

From: [RILEY, Jim](#)
To: [Miller, Ed](#); [Cook, Christopher](#)
Cc: [Joe Bellini](#); [Dean M Hubbard](#); [Penny Selman](#); [george.attarian@pgnmail.com](#); [Rudy Gil](#); [Rich Bologna](#); [JAMES C LABORDE](#); [Michael Proctor](#); [James G Rogers](#); [Ken Huffman](#); [RILEY, Jim](#); [Kit Ng](#); [Pat Brunette](#)
Subject: Fwd: Draft Dam Failure Decision/Process Flow Chart
Date: Tuesday, June 26, 2012 10:23:02 AM
Attachments: [Dam Failure Evaluation Flowchart.pptx](#)
[ATT00001.htm](#)

Chris, Ed;

Yesterday I sent you a couple of slides on concepts for dam failure evaluations. A revised version is attached. If time permits, we would like to present this information during our call today.

Jim Riley
Sent from my iPhone

Begin forwarded message:

From: "Bellini, Joe V" <joe.bellini@amec.com>
Date: June 26, 2012 8:58:22 AM CDT
To: "RILEY, Jim" <jhr@nei.org>
Cc: "William.McSorley@exeloncorp.com" <William.McSorley@exeloncorp.com>, "Vinod.Aggarwal@exeloncorp.com" <Vinod.Aggarwal@exeloncorp.com>, "Dean Hubbard (dmhubbard@duke-energy.com)" <dmhubbard@duke-energy.com>, "pbselman@tva.gov" <pbselman@tva.gov>, "kyng@bechtel.com" <kyng@bechtel.com>, Pat Brunette <pbrunette@enercon.com>, "michael.proctor@urs.com" <michael.proctor@urs.com>
Subject: RE: Draft Dam Failure Decision/Process Flow Chart

Jim:

Penny, Dean, and I had some subsequent phone discussions and email exchanges to further refine the dam failure flow chart; see attached. If it's not too late, please send this to the NRC for today's 1:00 webinar.

Thanks.
Joe

From: Bellini, Joe V
Sent: Thursday, June 21, 2012 10:56 AM
To: 'RILEY, Jim'; 'Dean Hubbard (dmhubbard@duke-energy.com)'; 'pbselman@tva.gov'; 'kyng@bechtel.com'; 'Pat Brunette'; 'michael.proctor@urs.com'
Cc: 'William.McSorley@exeloncorp.com'; 'Vinod.Aggarwal@exeloncorp.com'
Subject: RE: Draft Dam Failure Decision/Process Flow Chart

Updated slides for today's call; I added a slide with a draft outline of the white paper.

The current version of the white paper has much of the content; it would just need to be re-organized.

Thanks.

Joe

From: Bellini, Joe V
Sent: Wednesday, June 20, 2012 8:10 PM
To: RILEY, Jim; Dean Hubbard (dmhubbard@duke-energy.com); 'pbselman@tva.gov'; 'kyng@bechtel.com'; Pat Brunette; 'michael.proctor@urs.com'
Cc: William.McSorley@exeloncorp.com; 'Vinod.Aggarwal@exeloncorp.com'
Subject: Draft Dam Failure Decision/Process Flow Chart

Attached is my 1st crack at the dam failure evaluation decision/process flow chart. This will provide the framework for the dam failure evaluation white paper that is intended to supplement NUREG/CR-7046. We can discuss this during tomorrow's teleconference.

Thanks.

