2 page document that would provide a larger regulatory context for the public reader of the screening analysis report which was written for an internal audience but that would be made public as part of the GI program process. To this end, we have prepared the attached 'Foreword' to the GI-204 screening analysis report and the current plan is to add it to the report and make the report public in accordance with the GI-204 communications plan and timeline. It is forwarded to you for information and comment and was previously circulated among HQ Division management. Bill Ruland has agreed to be its signator (as he was the Chair of the screening panel) and at this point if you have any comments or suggestions on the text, please provide them to Bill directly as soon as possible.

We are still addressing the question from the 12/21/11 briefing regarding contacting DHS. Also, the NRR Dam Safety Officer (G. Wilson) is discussing our plans today at the Inter-agency Dam Safety Council meeting in Washington, D.C. We are also continuing to address questions from NRR. We obtained the go-ahead from the Fukushima steering committee to fold GI-204 (once it is established officially) into the NTTF 2.1/2.3 activities. We are headed to a Commissioner's Assistant briefing now.

We will not initiate action to declare GI-204 and release the screening analysis until the GI-204 communication team is ready.

Please contact either me, Rich Correia (DD), Ben Beasley (BC), or Richard Perkins (Lead PM) with questions, comments, or concerns.

Many thanks,
Doug

Doug Coe
Deputy Director
Division of Risk Analysis (DRA)
Office of Nuclear Regulatory Research (RES)
U.S. Nuclear Regulatory Commission
Rockville, MD
301-251-7914
doug.coe@nrc.gov

Foreword

(b)(5)

(b)(5)

William H. Ruland
Chairman
Generic Issue Screening Panel

Perkins, Richard

From: Bensi, Michelle
Sent: Wednesday, January 11, 2012 6:26 PM
To: Perkins, Richard
Cc: Beasley, Benjamin
Subject: Revised Figure 6
Attachments: Figure6_improvedlegibility_to_be_checked.docx

Richard,

I have attached a draft version of the revised figure 6. Thanks for agreeing to do the quality-check on the figure. A few notes:

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(b)(5)

Thanks,
Shelby

(b)(5),(b)(7)(F)

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(b)(5),(b)(7)(F)

Perkins, Richard

From: Aird, David
Sent: Thursday, January 12, 2012 8:06 AM
To: Perkins, Richard
Cc: Demoss, Gary
Subject: RE: GI-204 Upstream Dam Failure Communication Plan
Attachments: Response to Question 2.docx

Richard,

Please take a look at my revised answer below to the question (b)(5)
(b)(5). I provided an attachment with several responses of varying detail, along with some notes. Reading through the communication plan definitely gave me a better idea regarding the scope of the responses. Please let me know if the language and justification are appropriate. I welcome any comments at this point, but it is also good to hear that we can change the text later.

Thanks,
David

(b)(5)

From: Perkins, Richard
Sent: Monday, January 09, 2012 11:27 AM
To: Aird, David
Subject: RE: GI-204 Upstream Dam Failure Communication Plan

David,
The communication plan is ML113500172. Perhaps take a look at the questions that are in there and provide some text to me. If you would like, I can ask some other to look at your text and provide comments prior to going into the plan. Also, we can always change the text, at any time down the road, if we would like to reword it (upon further reflection).

Thanks,
Richard

From: Aird, David
Sent: Wednesday, January 04, 2012 9:37 AM
To: Perkins, Richard
Subject: RE: GI-204 Upstream Dam Failure Communication Plan

Richard,

How do you want to answer this question? Should I come down and meet with you for a few minutes to discuss the format/scope of my response? I do not have any experience with Comm. Plans.

Thanks,

David Aird

Reliability and Risk Engineer

RES/DRA/PRB

(301) 251 - 7926

Mailstop: CSB-4C07M

Location: 04-C25

From: Demoss, Gary
Sent: Wednesday, January 04, 2012 9:23 AM
To: Beasley, Benjamin; Aird, David
Cc: Perkins, Richard
Subject: RE: GI-204 Upstream Dam Failure Communication Plan

David,

Please coordinate with Richard Perkins to answer this Comm. Plan question.

Gary

From: Beasley, Benjamin
Sent: Wednesday, January 04, 2012 7:05 AM
To: Demoss, Gary
Cc: Perkins, Richard
Subject: RE: GI-204 Upstream Dam Failure Communication Plan

Thanks Gary. Please send the answer to Richard Perkins for addition to the Comm Plan.

Ben

From: Demoss, Gary
Sent: Tuesday, January 03, 2012 5:29 PM
To: Purnell, Blake; Beasley, Benjamin
Cc: Rosenberg, Stacey
Subject: RE: GI-204 Upstream Dam Failure Communication Plan

(b)(5)

- I think I have somebody available tomorrow.

From: Purnell, Blake
Sent: Tuesday, January 03, 2012 4:33 PM
To: Beasley, Benjamin; Demoss, Gary
Cc: Rosenberg, Stacey
Subject: GI-204 Upstream Dam Failure Communication Plan
Importance: High

Ben and Gary,

One of the questions for the GI-204 Communication Plan which RES sent to NRR was on

(b)(5)

(b)(5)

I talked with Donnie

Harrison (NRR/DRA) and he said that Gary's branch would be able to address the question.

(b)(5)

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Gary: Let me know if your branch can answer the question. If so, provide your response to Ben and NRR will not provide a response to this question.

Thanks,

Blake Purnell
NRR/DPR/PGCB
MS: O12-D20
ph: 301-415-1380

Response to Question 2

(b)(5)

(b)(5)

(b)(5)

Perkins, Richard

From: Perkins, Richard
Sent: Thursday, January 12, 2012 5:06 PM
To: Ferrante, Fernando
Cc: Aird, David
Subject: FW: GI-204 Dam Failure Comm. Plan Answer
Attachments: Response to Question 2.docx

Fernando,
FYI - Here's a quantitative answer David Aird drafted for Q2.
Richard

From: Aird, David
Sent: Thursday, January 05, 2012 1:26 PM
To: Perkins, Richard
Cc: Demoss, Gary
Subject: GI-204 Dam Failure Comm. Plan Answer

Richard,

Please take a look at my answer to the question regarding the (b)(5) I provided two responses – one basic, and one more detailed. Let me know if the language and justification are appropriate for use in a communication plan.

Thanks,

David Aird
Reliability and Risk Engineer
RES/DRA/PRB
(301) 251 - 7926
Mailstop: CSB-4C07M
Location: 04-C25

Response to Question 2

(b)(5)

(b)(5)

Perkins, Richard

From: Aird, David
Sent: Friday, January 13, 2012 6:11 AM
To: Perkins, Richard; Ferrante, Fernando
Subject: RE: GI-204 Dam Failure Comm. Plan Answer
Attachments: Response to Question 2.docx

All,

After reading the communication plan, I drafted another answer that better addresses the question using the appropriate language (less quantitative). It is highlighted in the attachment.

David

From: Perkins, Richard
Sent: Thursday, January 12, 2012 5:06 PM
To: Ferrante, Fernando
Cc: Aird, David
Subject: FW: GI-204 Dam Failure Comm. Plan Answer

Fernando,
FYI - Here's a quantitative answer David Aird drafted for Q2.
Richard

From: Aird, David
Sent: Thursday, January 05, 2012 1:26 PM
To: Perkins, Richard
Cc: Demoss, Gary
Subject: GI-204 Dam Failure Comm. Plan Answer

Richard,

Please take a look at my answer to the question regarding the (b)(5) I provided two responses – one basic, and one more detailed. Let me know if the language and justification are appropriate for use in a communication plan.

Thanks,

David Aird
Reliability and Risk Engineer
RES/DRA/PRB
(301) 251 - 7926
Mailstop: CSB-4C07M
Location: 04-C25

Response to Question 2

(b)(5)

(b)(5)

(b)(5)

Perkins, Richard

From: Perkins, Richard
Sent: Friday, January 13, 2012 3:54 PM
To: Philip, Jacob
Subject: FW: My response to Bill Ruland's comments on the Forward
Attachments: GI-204 screening analysis FOREWORD whr comments addressed.docx

FYI

From: Beasley, Benjamin
Sent: Friday, January 13, 2012 3:48 PM
To: Perkins, Richard
Cc: Bensl, Michelle
Subject: FW: My response to Bill Ruland's comments on the Forward

Richard,

Please Accept All changes in the attached file and use it as a Forward in the Screening Analysis.

Ben

From: Ruland, William
Sent: Friday, January 13, 2012 2:56 PM
To: Beasley, Benjamin
Cc: Brown, Frederick; Coe, Doug; Wilson, George; Burnell, Scott
Subject: FW: My response to Bill Ruland's comments on the Forward

I'm ok with this current version of the forward. I'm assuming that it has been fact checked.

Scott,

(b)(5)

Bill

From: Beasley, Benjamin
Sent: Thursday, January 12, 2012 8:05 AM
To: Ruland, William
Subject: FW: My response to Bill Ruland's comments on the Forward

Bill,

The attached file contains edits from me and Doug. Doug has a couple of comments expressing preference for the original text rather than Scott's edits. I can restore the original text in those spots if you prefer it.

Ben

From: Coe, Doug
Sent: Wednesday, January 11, 2012 5:15 PM
To: Beasley, Benjamin

Cc: Perkins, Richard; Correia, Richard

Subject: RE: My response to Bill Ruland's comments on the Forward

I made a couple tweaks. If you are OK with it, please send him the edited version (with track changes showing).

Thanks,
Doug

From: Beasley, Benjamin

Sent: Wednesday, January 11, 2012 3:56 PM

To: Perkins, Richard; Coe, Doug

Subject: My response to Bill Ruland's comments on the Forward

I used Track Changes to respond to Bill comments in the attached. Please let me know what you think.

Ben

Foreword

(b)(5)

(b)(5)

William H. Ruland
Chairman
Generic Issue Screening Panel

Perkins, Richard

From: Perkins, Richard
Sent: Tuesday, January 24, 2012 9:03 AM
To: Beasley, Benjamin; Bensi, Michelle
Subject: FW: Oconee GI-204 Communication Plan
Attachments: Communication Plan for OCO GI-204.docx ML12026A254

Should the main communication plan include a prominent reference to this communication plan?

From: Bartley, Jonathan
Sent: Monday, January 23, 2012 1:27 PM
To: Perkins, Richard; Bensi, Michelle
Cc: Stang, John; Thompson, Jon; Salgado, Nancy
Subject: Oconee GI-204 Communication Plan

Richard, Michelle,

Attached is an Oconee specific communication plan for the issuance of GI-204. We anticipate receiving public interest with Oconee specific questions so we felt it would be prudent to have an Oconee specific communication plan to supplement the GI-204 communication plan.

Please call me if you have any questions.

Jonathan Bartley
Chief, Reactor Projects Branch 1
Division of Reactor Projects, Region II
U. S. Nuclear Regulatory Commission
jonathan.bartley@nrc.gov
Office: 404.997.4607
Cell: (b)(6)

Perkins, Richard

From: Bartley, Jonathan
Sent: Tuesday, January 24, 2012 1:38 PM
To: Perkins, Richard
Subject: Re: Oconee GI-204 Communication Plan

We are processing it now. I will let you know when it is in ADAMS (and provide the ML#).

This email is being sent from an NRC mobile device.

From: Perkins, Richard
To: Bartley, Jonathan
Sent: Tue Jan 24 13:06:00 2012
Subject: RE: Oconee GI-204 Communication Plan

Jonathan,

Is this plan available on ADAMS? I was going to add a reference to it in the main communication plan.

Richard

From: Bartley, Jonathan
Sent: Monday, January 23, 2012 1:27 PM
To: Perkins, Richard; Bensi, Michelle
Cc: Stang, John; Thompson, Jon; Salgado, Nancy
Subject: Oconee GI-204 Communication Plan

Richard, Michelle,

Attached is an Oconee specific communication plan for the issuance of GI-204. We anticipate receiving public interest with Oconee specific questions so we felt it would be prudent to have an Oconee specific communication plan to supplement the GI-204 communication plan.

Please call me if you have any questions.

Jonathan Bartley

Chief, Reactor Projects Branch 1
Division of Reactor Projects, Region II
U. S. Nuclear Regulatory Commission
jonathan.bartley@nrc.gov
Office: 404.997.4607
Cell: (b)(6)

Perkins, Richard

From: Beasley, Benjamin
Sent: Tuesday, February 14, 2012 7:24 AM
To: Perkins, Richard
Cc: Bensi, Michelle
Subject: Oconee missing from FSAR/IPEEE document
Attachments: IPEEE_Oconee_flooding.pdf, FSAR_Oconee_flooding.pdf, FSAR_Oconee_p9.6-1.pdf

Richard,

The attached pages are not in the FSAR/IPEEE compilation we produced. Can we revise the Region II document to add these?

Ben

**IPEEE_Oconee_flooding.pdf; FSAR_Oconee_flooding.pdf;
FSAR_Oconee_p9.6-1.pdf**

**17 pages withheld in their entirety - exemptions 5 and
7F**

Perkins, Richard

From: Beasley, Benjamin
Sent: Thursday, February 23, 2012 2:01 PM
To: Perkins, Richard
Subject: Redactions needed
Attachments: Pre-GI-009 Analysis final redacted BGB 2-23-2012.docx

Please see me if you have any questions on the attached.

**Draft Redacted Screening Analysis Report for the Proposed Generic Issue on
Flooding of Nuclear Power Plant Sites Following Upstream Dam Failures**

44 pages withheld in their entirety - exemption 5

Perkins, Richard

From: Williams, Shawn
Sent: Friday, March 02, 2012 10:08 AM
To: Beasley, Benjamin; Perkins, Richard; Bensi, Michelle; Wilson, George
Cc: Howe, Allen; Khanna, Meena; Wengert, Thomas
Subject: FW: GI-204 ready for release
Attachments: FW: ~~OUO~~ Attachment May Contain Sensitive Information Prairie Island - Writeup for GI Report *email*

Hi,

(b)(5)

From: Wengert, Thomas
Sent: Friday, March 02, 2012 8:21 AM
To: Wilson, George
Cc: Williams, Shawn
Subject: RE: GI-204 ready for release

George,

I see that the Prairie Island licensee's comments on the draft write-up (attached) were apparently not incorporated into the final document (no changes made). Was that intentional?

Just wondering.

