

Received: from igate.nrc.gov
 by nrcgwia.nrc.gov; Wed, 10 Dec 2003 11:23:24 -0500
 Received: from smtpgw3.bnl.gov (smtpgw3.bnl.gov [130.199.3.20])
 by smtp-gateway ESMTPœ id hBAGICU3011296
 for <CFS1@nrc.gov>; Wed, 10 Dec 2003 11:18:24 -0500 (EST)
 Received: from exchange02.bnl.gov ([130.199.74.18])
 by smtpgw3.bnl.gov with esmtp (Exim 3.36 #1)
 id 1AU76h-0004TC-00
 for <CFS1@nrc.gov>; Wed, 10 Dec 2003 11:22:35 -0500
 Received: by exchange02.bnl.gov with Internet Mail Service (5.5.2657.72)
 id <XNAG19YH>; Wed, 10 Dec 2003 11:18:55 -0500
 Message-ID: <1655641A03CED411BDCB0002B309452408573148@exchange02.bnl.gov>
 From: "Sullivan, Kenneth" <ks@bnl.gov>
 To: "CFS1@nrc.gov" <CFS1@nrc.gov>
 Subject: Hatch Question - multiple circuit faults
 Date: Wed, 10 Dec 2003 11:18:45 -0500
 MIME-Version: 1.0
 X-Mailer: Internet Mail Service (5.5.2657.72)
 Content-Type: text/plain;
 charset="iso-8859-1"
 X-BNL-MailScanner: Found to be clean

Caswell

To my knowledge, the Hatch Licensing Basis does not EXPLICITLY endorse the assumption that only one fire induced failure will occur as a result of fire damage. If the licensee is making this claim I would ask to see the SE. Per industry's own (NEI) inspection guidance, the SE must EXPLICITLY approve such assumptions for them to be considered part of the licensing basis.

During the inspection we had a discussion regarding multiple spurious actuations ...At that time licensing reps used words like "GL 86-10 is part of our licensing basis...based on our interpretation of GL 86-10 Q 5.3.10 we only need to assume one spurious actuation per fire event" I remember pointing out to the licensee that Q 5.3.10 is only applicable to alternative shutdown capabilities (Not III.G.2 Areas) — Just read the question....it clearly states "when considering the design of alternative shutdown..." Q 5.3.10 is an alternative shutdown design criterion (i.e., the ASD capability must be capable of mitigating one worst case spurious actuation prior to isolation of circuits at the remote SD panel) IT IS NOT A FIRE DAMAGE/CIRCUIT ANALYSIS CRITERION. Over 1600 cables were damaged at Browns Ferry...what basis would the staff have to endorse an assumption of a single failure due to fire?

Such an assumption is inconsistent with the Hatch SSAR. For Example:

Section 0 Introduction:

An analysis of each fire area was done to assure that the plant could be shut down safely using path
 1, 2, or 3 equipment, assuming a fire in that fire area and loss of all equipment and circuits in the fire

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area. If a circuit in that area was required to remain functional, it had to be either re-routed out of the fire area, have a fire rated enclosure added around the affected raceways within the area and the enclosed portion changed to an opposite shutdown path area, have a manual action to offset the loss of the circuits, or have an exemption to Appendix R requested.

0.1.5 ANALYSIS BY FIRE AREA

For a postulated fire in each area, all fire-induced circuit faults (hot shorts between multiple conductors within a single cable, open circuits, and shorts to ground) and their effects on the safe shutdown equipment identified in [the Safe Shutdown Equipment List] were determined

I can come up with more examples if needed

Ken

Mail Envelope Properties

(3FD8925D.727 : 4 : 14119)

Subject: RE: Hatch Question - multiple circuit faults
Creation Date: Thu, Dec 11, 2003 10:46 AM
From: "Sullivan, Kenneth" <ks@bnl.gov>

Created By: ks@bnl.gov

Recipients

nrc.gov
ATL_PO.ATL_DO
CFS1 (Caswell Smith)

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Files	Size	Date & Time
MESSAGE	2992	Thursday, December 11, 2003 10:46 AM
Mime.822	3959	

Options

Expiration Date: None
Priority: Standard
Reply Requested: No
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Concealed Subject: No
Security: Standard