Joe

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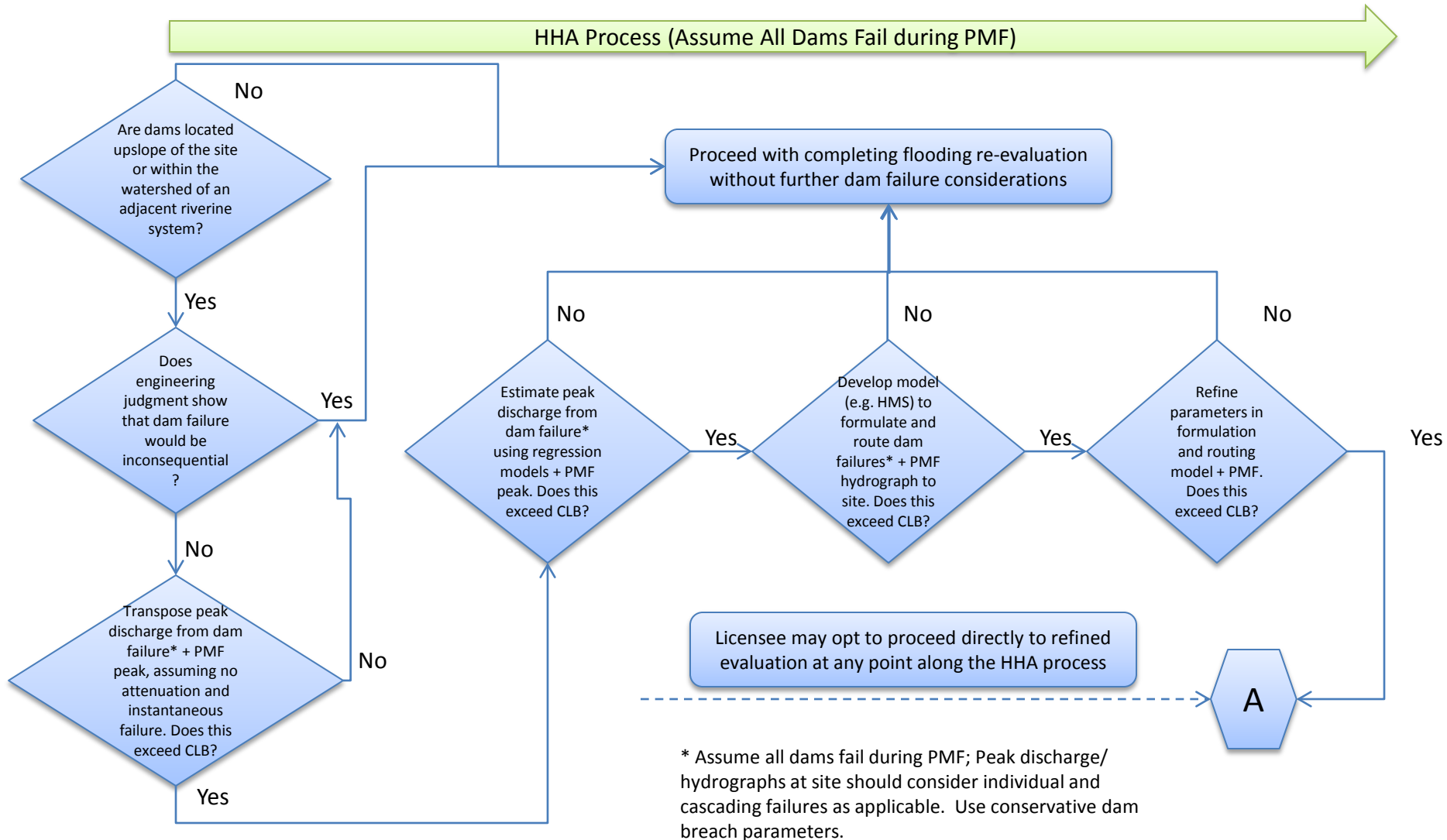


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NTTF Recommendation 2.1: Flooding Dam Failure Evaluations