Thanks,

Tom

From: Williams, Shawn
Sent: Friday, March 02, 2012 8:09 AM
To: Beltz, Terry; Chawla, Mahesh; Feintuch, Karl; Tam, Peter; Wengert, Thomas; Williams, Shawn
Subject: FW: GI-204 ready for release

fyi

From: Wilson, George
Sent: Thursday, March 01, 2012 2:48 PM
To: Williams, Shawn; Zimmerman, Jacob; Khanna, Meena; Broaddus, Doug
Subject: FW: GI-204 ready for release

fyi

From: Beasley, Benjamin
Sent: Thursday, March 01, 2012 2:44 PM
To: Correia, Richard; Brown, Frederick; Evans, Michele; Wilson, George; Ruland, William
Cc: Lubinski, John; Siu, Carolyn
Subject: RE: GI-204 ready for release

All,

The press release on GI-204 has been scheduled for roughly noon on Tuesday, March 6. The Screening Analysis will become available to the public shortly thereafter. The Regional SLOs have been notified of the press release schedule. A CA Note will be provided to Commission Offices tomorrow. The Army Corps of Engineers and other Interagency Committee on Dam Safety members will be notified by George Wilson this afternoon or tomorrow.

The Communication Plan is [ML113500172](#). The redacted Screening Analysis that will be available to the public is [ML113500495](#).

Regards,
Ben Beasley

From: Correia, Richard
Sent: Thursday, March 01, 2012 2:17 PM
To: Brown, Frederick; Evans, Michele; Wilson, George
Cc: Lubinski, John; Beasley, Benjamin; Siu, Carolyn
Subject: RE: GI-204 ready for release

Yes...we're processing those action as we speak.

Richard Correia, PE
Director, Division of Risk Analysis
Office of Nuclear Regulatory Research
US NRC

richard.correia@nrc.gov

From: Brown, Frederick
Sent: Thursday, March 01, 2012 2:08 PM
To: Evans, Michele; Wilson, George
Cc: Lubinski, John; Correia, Richard
Subject: RE: GI-204 ready for release

Will RES or someone be distributing the final version to the Divisions?

From: Evans, Michele
Sent: Thursday, March 01, 2012 1:30 PM
To: Boger, Bruce; Leeds, Eric; Dorman, Dan
Cc: Howe, Allen; Lund, Louise; Ruland, William; Hiland, Patrick; Cheok, Michael; Davis, Jack; Glitter, Joseph; Lee, Samson; McGinty, Tim; Brown, Frederick; Galloway, Melanie; Skeen, David; Taylor, Robert; Delligatti, Mark; Lubinski, John; Monninger, John; Bahadur, Sher; Nelson, Robert
Subject: GI-204 ready for release

FYI. All stakeholder comments on the screening analysis were addressed as of earlier this week.

Brian approved the GI recommendation memo yesterday and the clock has started for public release of GI-204. We don't have a confirmed release date yet, but per the timeline, won't be a Friday, so I expect it to be Monday or Tuesday of next week.

Michele

From: Wilson, George
Sent: Thursday, March 01, 2012 12:41 PM
To: Evans, Michele
Subject: RE: Please share the current comm plan for GI-204

Research is still coordinating with OPA for the press release date, I will get the date later today.

This is an email attachment to 3/2/12 10:08 am email

Perkins, Richard

From: Wengert, Thomas
Sent: Monday, February 13, 2012 3:18 PM
To: Wilson, George
Subject: FW: OUO - Attachment May Contain Sensitive Information Prairie Island - Writeup for GI Report

George,

Are Prairie Island's comments being considered w.r.t. to the GI-204 screening analysis report? Does the technical staff want to discuss this with the licensee?

Please advise.

Thanks,

Tom
415-4037

From: Wengert, Thomas
Sent: Thursday, February 09, 2012 7:11 PM
To: Wilson, George
Cc: Williams, Shawn
Subject: FW: OUO - Attachment May Contain Sensitive Information Prairie Island - Writeup for GI Report

George,

See Prairie Island's comments on the GI report writeup. Let me know if you'd like to discuss this with the licensee or if you need any additional information.

Tom

From: Vincent, Dale M. [Dale.Vincent@xenuclear.com]
Sent: Thursday, February 09, 2012 4:20 PM
To: Wengert, Thomas
Subject: RE: OUO - Attachment May Contain Sensitive Information Prairie Island - Writeup for GI Report

Tom, we have reviewed the NRC discussion of dam failures and floods. We believe that the discussion should give more consideration to the maximum probable flood (MPF) and explain the extreme condition that it represents. As noted in USAR Section 2.4, the MPF has approximately 3 times the flow of a 1000 year flood and therefore is very improbable. MPF is defined in USAR App F. We would not agree that the USAR information is general since we did a comprehensive study of the Mississippi River flooding for original plant licensing. Also we believe that the cascading failures were adequately addressed. Our engineer called USACE today and confirmed that the purpose of L&D 2 and L&D 3 is to allow navigation, not flood control, and the top of lock structure of L&D 2 and L&D 3 are 694 and 686, respectively, so the MPF level would be well above the level of these dams. Based on this, the probable maximum flood (PMF) level of 703.6ft MSL is significantly higher than the levels at which the Mississippi River lock and dam system would be effective at restricting flood waters. Also it is our understanding that the tainter gates are controlled in such a manner that would not result in the sudden opening of gates which could impact river levels at flood conditions.

Also note that "through the 10 spillway gates" could be taken to mean that L&D 2 only has 10 gates; there are 19.

We do not see any security sensitive information in the discussion.

From: Wengert, Thomas [<mailto:Thomas.Wengert@nrc.gov>]

Sent: Thursday, February 09, 2012 9:42 AM

To: Vincent, Dale M.

Subject: ~~OUO~~ Attachment May Contain Sensitive Information Prairie Island - Writeup for GI Report

~~OUO~~ – Attachment May Contain Sensitive Information

Dale,

As we discussed, for your awareness, attached is the writeup for Prairie Island that the NRC staff plans to include in the Generic Issue (GI) report to be issued and made publicly available in the near future. Please review and let me know if you have any comments or if NSPM believes any of this information is sensitive and should be redacted or withheld from public release.

We'd appreciate your response by COB Friday, if possible.

Please call me if you'd like to discuss.

Tom Wengert
301-415-4037

~~OUO~~ – Attachment May Contain Sensitive Information

Perkins, Richard

From: Beasley, Benjamin
Sent: Monday, March 05, 2012 9:59 AM
To: Perkins, Richard
Subject: My proposed Comm Plan changes
Attachments: GI204 Communication Plan BB edits 3-2-12.docx

Attached...

**Draft, dated 02/06/2012, of the Communication Plan for Generic Issue #204,
Flooding of Nuclear Power Plant Sites Following Upstream Dam Failures**

26 pages withheld in their entirety - exemption 5

Perkins, Richard

From: Bensi, Michelle
Sent: Tuesday, March 06, 2012 9:59 AM
To: Beasley, Benjamin; Perkins, Richard
Subject: FW: GI-204
Attachments: GI-204.pptx

Ben and Richard,

(b)(5)

Thanks,
Shelby

From: Ziev, Tracey
Sent: Monday, March 05, 2012 8:51 AM
To: Bensi, Michelle
Subject: RE: GI-204

Hi Shelby,

This is what I put together for a poster on GI-204. Do you have any feedback?

Thanks,

Tracey

From: Bensi, Michelle
Sent: Monday, March 05, 2012 8:33 AM
To: Ziev, Tracey
Subject: GI-204

The GI-204 Comm Plan is available at: ML113500172. Check out questions 8 and 9.

Note: There will be some updating on the comm. plan today to revise answers related to "next steps" for resolution of the issue (i.e. GI-204 will be taken up by the JLD. After the JLD has addressed it, the Generic Issues Program will evaluate whether the issue (including the complete scope of the issue) has been resolved. If not, it will be turned back over to the Generic Issues Program for further evaluation).

I can look at any slide you compile and give feedback. I will also send it to my BC for a quick review.

(b)(5)

Perkins, Richard

From: Perkins, Richard
Sent: Thursday, April 12, 2012 10:02 AM
To: Beasley, Benjamin
Subject: Researcher Article
Attachments: Researcher Article for GI204_draft.docx

Draft attached

Richard H. Perkins, P.E.
Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Division of Risk Analysis
Operating Experience and Generic Issues Branch
Phone - 301/251-7479

(b)(5)

(b)(5)

(b)(5)

Perkins, Richard

From: Perkins, Richard
Sent: Monday, July 09, 2012 10:38 AM
To: Ferrante, Fernando
Subject: FW: My slides for the July 10 RES Seminar
Attachments: RES Seminar on GI204_June 29 2012.ppt

Fernando,
Here's the slides I plan to use.
Richard

From: Perkins, Richard
Sent: Friday, June 29, 2012 4:47 PM
To: Pham, Bo; Philip, Jacob; Cook, Christopher
Subject: My slides for the July 10 RES Seminar

Here are my slides for the July 10 seminar. I will be out all next week, so please send your slides (draft or final) to our Branch Chief Bo Pham as soon as you can (with a cc: to me).

Thanks and have a great week,

Richard H. Perkins, P.E.
Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Division of Risk Analysis
Operating Experience and Generic Issues Branch
Phone - 301/251-7479

Flooding of U.S. Nuclear Power Plant Sites Following Upstream Dam Failure: Generic Issue Screening Analysis Method

Richard H. Perkins, P.E.

Office of Nuclear Regulatory Research
Division of Risk Analysis
Generic Issues and Operational Experience Branch

Visit our intranet website at
<http://www.internal.nrc.gov/RES/projects/GIP>

Objectives of Presentation

- ✓ Discuss the nature of a Generic Issue Screening Analysis
- ✓ Provide high-level overview of topic
- ✓ Describe content of screening analysis

Part 1:

What is a Generic Issue Screening Analysis

**The Generic Issues
Program** is a
Congressionally mandated,
agency-wide program to
address issues that have
significant generic
implications related to
safety or security which
cannot be more effectively
resolved by other
regulatory programs or

Visit our intranet website at

<http://www.internal.nrc.gov/RES/projects/GIP>

What is Special about a Generic Issue?

- The term “Generic Issue” is an official designation and conveys special recognition and treatment of the issue
- The issue description and its progress will be documented in NUREG 0933 – the purpose of which is to drive “... the timely and efficient allocation of NRC resources for the resolution of those safety issues...”
- The status of all active Generic Issues is provided in a report to Congress every six months
- The status of all active Generic Issues is reported in a public document every 90 days.
- 10CFR52.47(a)(21) requires license applications to address (propose a technical resolution for) any issue that has been listed in NUREG 0933 for more than 6 months prior to the docket date of the application and which are technically relevant to the design.
- Visibility and regular reporting requirements make resolution of the issue extremely likely.

Stages



Major Phases of GI-204 Coordination

- Screening analysis development
- Generic Issue Review Panel briefings
(with inter-office discussion)
- Formal Inter-office coordination of
recommendation memorandum
- Community development of communication plan
- Formal coordination of the communication plan
- Pre-release meetings
- Rollout

Phases of GI-204 Coordination (cont.)

Objectives & Coordination during the Screening Analysis Development

- Obtain information
- Increase staff awareness
- Research and formulation
- Engagement of NRC community
- Develop agency consensus

Phases of GI-204 Coordination (cont.)

- Early inter-office coordination occurs during the
Generic Issue Review Panel briefings
- Formal coordination of the
GI Review Panel recommendation

Phases of GI-204 Coordination (cont.)

- **Community development of the Communication Plan**
 - Goals, key messages, background/overview, recognize stakeholders
 - Establishment of inter-office Communication Team
 - Q&A development, community editing, and coordination
 - Rollout plan development (including press release)
 - Living document (keeps discussion going, comments encouraged, “community owned”)
- **Formal Coordination of the Communication Plan**
 - Issued by memorandum
 - Broad concurrence across NRC

Phases of GI-204 Coordination (cont.)

- **Pre-release Activities and Rollout**
 - Briefings and conferences with regions/offices
 - Routine communication team updates
 - Upper-level final planning meetings
 - Rollout execution

See declaration timeline (next slide)

GI-204 Declaration Timeline – Internal Information – Not for Public Release

Documents Required for GI Declaration:

Recommendation Memo from GI Review Panel

Communication Plan (non public)

Screening Analysis Report (non public)

OPA Press Release

Status

Approved by GI Review Panel.

Approved and available for use

Completed and final (not released)

Approved by Chairman's Office – awaiting release
Subject to continuing edits in real time

Significant Critical Path Tasks:

With RES Director for review and consideration for approval

Sequence and Timeline: [Organization responsible for action]

- Formal coordination of **Communication Plan** is completed
- RES Director: Signs out **Communication Plan** (non public)
- Approved **Communication Plan** is distributed to communication team [RES]
- 3 work days RES Director: Approves **GI Recommendation Memo** (release clock begins)
- 3 work days Public release day (not Friday) and time is selected with OPA [OPA & RES]
- 3 work days 'Heads up' notification to Regional State Liaison Officers (RSLOs) and OCA [RES]
- 2 work days Communication Team is notified of release day and time [RES]
- 2 work days Communication Team notifies internal stakeholders [Communication Team Members]
- As appropriate RSLO actions and communications with States [RSLOs]
- 0 time **OPA Press Release** [OPA]
- +1 hour **Recommendation Memo** and **Screening Analysis Report** become publicly available in ADAMS [RES]
- +1 hour Communication Team is notified of press release and document status [RES]

POC: Richard Perkins,
NRC/RES/DRA/OEGIB
richard.perkins@nrc.gov
301-251-7479

Part 2:

High-level overview of topic

Key Messages

- Reevaluation of the effect of dam failures is appropriate based on new information
- Evaluation of the issue will continue to the next stage of the Generic Issues Program
- The screening analysis was a limited scope assessment
- Screening analysis was completed before events at Fukushima and Fort Calhoun Station
- No immediate safety concerns were identified

Scope

- Generic Issue #204 applies to:
 - Operating nuclear power plants
 - Spent fuel pools
 - Sites undergoing decommissioning with spent fuel still in the spent fuel pools
- Related technical issues addressed as separately proposed Generic Issues:
 - Effect of downstream dam failures on availability of cooling water
 - Proposed, accepted, currently undergoing screening
 - Effect of upstream dam failures on fuel facilities
 - Issue was proposed and was not accepted
 - Effect of external flooding on ISFSIs
 - Proposed, undergoing acceptance review

Plant names appearing in screening analysis

- **Region 1**

- Beaver Valley
- Hope Creek
- Indian Point
- Peach Bottom
- Three-Mile Island
- Vermont Yankee

- **Region III**

- Prairie Island

- **Region II**

- Browns Ferry
- McGuire
- Oconee
- H.B. Robinson
- Sequoyah
- Surry
- Waterford
- Watts Bar

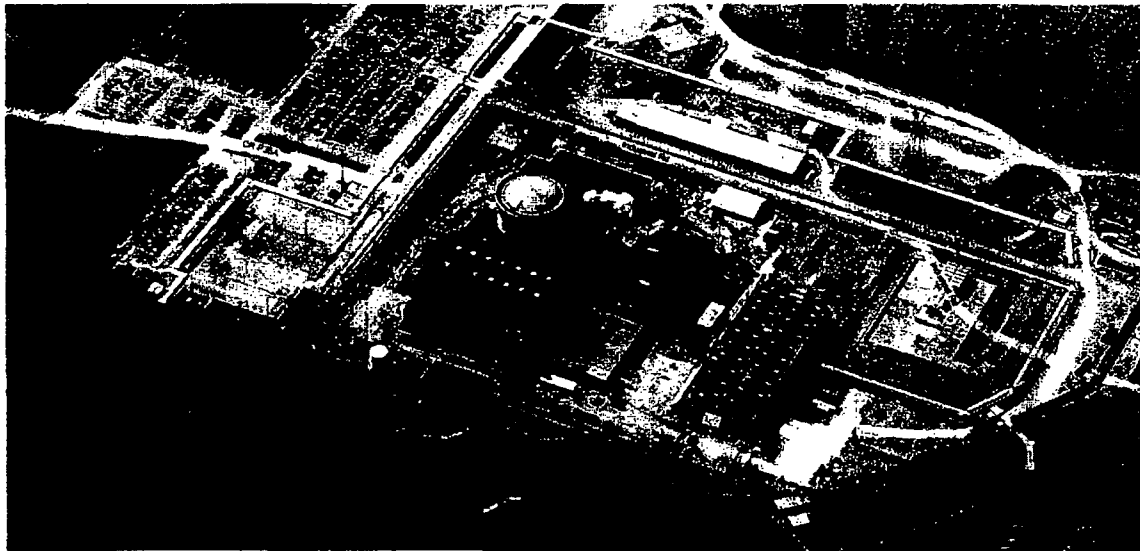
- **Region IV**

- Arkansas Nuclear
- Columbia
- Cooper
- South Texas
- Fort Calhoun

Part 3:

Overview of screening assessment

Precursor Events: Background on Fort Calhoun and Oconee

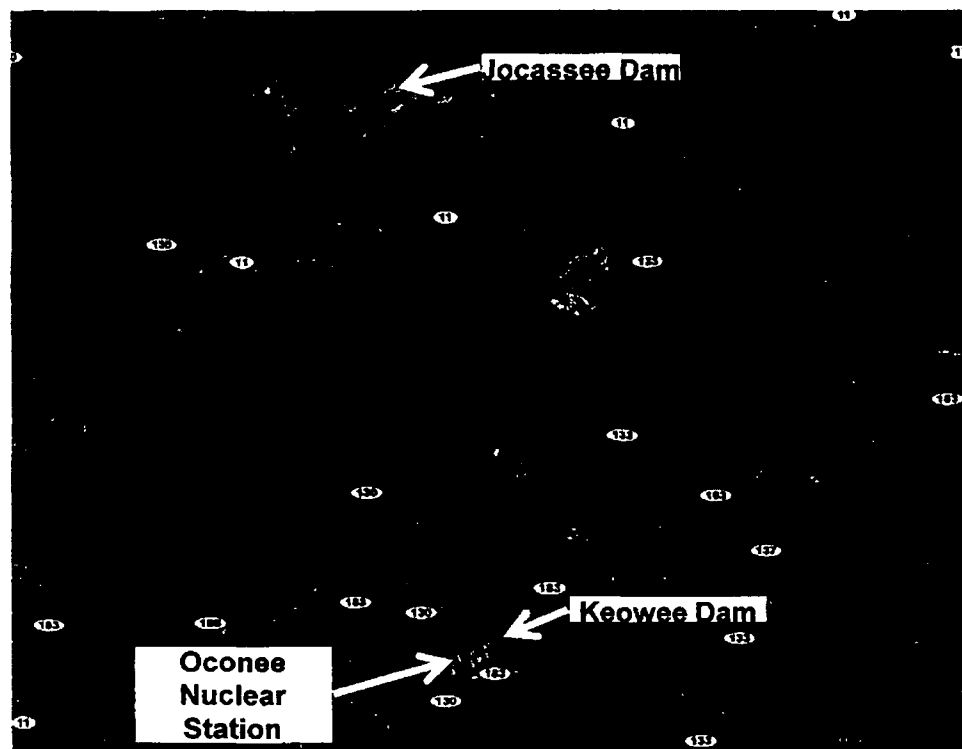


Insufficient
Procedures



Flood Barrier
Penetrations

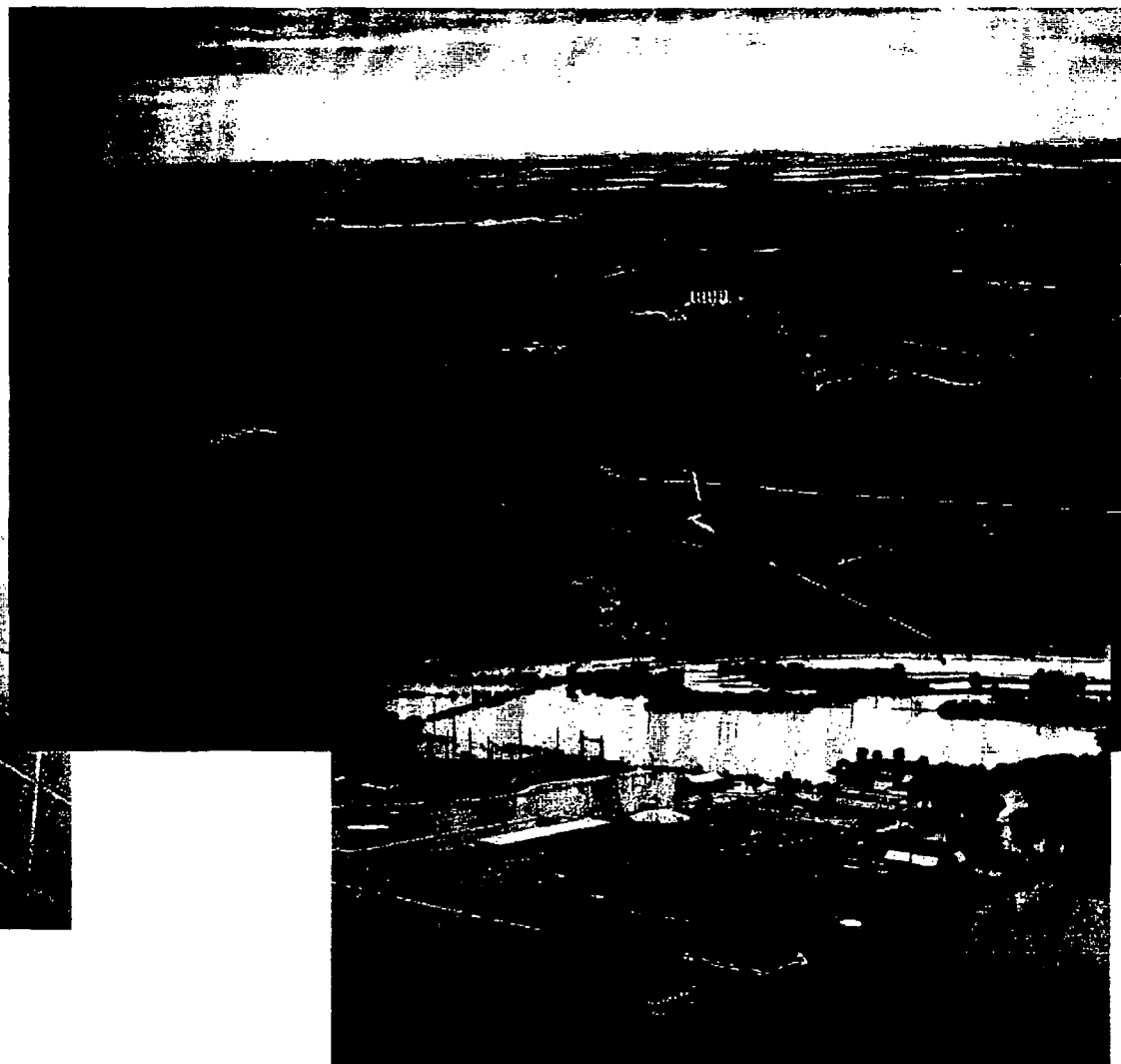
Precursor events con'd: Experience at Oconee Nuclear Station



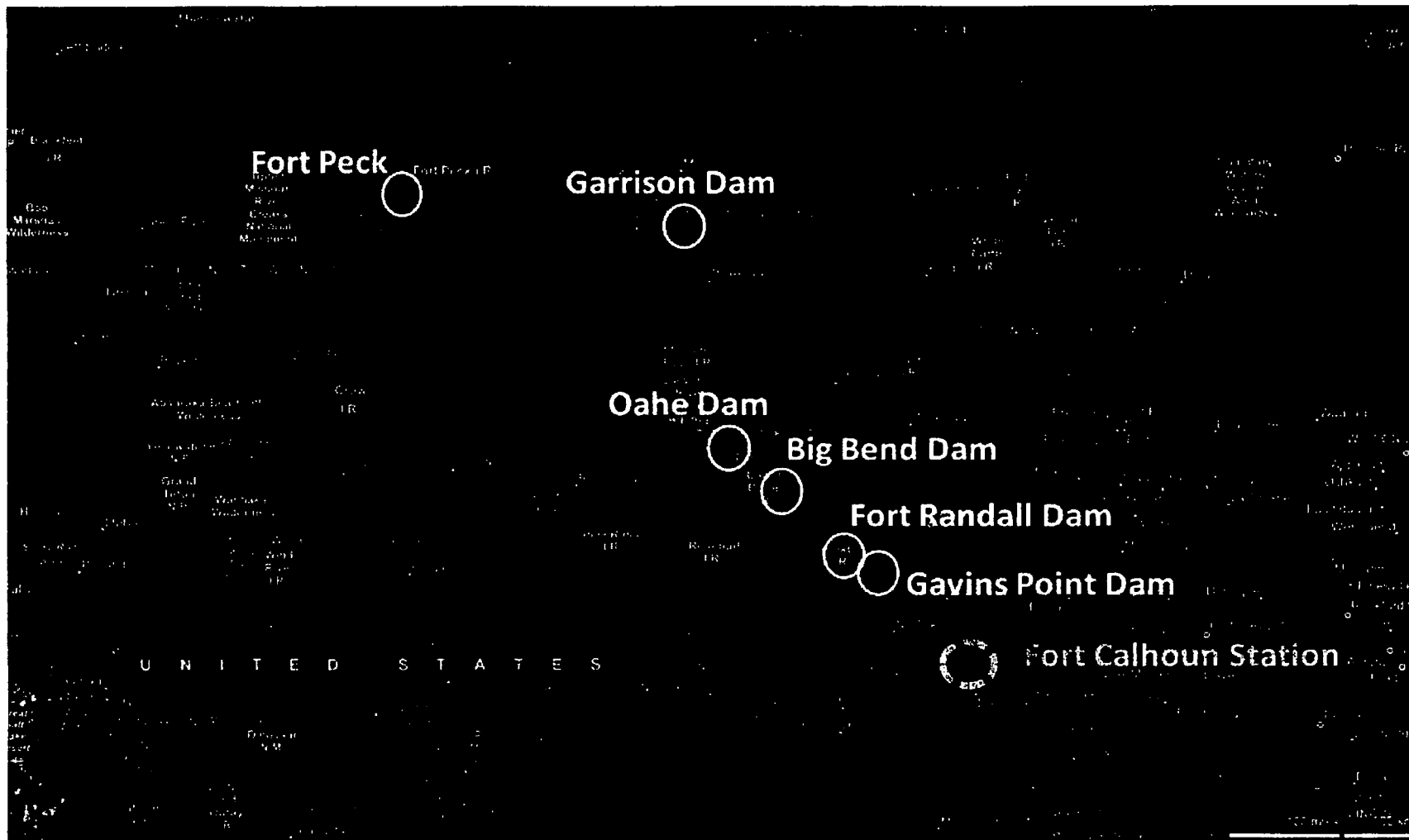
Given catastrophic dam failure, containment failure appeared likely