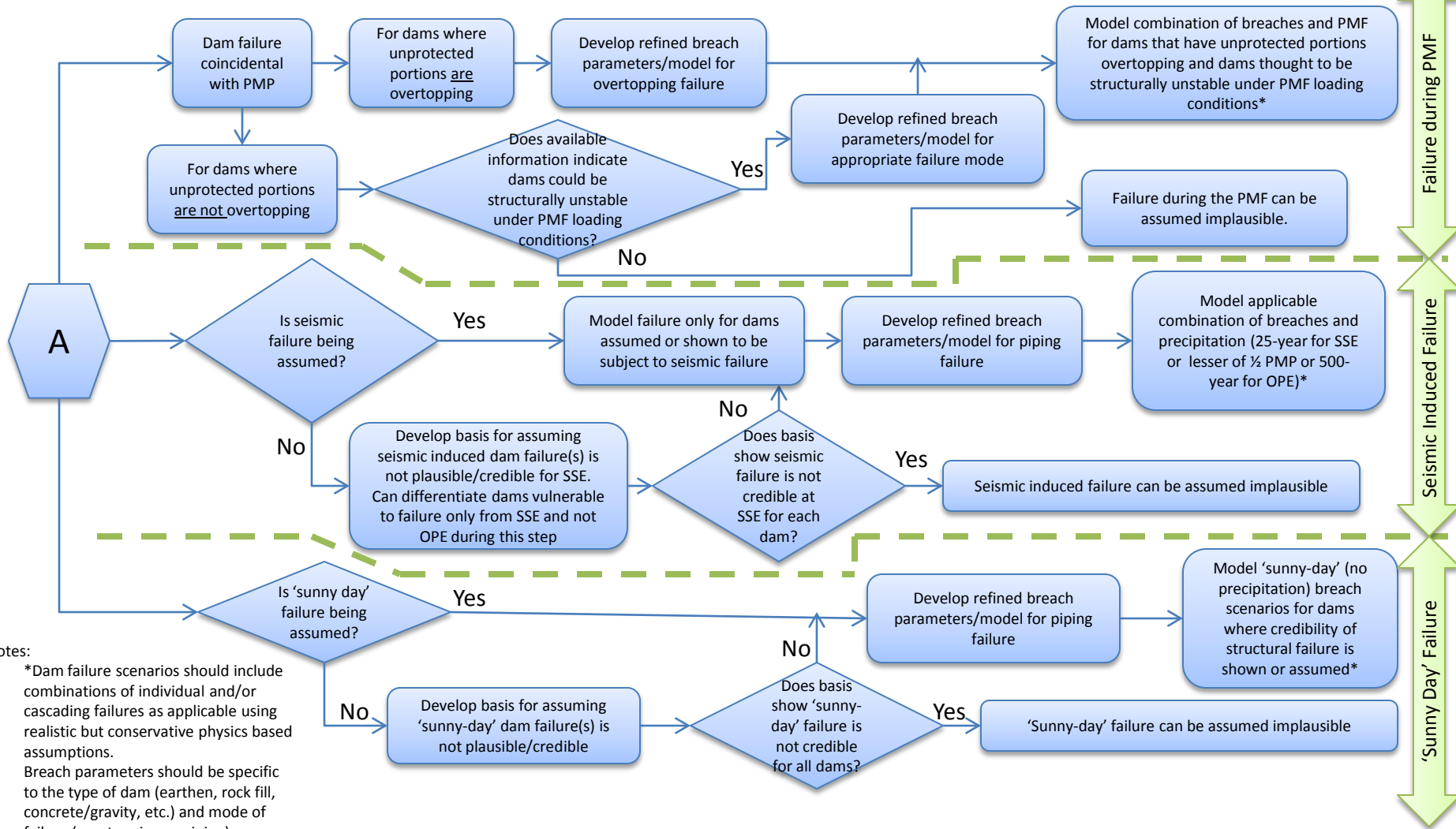
Supplemental Guidance to
NUREG/CR-7046

Dam Failure Evaluation Decision/Process Flow Chart



Dam Failure Evaluation Decision/Process Flow Chart

Refined Dam Failure Evaluation (may produce an aggregate set of dam failure scenarios)



Failure during PMF

Seismic Induced Failure

'Sunny Day' Failure

- Notes:
- *Dam failure scenarios should include combinations of individual and/or cascading failures as applicable using realistic but conservative physics based assumptions.
 - Breach parameters should be specific to the type of dam (earthen, rock fill, concrete/gravity, etc.) and mode of failure (overtopping or piping).