- LOOP
 - SSF Failure
 - Failure of Keowee Dam
- } → Degradation Timeline

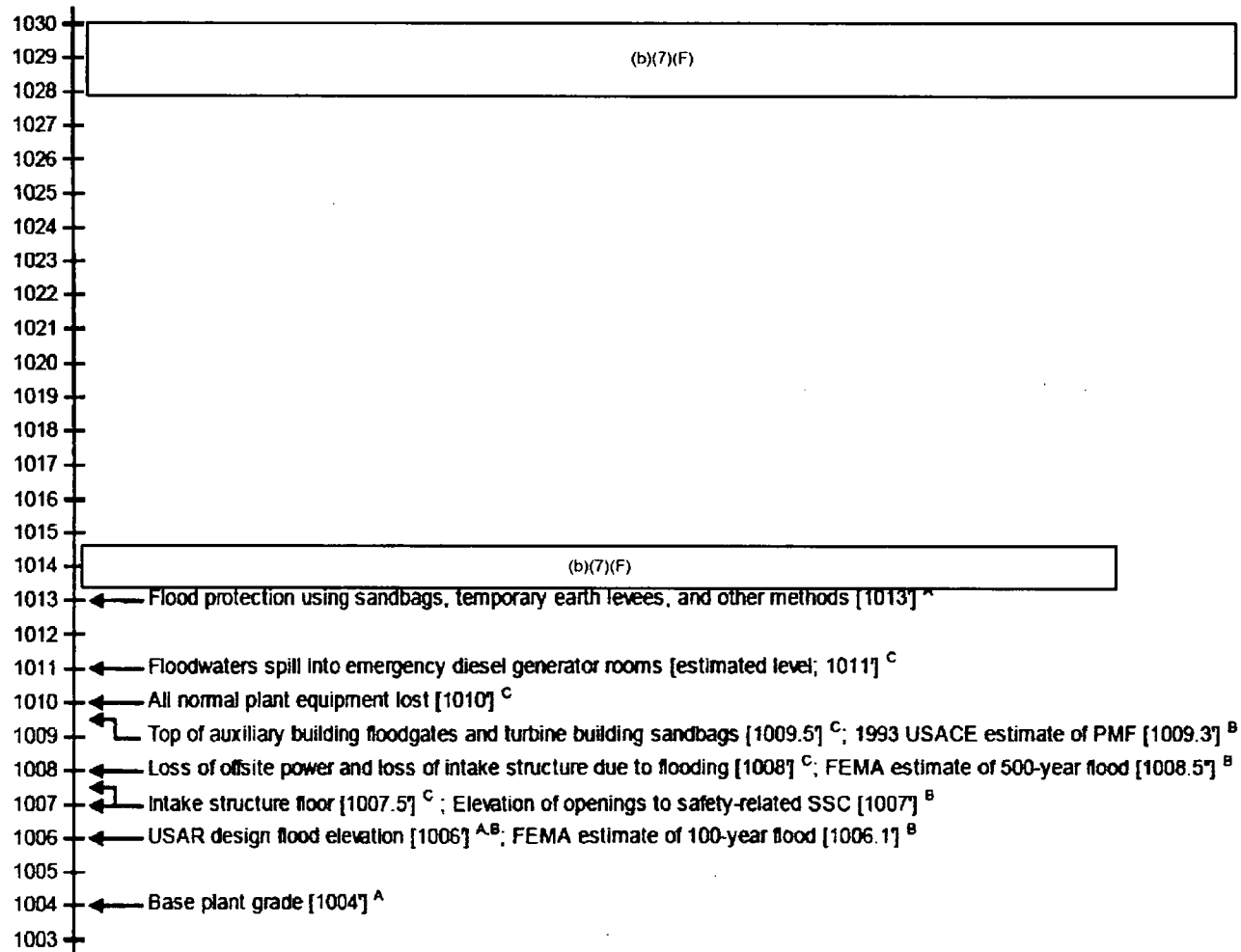
Precursor events con'd: Recent experience at Fort Calhoun



Precursor events con'd: Fort Calhoun Station Upstream Dams



Precursor events con'd: Fort Calhoun Station Flood Levels



Examination of applicability to multiple plants: General approach

Clear identification of the issue at ONS and FCS

Difficulty stating a generic class of applicable plants.

- FSAR and IPEEE did not necessarily reveal an issue
- Lack of (identified) *readily available* conclusive information

Use of “signature characteristics”

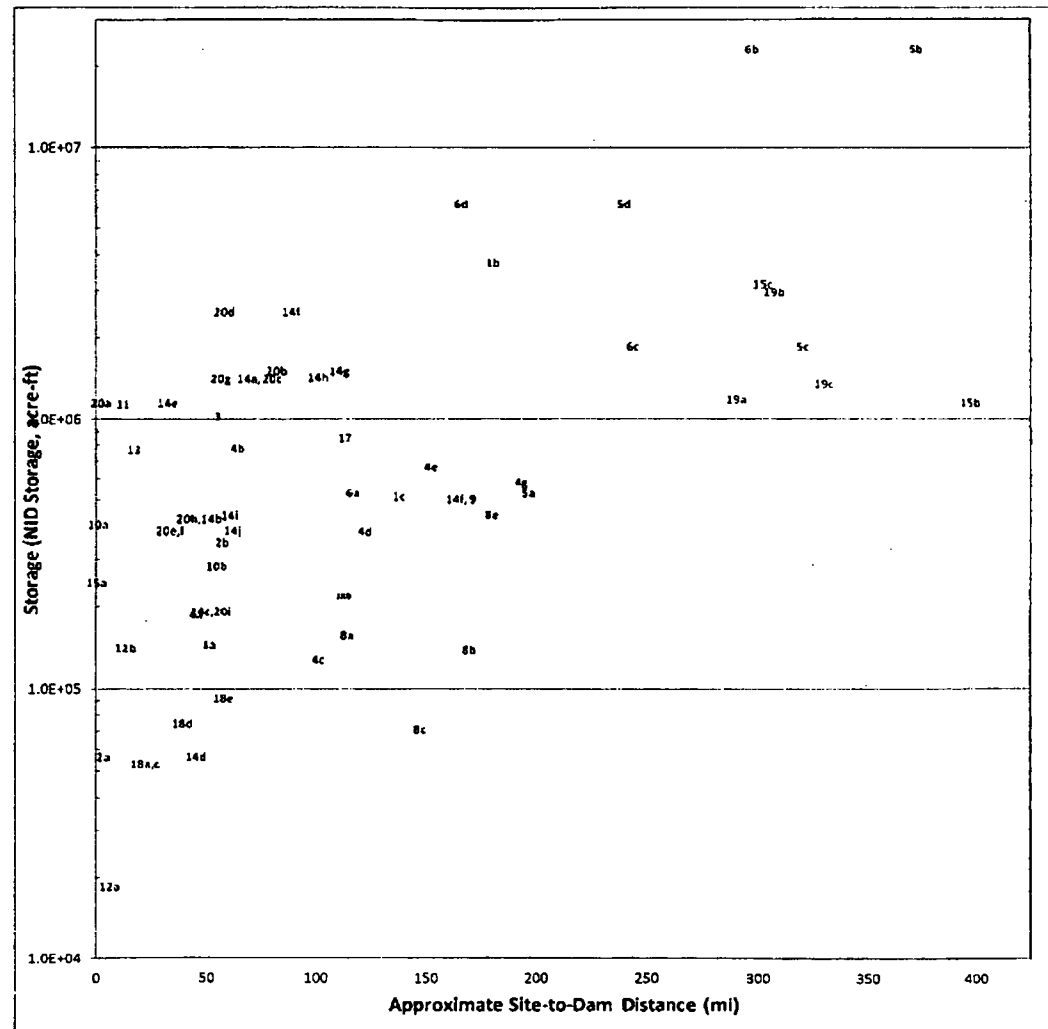
- Reliance on the placement of temporary barriers
- Challenging circumstances during flood management
- Certain features assumed to have a success probability of 1
(Dikes, levees, doors, hatches, or untested equipment)
- Limited time window for response
- Small or negative margins under less than ideal circumstances
- Significant events “screened out” where reconsideration may be appropriate
- Evaluation coincident with less than PMF

Timeline of Plan Operating License Issuance vs. Publication Dates

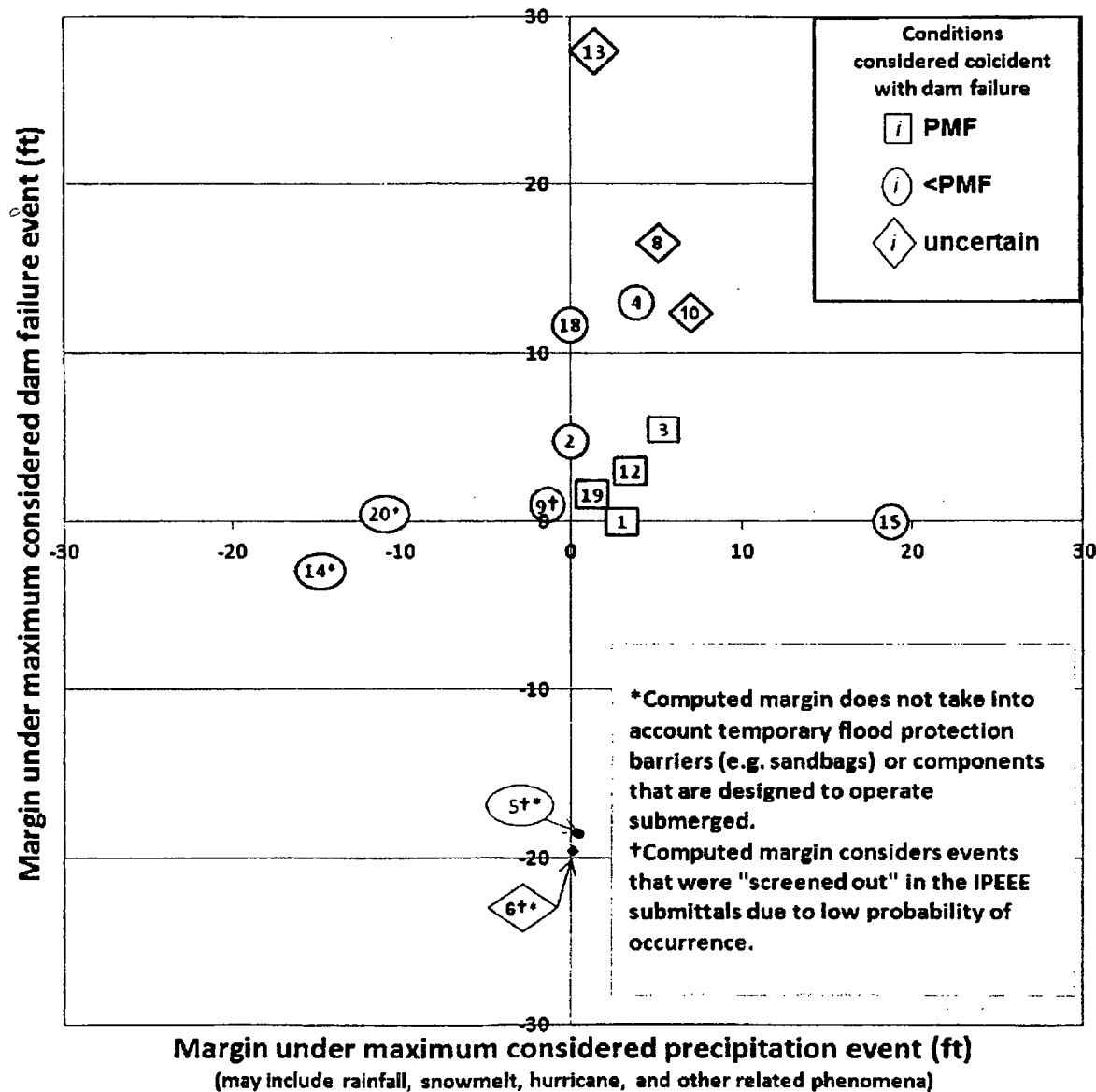
11.B. Robinson 2	1970	
	1971	10 CFR 50, Appendix A, GDC-2
Vermont Yankee, Surry 1	1972	
Fort Calhoun, Oconee 1-2, Browns Ferry 1, Peach Bottom 2, Indian Point 2, Surry 2	1973	Regulatory Guide 1.59
Arkansas Nuclear 1, Oconee 3, Browns Ferry 2, Cooper, Peach Bottom 3, Three Mile Island 1, Prairie Island 1-2	1974	
Indian Point 3	1975	Regulatory Guide 1.102; NUREG-75/087, Standard Review Plan
Beaver Valley 1, Browns Ferry 3, Salem 1	1976	ANSI Standard N170-1976/ANS 2.8; Regulatory Guide 1.59 (Revision 1); Regulatory Guide 1.102 (Revision 1)
	1977	Regulatory Guide 1.59 (Revision 2)
Arkansas Nuclear 2	1978	NUREG-75/087, Standard Review Plan (Revision 1 to Sections 2.4.2-2.4.4)
	1979	
Sequoyah 1	1980	Regulatory Guide 1.59 (Errata to Revision 2)
McGuire 1, Sequoyah 2, Salem 2	1981	NUREG-0800, formerly NUREG-75/087, Standard Review Plan (Revision 2 to Sections 2.4.2-2.4.4)
	1982	
McGuire 2	1983	
Columbia	1984	
Waterford 3	1985	
Hope Creek 1	1986	
Beaver Valley 2	1987	
South Texas 1	1988	
South Texas 2	1989	NUREG-0800, Standard Review Plan (Revision 3 to Sections 2.4.2-2.4.3)
	1990	
	1991	NUREG-1407
	1992	American National Standard ANSI/ANS-2.8-1992
Watts Bar 1	1996	
	2002	NUREG-1742
	2007	NUREG-0800, Standard Review Plan (Revision 4 to Sections 2.4.2-2.4.3, Revision 3 to Section 2.4.4)

Examination of applicability to multiple plants: Location of dams relative to NPP sites

- In the Generic Issue Proposal, 20 plants were identified
- Plant-specific documents were reviewed along with data from the National Inventory of Dams
- Key observations:
 - Many nuclear power plants are located downstream of dams
 - Dams upstream of plants have varying characteristics, sizes, capacities, purposes, and are regulated by different agencies



Margin under maximum considered precipitation event



ML112430114

Backup Slides

The Generic Issue Criteria:

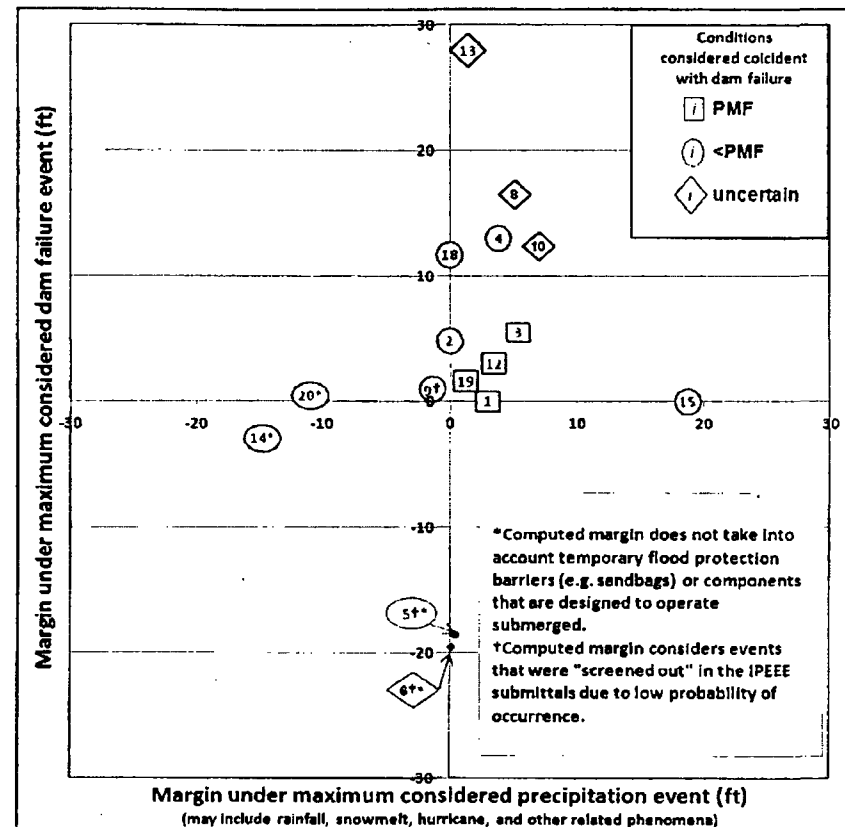
- 1 – The issue affects public health and safety, the common defense and security, or the environment
- 2 – The issue applies to two or more facilities and/or licensees/certificate holders, or holders of other regulatory approvals
- 3 – The issue cannot be readily addressed through other regulatory programs and processes; existing regulations, policies, or guidance; or voluntary industry initiatives
- 4 – The issue can be resolved by new or revised regulation, policy, or guidance
- 5 – The issue's risk or safety significance can be adequately determined (i.e., it does not involve phenomena or other uncertainties that would require long-term studies and/or experimental research to establish the risk or safety significance)
- 6 – The issue is well defined, discrete, and involves a radiological safety, security, or environmental matter
- 7 – Resolution of the issue may potentially involve review, analysis, or action by the affected licensees, certificate holders, or holders of other regulatory approvals

The Generic Issue Criteria (shorthand):

- 1 – Pose an appreciable risk to safety, security, or the environment
- 2 – Apply to two or more plants
- 3 – Cannot be readily addressed by current NRC regulatory process
- 4 – But can be addressed by an NRC regulatory process
- 5 – There has to be a way that we can calculate, estimate, or otherwise understand the risk
- 6 – You have to be able to tell us specifically what the issue is, so we know what the issue is
- 7 – Conceivably, it has to be something the licensee could address or fix

Examination of applicability to multiple plants: Margin under precipitation and dam failure events

- Calculated margin is based on several prescribed assumptions:
 - Considers largest flood elevation and smallest flood protection elevation available in reviewed NRC documents
 - Not limited to design basis events
 - Does not account for temporary protective measures or operation of submerged components
- Prescribed assumptions are based on observations about Oconee and Fort Calhoun:
 - Reliance on temporary barriers
 - Revised flood estimates that are larger than older estimates
 - Increased estimates of dam failure frequency



This figure answers the question:

What is the "margin" between the highest flood level referred to in available documents and the plant's flood protection level, when not accounting for certain measures that may have been approved during licensing?

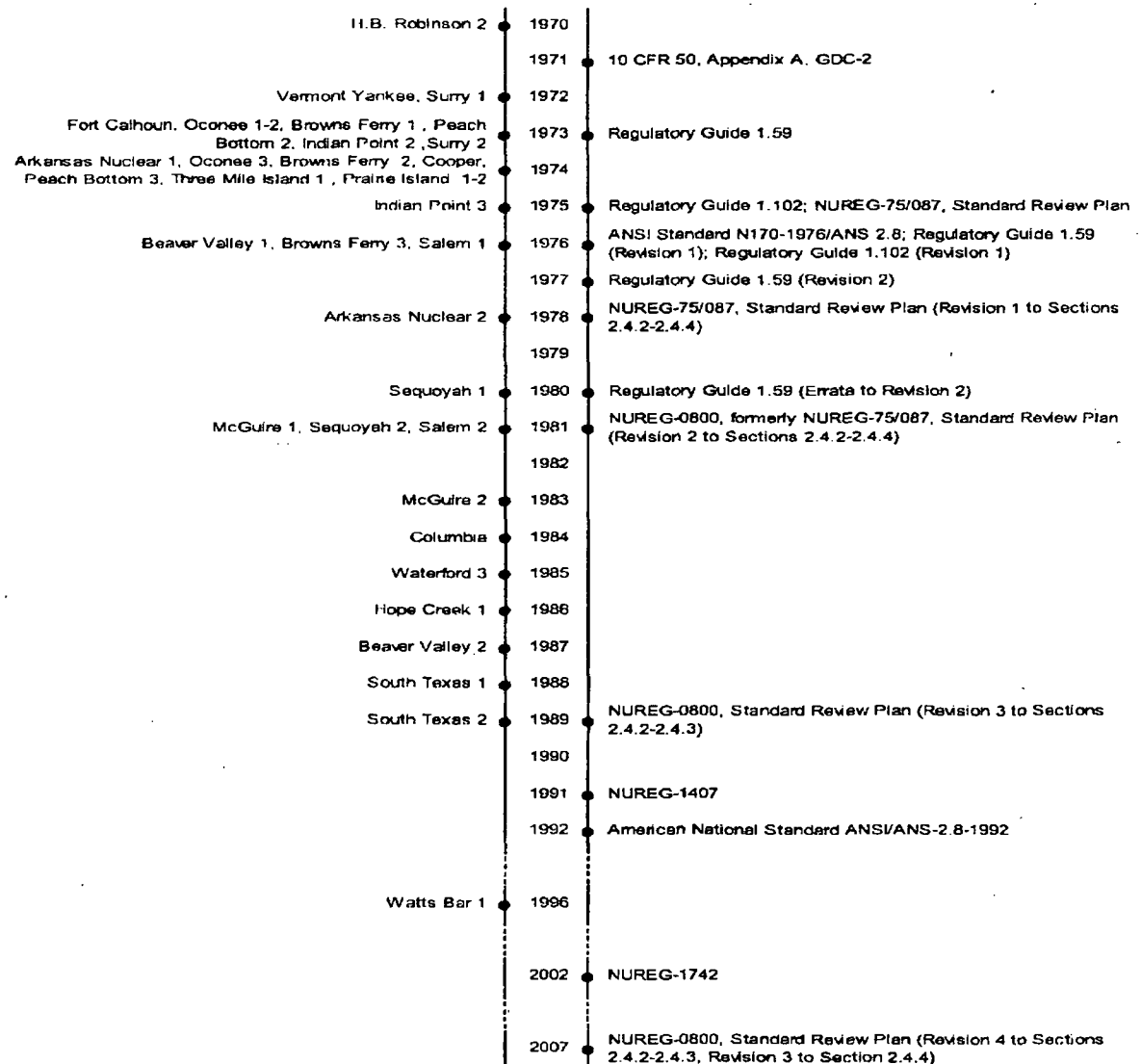
Examination of regulatory history: Operating License Issuance vs. Publication Dates

Key observations:

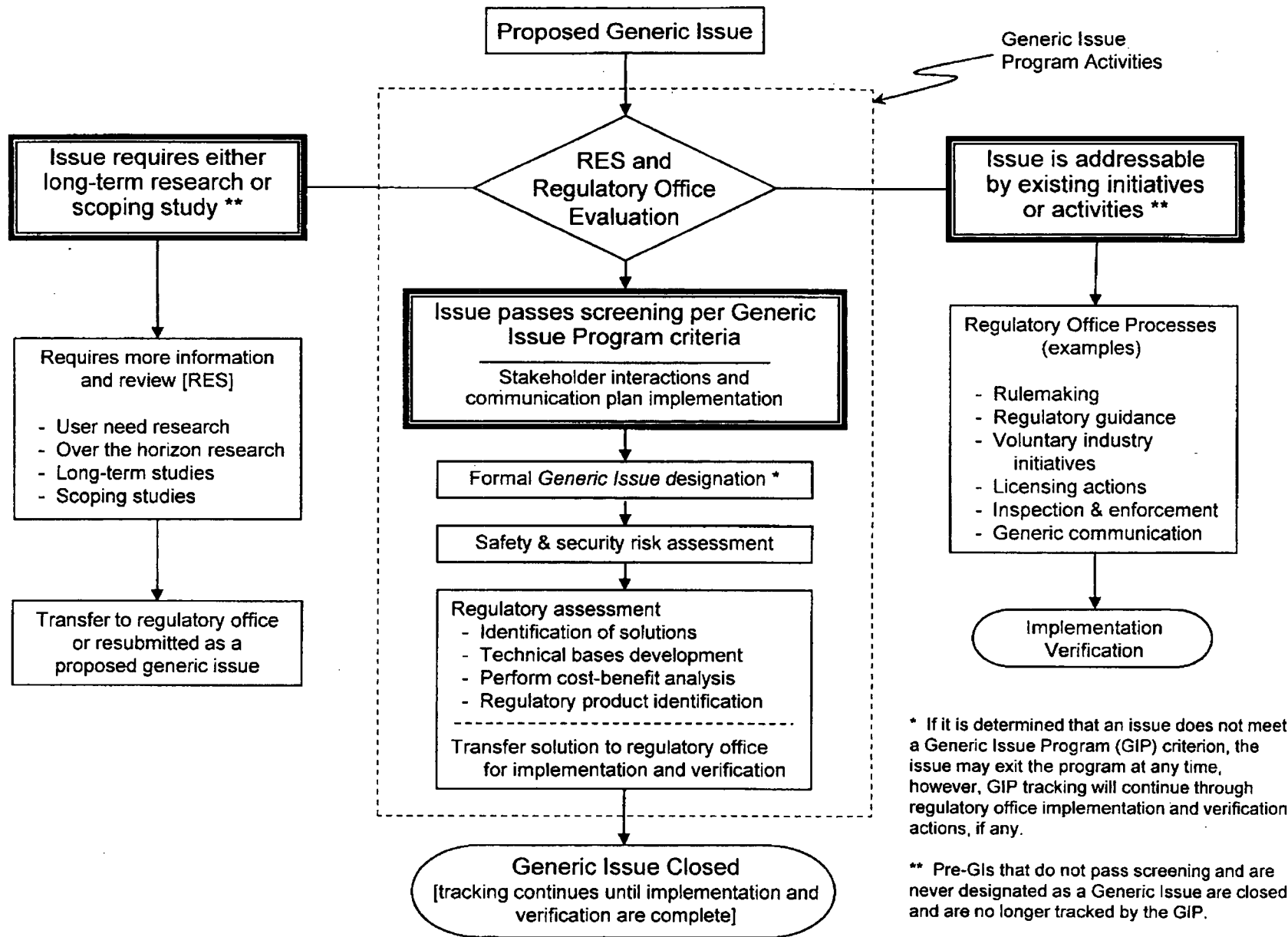
Some plants licensed before key regulatory guidance.

Regulatory guidance related to dam failures has evolved over time.

There is no regulatory requirement to re-assess plants under new/revised guidance.



Generic Issue Program in Perspective With Other Regulatory Programs and Processes



GI-204 Communication Plan

KEY MESSAGES – BACKGROUND – Q&As

You can use this document as a basis for communication with the public

- Widely coordinated throughout NRC
- Represents a coordinated, approved agency opinion

Update Strategy

- Expected to change as our knowledge changes
- Expected to change as the status changes
- We hope to receive comments from the community
- If there is a tough question we have not answered, please let us know

Please review the questions in the Q&A section

The communication plan is not a public document

- Internal coordination tool
- Many communication plans do become public information eventually

Perkins, Richard

From: Perkins, Richard
Sent: Monday, July 09, 2012 12:24 PM
To: Cai, June
Cc: Felsher, Harry; Jessie, Janelle
Subject: RE: GSI-204
Attachments: RES Seminar on GI204_July 5 2012.ppt

Thanks for the updates; I will make the appropriate changes. Once the issue was declared GI-204, the execution of GI-204 was transferred to the Japan Lessons Learned Directorate. It will continue to be GI-204, but will be worked by that "group" as they move toward an eventual resolution. Christopher Cook is the lead and will also be presenting tomorrow. At some point, I will discuss with Chris – how do we want to maintain the Communication Plan and roster. Thanks for staying interested.

My slides are attached. The others will be available shortly.

Richard

From: Cai, June
Sent: Monday, July 09, 2012 9:08 AM
To: Perkins, Richard
Cc: Felsher, Harry; Jessie, Janelle
Subject: RE: GSI-204

Yes, I have taken over for Rosetta, and any projects she was involved with, I will be need to start getting up to speed on.

Please advise if there is anything I should do on this. Janelle's email below mentions attending some event. Please let me know if there is something I should attend.

Thanks for reaching out! I will do my best to get up to speed.

June

From: Jessie, Janelle
Sent: Monday, July 09, 2012 7:50 AM
To: Perkins, Richard
Cc: Cai, June; Felsher, Harry
Subject: RE: GSI-204

Good Morning Richard,

Unfortunately, I won't be able to attend tomorrow's presentation as I will be out of the office. However, I would like a copy of the power point slides from the presentation, if possible.

Also, June Cai was selected as Rosetta Virgilio's replacement in FSME/DILR. I have copied June on this email in the event that she can attend after learning from Harry that this is something that Rosetta would support as well.

Thanks in advance,

Janelle

X6775

From: Felsher, Harry
Sent: Monday, July 09, 2012 7:44 AM
To: Perkins, Richard
Cc: Jessie, Janelle
Subject: FYI: GSI-204

Richard,

Please note that Janelle Jessie has now taken over as the FSME/DWMEP Technical Assistant, so please delete my name and add her name to your e-mail distribution list and as one of the two FSME contacts for GSI-204. Note that FSME/DILR has not yet determined who will take over for Rosetta Virgilio (who retired) as the other FSME contact for GSI-204.

Thanks,
Harry Felsher, x6559

From: Perkins, Richard
Sent: Wednesday, March 07, 2012 9:09 AM
To: Barker, Allan; Bartley, Jonathan; Beasley, Benjamin; Beaulieu, David; Bensi, Michelle; Burnell, Scott; Cahill, Christopher; Caverly, Jill; Chaput, Peter; Coe, Doug; Compton, Keith; Correia, Richard; Emche, Danielle; Erlanger, Craig; Felsher, Harry; Ferrante, Fernando; Gaddy, Vincent; Hills, David; Hilton, Nick; Holian, Brian; Ibarra, Jose; Imboden, Andy; Kauffman, John; Khanna, Meena; Klett, Audrey; Logaras, Haral; Maier, Bill; Marciano, Jonathan; McNamara, Nancy; Meghani, Vijay; Miller, Chris; Mitman, Jeffrey; Mrowca, Lynn; Perkins, Richard; Philip, Jacob; Pohida, Marie; Raione, Richard; Riley (OCA), Timothy; Rosenberg, Stacey; Ruland, William; Sancaktar, Selim; Schmidt, Wayne; Screnci, Diane; See, Kenneth; Sheehan, Neil; Stapleton, Bernard; Tift, Doug; Trojanowski, Robert; Vaughn, Stephen; Virgilio, Rosetta; Wilson, George; Wilson, Peter; Woodruff, Gena; Wray, John
Subject: GI-204 Communication Plan has been updated

GI-204 Communication Team,

The document (ML113500172) now includes these two new questions:

48. How can the NRC justify removing so much important detail from the screening analysis?

While the NRC can discuss the generic concept of upstream dam failures and their potential effect on nuclear power plant safety, site-specific examples are not available. Since dams are considered part of the nation's critical infrastructure and their failure would have wide-ranging effects, other Federal agencies consider information on this subject to be sensitive. Information relating to details of a nuclear power plant's safety systems is also sensitive. For these reasons, the NRC has redacted some details from the NRC screening analysis.

(b)(5)

(b)(5)

Intranet link: <https://adamsxt.nrc.gov/WorkplaceXT/getContent?id=current&vsId=%7BFC4BF245-C6A5-4CC2-900C-389325E1C350%7D&objectStoreName=Main.Library&objectType=document>

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Flooding of U.S. Nuclear Power Plant Sites Following Upstream Dam Failure: Generic Issue Screening Analysis Method

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Division of Risk Analysis
Operational Experience and Generic Issues Branch

Visit our intranet website at
<http://www.internal.nrc.gov/RES/projects/GIP>

Objectives of Presentation

- ✓ Discuss the nature of a Generic Issue Screening Analysis
- ✓ Provide high-level overview of topic
- ✓ Describe content of screening analysis

Part 1:

What is a Generic Issue Screening Analysis

**The Generic Issues
Program is a
Congressionally mandated,
agency-wide program to
address issues that have
significant generic
implications related to
safety or security which
cannot be more effectively
resolved by other
regulatory programs or**

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What is Special about a Generic Issue?

- The term “Generic Issue” is an official designation and conveys special recognition and treatment of the issue
- The status of all active Generic Issues is provided in a report to Congress every six months
- The status of all active Generic Issues is reported in a public document every 90 days.
- 10CFR52.47(a)(21) requires license applications to address (propose a technical resolution for) any issue that has been listed in NUREG 0933 for more than 6 months prior to the docket date of the application and which are technically relevant to the design.
- Generic Issues Program provides visibility, regular reporting and tracking of regulatory changes until such changes are implemented and verified.

Stages

-
- The diagram illustrates the stages of a process, categorized into two groups. The 'Pre GI' group includes Identification, Acceptance Review, and Screening. The 'Generic Issue' group includes Safety Risk Assessment and Regulatory Assessment. Brackets on the left side of the list indicate these groupings.
- Pre GI
 - Identification
 - Acceptance Review
 - Screening
 - Generic Issue
 - Safety Risk Assessment
 - Regulatory Assessment

Coordination During Screening of GI-204

- Screening analysis development
- Generic Issue Review Panel briefings
(with inter-office discussion)
- Formal Inter-office coordination of
recommendation memorandum
- Community development of communication plan
- Formal coordination of the communication plan
- Pre-release meetings
- Rollout

GI-204 Declaration Timeline – Internal Information – Not for Public Release

Documents Required for GI Declaration:

Recommendation Memo from GI Review Panel

Communication Plan (non public)

Screening Analysis Report (eris Sub)

OPA Press Release

Status

Approved by GI Review Panel.

Approved and available for use

Completed and final (not released)

Approved by Chairman's Office – awaiting release
Subject to continuing edits in real time

Significant Critical Path Tasks:

With RES Director for review and consideration for approval

Sequence and Timeline: [Organization responsible for action]

- Formal coordination of Communication Plan is completed
- RES Director: Signs out Communication Plan (non public)
- Approved Communication Plan is distributed to communication team [RES]
- 3 work days RES Director: Approves GI Recommendation Memo (release clock begins)
- 3 work days Public release day (not Friday) and time is selected with OPA [OPA & RES]
- 3 work days 'Heads up' notification to Regional State Liaison Officers (RSLOs) and OCA [RES]
- 2 work days Communication Team is notified of release day and time [RES]
- 2 work days Communication Team notifies internal stakeholders [Communication Team Members]
- As appropriate RSLO actions and communications with States [RSLOs]
- 0 time ~~OPA Press Release~~ [OPA]
- +1 hour Recommendation Memo and Screening Analysis Report become publicly available in ADAMS [RES]
- +1 hour Communication Team is notified of press release and document status [RES]

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Part 2:

High-level overview of topic

Key Messages

- Reevaluation of the effect of dam failures is appropriate based on new information
- Evaluation of the issue will continue to the next stage of the Generic Issues Program
- The screening analysis was a limited scope assessment
- Screening analysis was completed before events at Fukushima and Fort Calhoun Station
- No immediate safety concerns were identified
- **Note:** GI-204 has been incorporated into the tasks under the Fukushima Near-Term Task Force

Scope

- Generic Issue-204 applies to:
 - Operating nuclear power plants
 - Spent fuel pools
 - Sites undergoing decommissioning with spent fuel still in the spent fuel pools
- Related issues proposed as separate Generic Issues:
 - Effect of downstream dam failures on availability of cooling water
 - Proposed, accepted, currently undergoing screening
 - Effect of upstream dam failures on fuel facilities
 - Issue was proposed and was not accepted
 - Effect of external flooding on ISFSIs
 - Proposed, undergoing acceptance review

Plants Referenced in Screening Analysis

- **Region 1**

- Beaver Valley
- Hope Creek
- Indian Point
- Peach Bottom
- Three-Mile Island
- Vermont Yankee

- **Region III**

- Prairie Island

- **Region II**

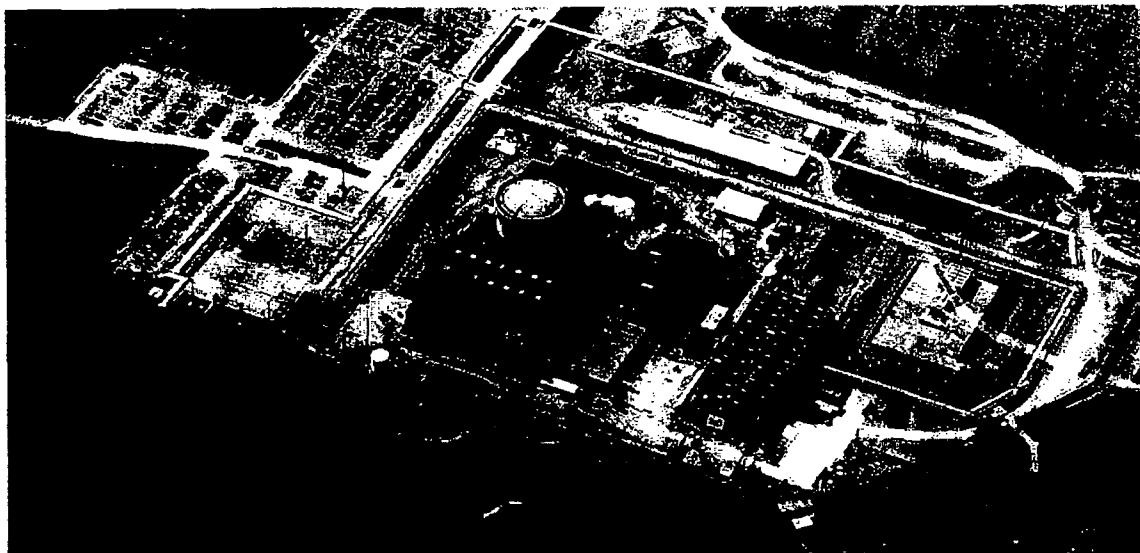
- Browns Ferry
- McGuire
- Oconee
- H.B. Robinson
- Sequoyah
- Surry
- Waterford
- Watts Bar

- **Region IV**

- Arkansas Nuclear
- Columbia
- Cooper
- South Texas
- Fort Calhoun

Part 3: Overview of screening assessment

Precursor Events: Background on Fort Calhoun and Oconee

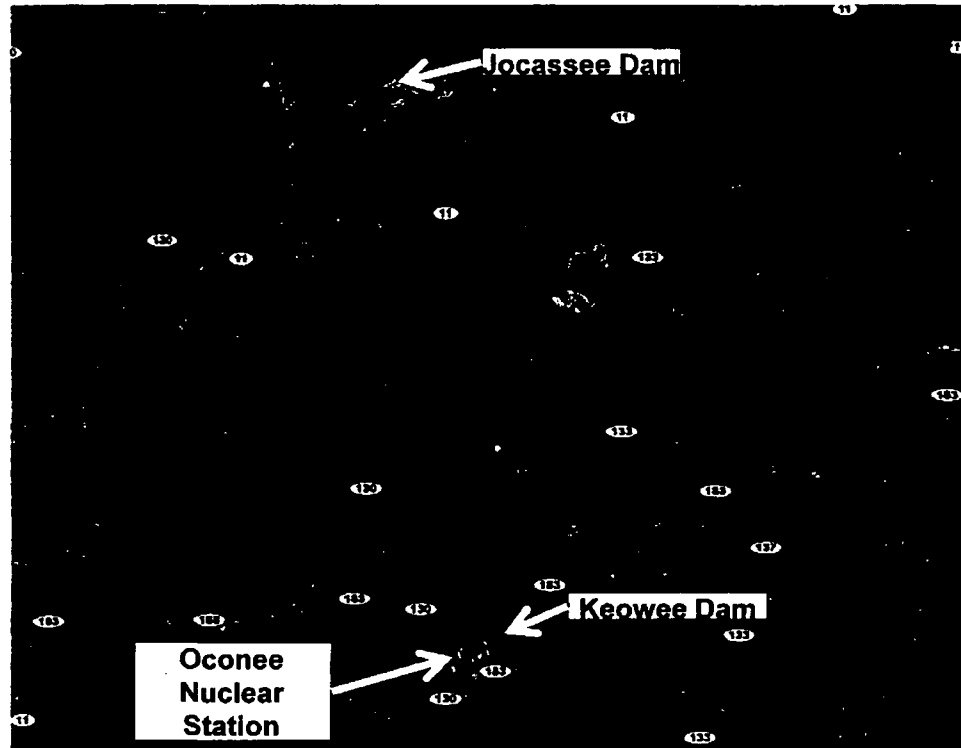


Insufficient
Procedures



Flood Barrier
Penetrations

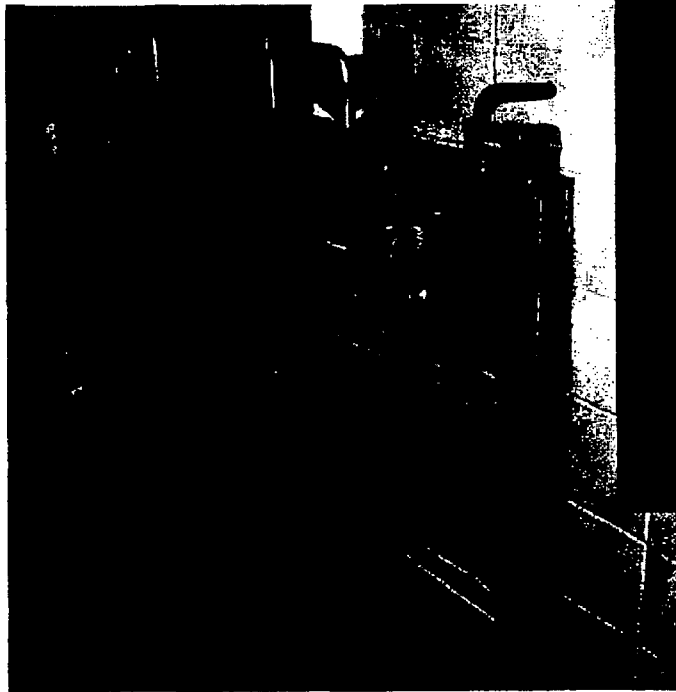
Precursor events con'd: Experience at Oconee Nuclear Station



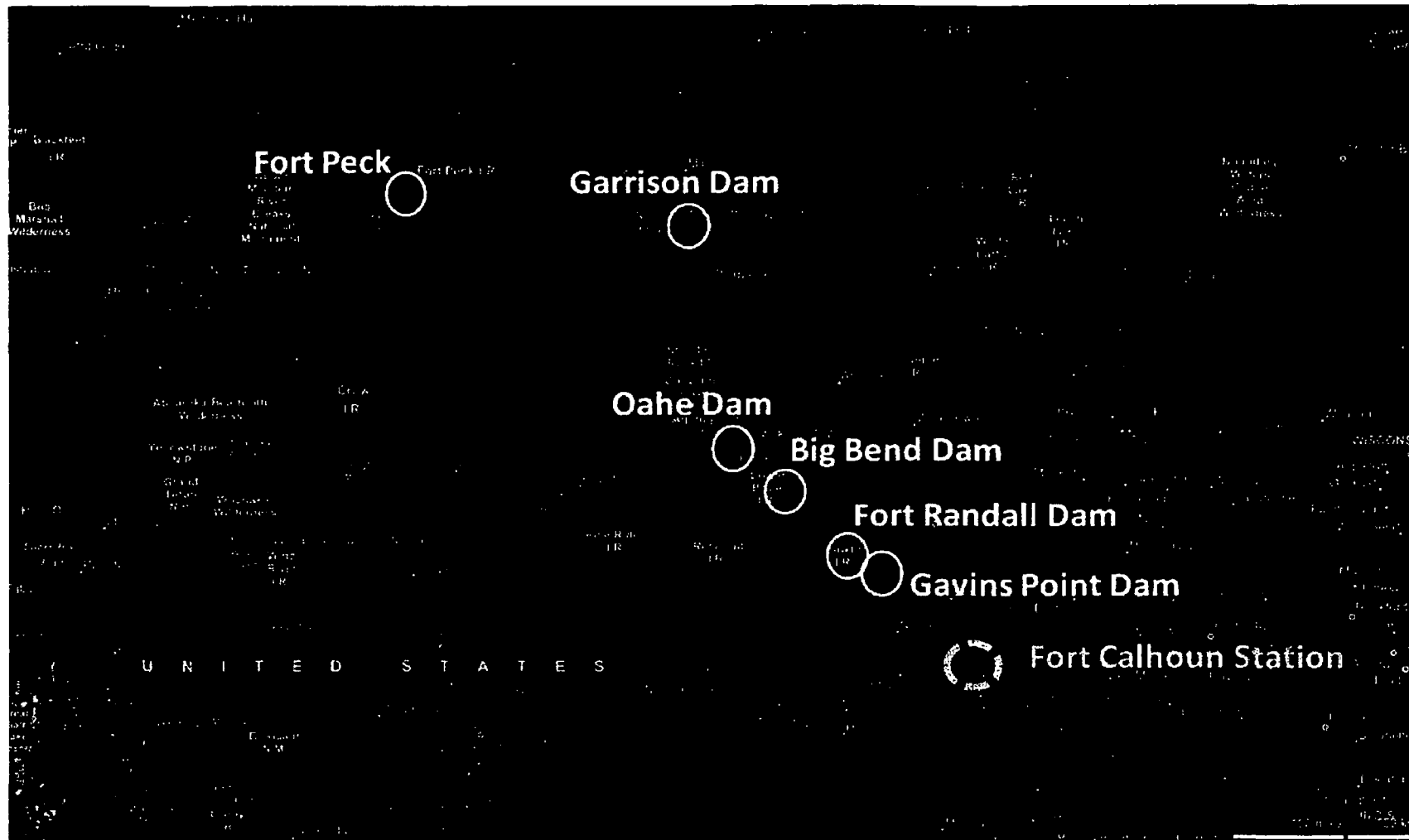
Given catastrophic dam failure, containment failure appeared likely

- LOOP
 - SSF Failure
 - Failure of Keowee Dam
- } → Degradation Timeline

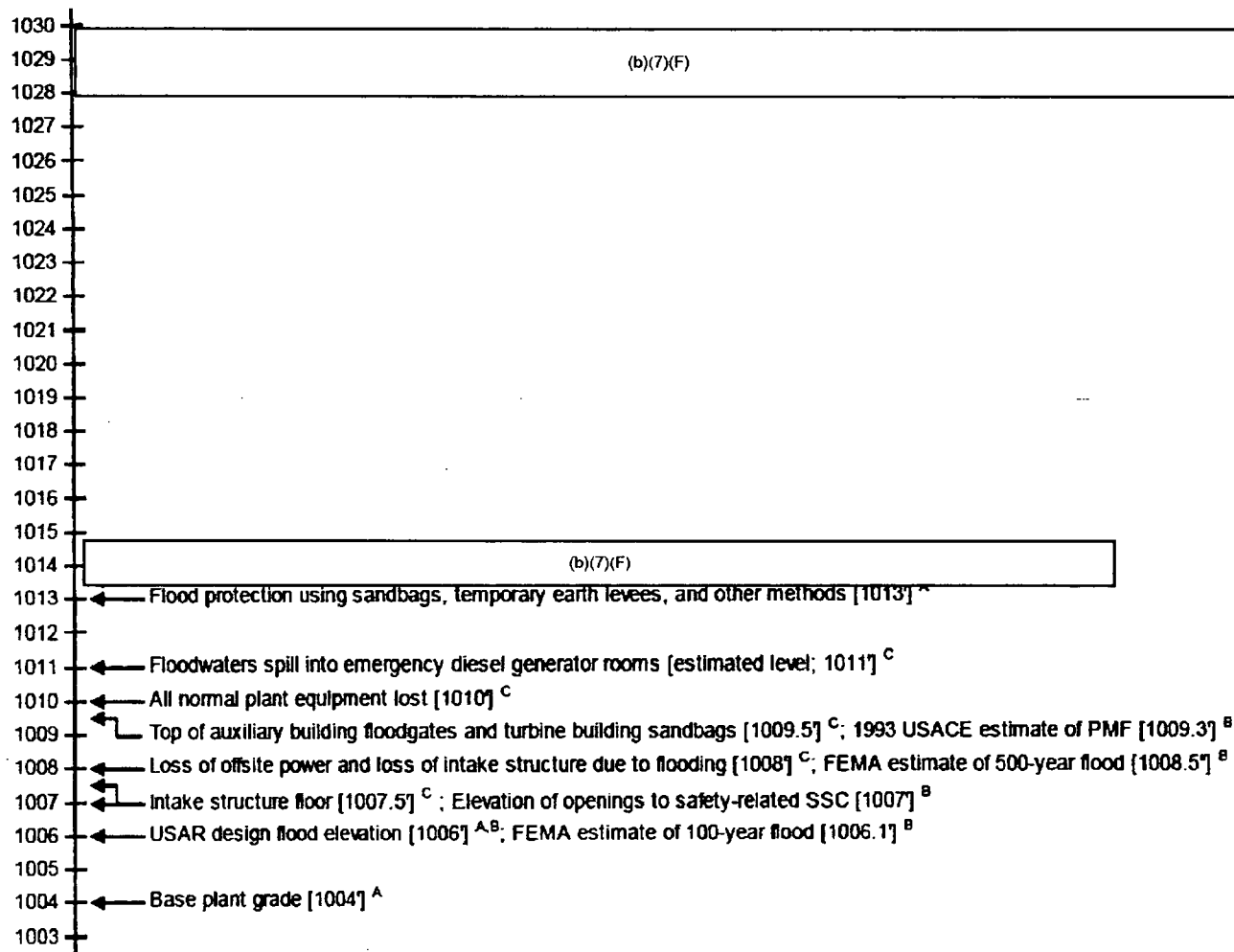
Precursor events con'd: Recent experience at Fort Calhoun



Precursor events con'd: Fort Calhoun Station Upstream Dams



Precursor events con'd: Fort Calhoun Station Flood Levels



Examination of applicability to multiple plants: General approach

Clear identification of the issue at ONS and FCS

Difficulty stating a generic class of applicable plants.

- FSAR and IPEEE did not necessarily reveal an issue
- Lack of (identified) *readily available* conclusive information

Use of “signature characteristics”

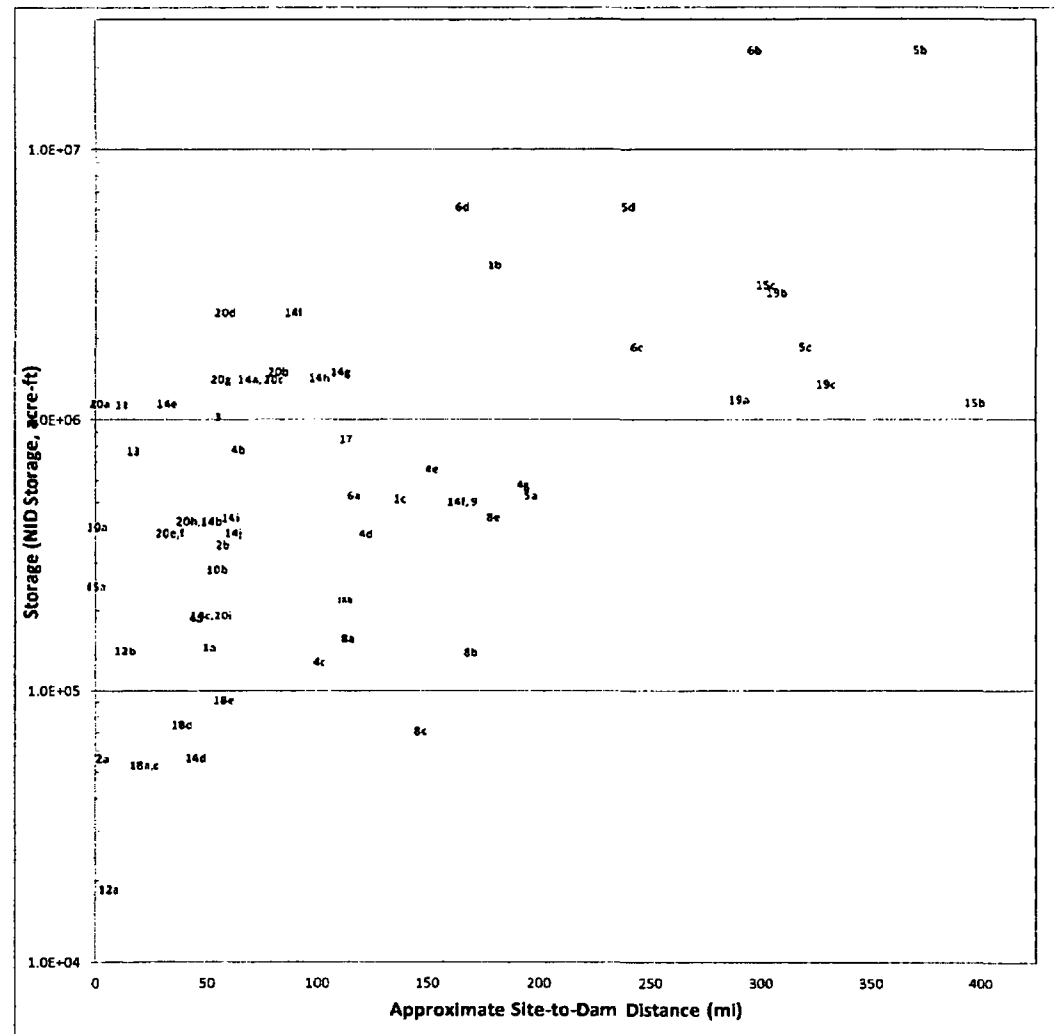
- Reliance on the placement of temporary barriers
- Challenging circumstances during flood management
- Certain features assumed to have a success probability of 1
(Dikes, levees, doors, hatches, or untested equipment)
- Limited time window for response
- Small or negative margins under less than ideal circumstances
- Significant events “screened out” where reconsideration may be appropriate
- Evaluation coincident with less than PMF

Timeline of Plan Operating License Issuance vs. Publication Dates

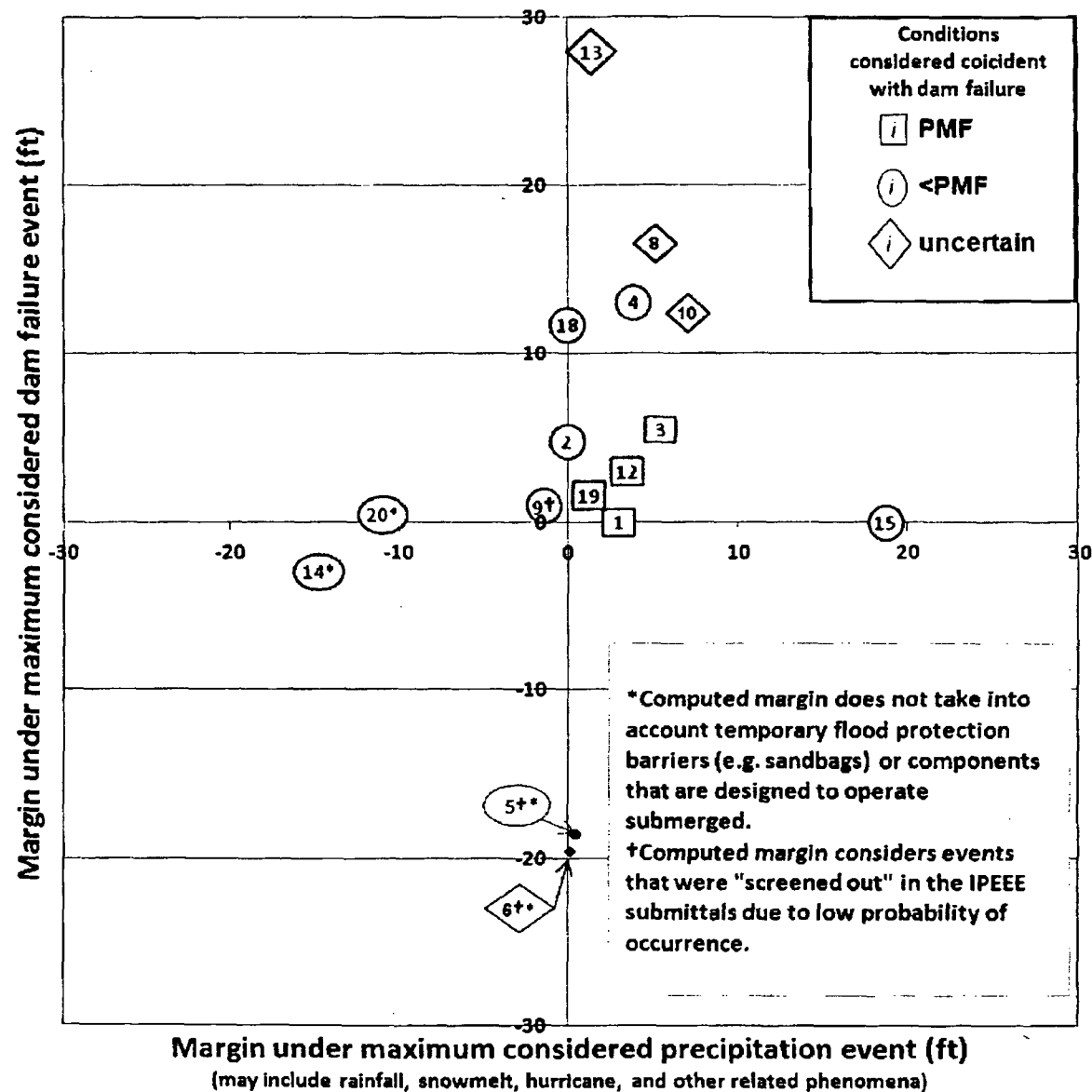
11.B. Robinson 2	1970	
	1971	10 CFR 50, Appendix A, GDC-2
Vermont Yankee, Surry 1	1972	
Fort Calhoun, Oconee 1-2, Browns Ferry 1, Peach Bottom 2, Indian Point 2, Surry 2	1973	Regulatory Guide 1.59
Arkansas Nuclear 1, Oconee 3, Browns Ferry 2, Cooper, Peach Bottom 3, Three Mile Island 1, Prairie Island 1-2	1974	
Indian Point 3	1975	Regulatory Guide 1.102; NUREG-75/087, Standard Review Plan
Beaver Valley 1, Browns Ferry 3, Salem 1	1976	ANSI Standard N170-1976/ANS 2.8; Regulatory Guide 1.59 (Revision 1); Regulatory Guide 1.102 (Revision 1)
	1977	Regulatory Guide 1.59 (Revision 2)
Arkansas Nuclear 2	1978	NUREG-75/087, Standard Review Plan (Revision 1 to Sections 2.4.2-2.4.4)
	1979	
Sequoyah 1	1980	Regulatory Guide 1.59 (Errata to Revision 2)
McGuire 1, Sequoyah 2, Salem 2	1981	NUREG-0800, formerly NUREG-75/087, Standard Review Plan (Revision 2 to Sections 2.4.2-2.4.4)
	1982	
McGuire 2	1983	
Columbia	1984	
Waterford 3	1985	
Hope Creek 1	1986	
Beaver Valley 2	1987	
South Texas 1	1988	
South Texas 2	1989	NUREG-0800, Standard Review Plan (Revision 3 to Sections 2.4.2-2.4.3)
	1990	
	1991	NUREG-1407
	1992	American National Standard ANSI/ANS-2.8-1992
Watts Bar 1	1996	
	2002	NUREG-1742
	2007	NUREG-0800, Standard Review Plan (Revision 4 to Sections 2.4.2-2.4.3, Revision 3 to Section 2.4.4)

Examination of applicability to multiple plants: Location of dams relative to NPP sites

- In the Generic Issue Proposal, 20 plants were identified
- Plant-specific documents were reviewed along with data from the National Inventory of Dams
- Key observations:
 - Many nuclear power plants are located downstream of dams
 - Dams upstream of plants have varying characteristics, sizes, capacities, purposes, and are regulated by different agencies



Margin under maximum considered precipitation event



ML112430114

Backup Slides

The Generic Issue Criteria:

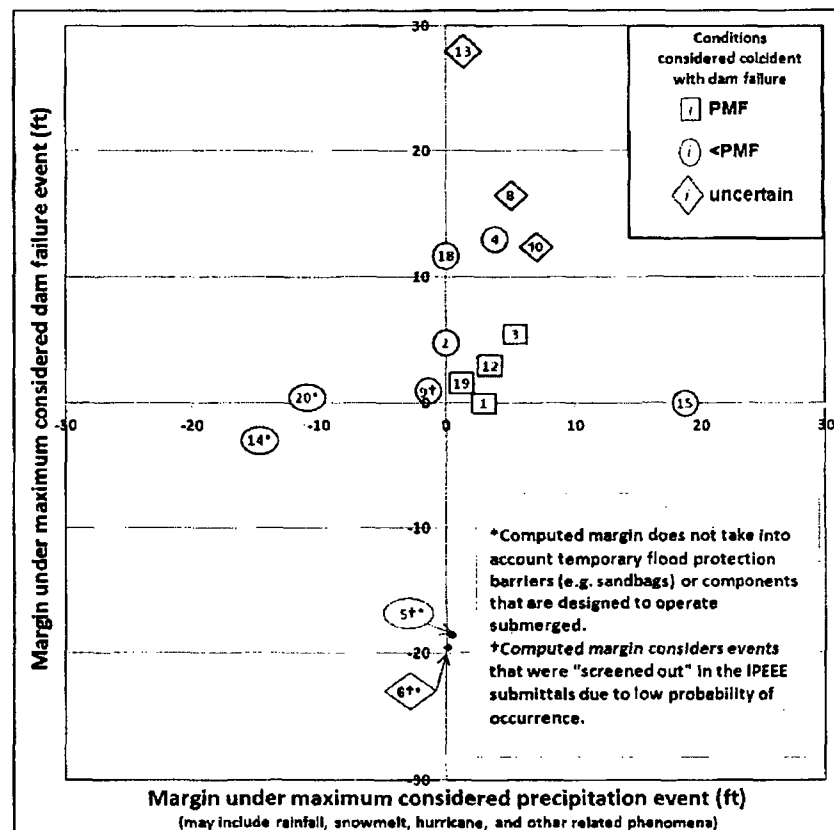
- 1 – The issue affects public health and safety, the common defense and security, or the environment
- 2 – The issue applies to two or more facilities and/or licensees/certificate holders, or holders of other regulatory approvals
- 3 – The issue cannot be readily addressed through other regulatory programs and processes; existing regulations, policies, or guidance; or voluntary industry initiatives
- 4 – The issue can be resolved by new or revised regulation, policy, or guidance
- 5 – The issue's risk or safety significance can be adequately determined (i.e., it does not involve phenomena or other uncertainties that would require long-term studies and/or experimental research to establish the risk or safety significance)
- 6 – The issue is well defined, discrete, and involves a radiological safety, security, or environmental matter
- 7 – Resolution of the issue may potentially involve review, analysis, or action by the affected licensees, certificate holders, or holders of other regulatory approvals

The Generic Issue Criteria (shorthand):

- 1 – Pose an appreciable risk to safety, security, or the environment
- 2 – Apply to two or more plants
- 3 – Cannot be readily addressed by current NRC regulatory process
- 4 – But can be addressed by an NRC regulatory process
- 5 – There has to be a way that we can calculate, estimate, or otherwise understand the risk
- 6 – You have to be able to tell us specifically what the issue is, so we know what the issue is
- 7 – Conceivably, it has to be something the licensee could address or fix

Examination of applicability to multiple plants: Margin under precipitation and dam failure events

- Calculated margin is based on several prescribed assumptions:
 - Considers largest flood elevation and smallest flood protection elevation available in reviewed NRC documents
 - Not limited to design basis events
 - Does not account for temporary protective measures or operation of submerged components
- Prescribed assumptions are based on observations about Oconee and Fort Calhoun:
 - Reliance on temporary barriers
 - Revised flood estimates that are larger than older estimates
 - Increased estimates of dam failure frequency



This figure answers the question:

What is the "margin" between the highest flood level referred to in available documents and the plant's flood protection level, when not accounting for certain measures that may have been approved during licensing?

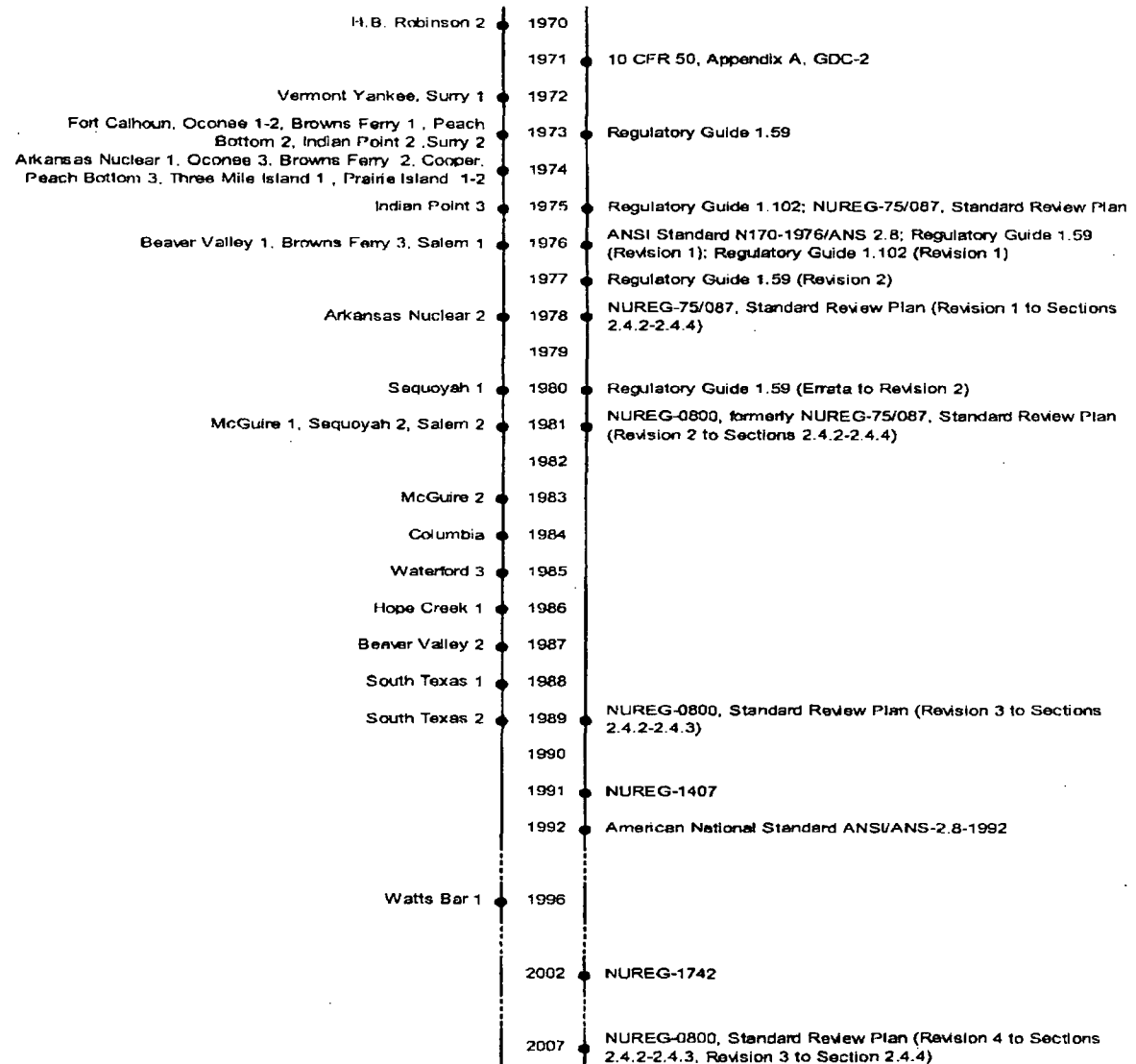
Examination of regulatory history: Operating License Issuance vs. Publication Dates

Key observations:

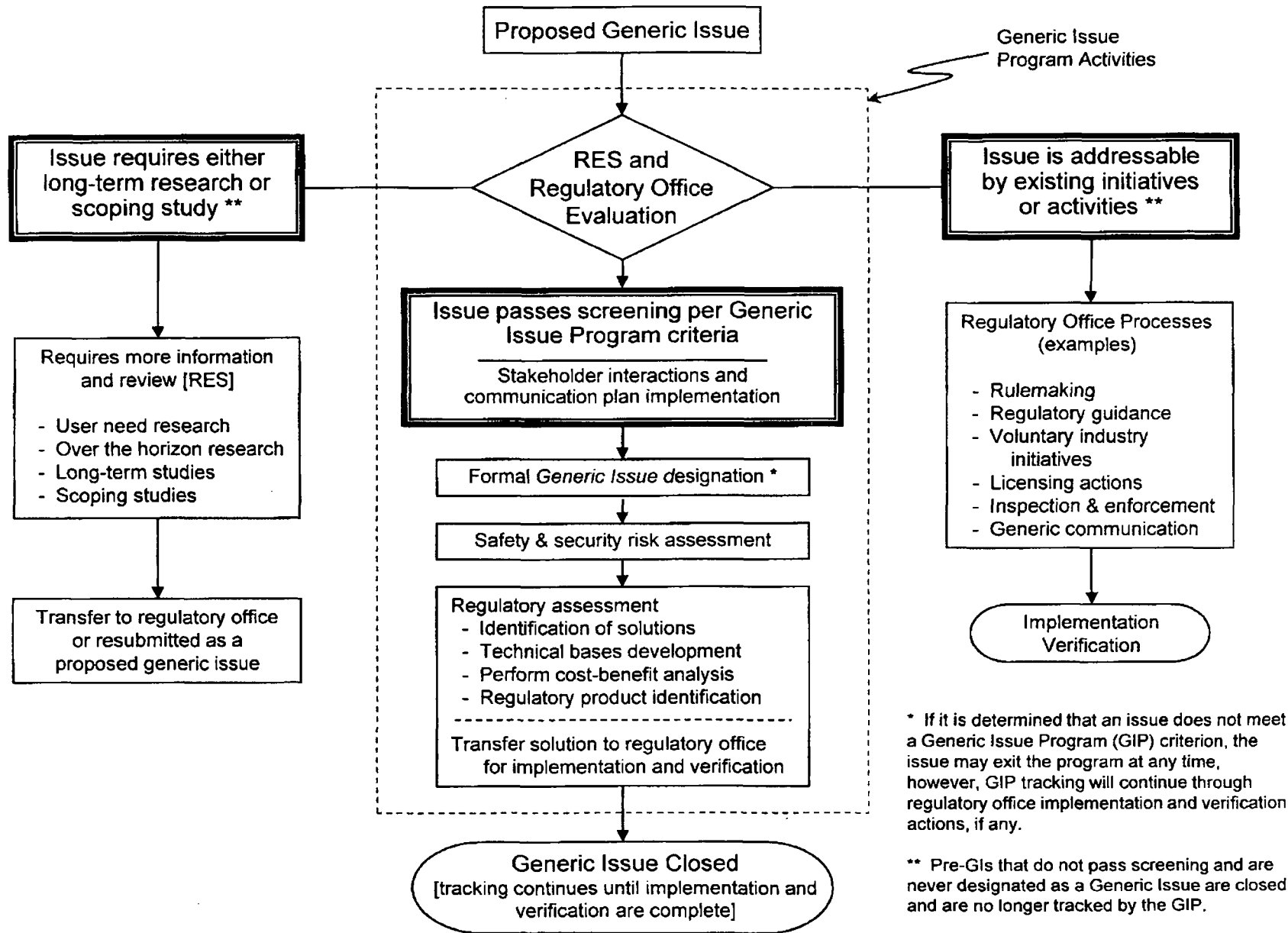
Some plants licensed before key regulatory guidance.

Regulatory guidance related to dam failures has evolved over time.

There is no regulatory requirement to re-assess plants under new/revised guidance.



Generic Issue Program in Perspective With Other Regulatory Programs and Processes



GI-204 Communication Plan

KEY MESSAGES – BACKGROUND – Q&As

You can use this document as a basis for communication with the public

- Widely coordinated throughout NRC
- Represents a coordinated, approved agency opinion

Update Strategy

- Expected to change as our knowledge changes
- Expected to change as the status changes
- We hope to receive comments from the community
- If there is a tough question we have not answered, please let us know

Please review the questions in the Q&A section

The communication plan is not a public document

- Internal coordination tool
- Many communication plans do become public information eventually