

From: Timothy Steingass
To: Carl Lyon
Date: 4/15/05 10:28AM
Subject: RAI Writeup

Carl:

Per your request, attached is a draft version of my RAI submittal for Terence's signature. There may be minor changes and additional questions added to the draft after Terence's review.

Tim

CC: Terence Chan

MEMORANDUM TO: Lakshminaras Raghavan, Chief
Project Directorate III-I
Division of Licensing Project Management

FROM: Terence L. Chan, Chief
Piping Integrity and NDE Section
Materials and Chemical Engineering Branch
Division of Engineering

SUBJECT: REVIEW OF DONALD C. COOK UNIT 1, RELIEF REQUEST ISIR-15,
REQUEST FOR ADDITIONAL INFORMATION (TAC NO. MC6704)

The Materials and Chemical Engineering Branch, Piping Integrity and NDE Section (EMCB) has completed its review of the information provided by the licensee pertaining to the Donald C. Cook Nuclear Plant Unit 1, submitted by letter dated April 12, 2005. Indiana Michigan Power submitted Relief Request ISIR-15, requesting relief from the repair requirements of the ASME Boiler and Pressure Vessel Code pursuant to 10 CFR 50.55a(a)(3)(i). The staff requests additional information pertaining to the subject Relief Request (Attachment). We request that the information requested be provided prior to the staff's granting of relief.

Docket No.: 50-315

ATTACHMENT: Yes

CONTACT: T.K. Steingass, NRR/DE/EMCB
301-415-3312

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Docket No.: 50-315

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CONTACT: T.K. Steingass, NRR/DE/EMCB
301-415-3312

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EMCB RF CFLyon EMCB(B)

G:\DE\EMCB\Steingass\DC Cook Overlay Relief Request.wpd

OFFICE	EMCB:DE	EMCB:DE
NAME	TSteingass	TLChan
DATE	04/15/2005	04/ /2005

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OFFICE OF NUCLEAR REACTOR REGULATION
REQUEST FOR ADDITIONAL INFORMATION
RELIEF REQUEST ISIR-15
DONALD C. COOK NUCLEAR PLANT UNIT 1
INDIANA MICHIGAN POWER
DOCKET NUMBER 50-315

- 1) Please provide the axial length and dimensions of the crack in relation to the original nozzle to safe end weld 1-PZR-23. This information is necessary to determine if the application of Code Case N-504-2 is appropriate.
- 2) Please explain the controls necessary to assure the repair weld does not extend into the area of the carbon steel nozzle which is greater than 1.25" thickness.
- 3) If the repair weld extends into the carbon steel area in an area where sectional thickness is greater than 1.25" thick, please explain why the application of the pre and post weld heat treatment is unnecessary and what impact this welding may have on the material.
- 4) Please explain why Code Case N-416-1 is specified rather than Code Case N-416-2 which is currently approved under NUREG 1.147, Rev. 13. The discussion should include a comparison of limitations between the two Code Cases and why the alternative pressure test requirements provide a suitable alternative to that specified under Code Case N-504-2.
- 5) The Relief Request states that "The flaw was most likely caused by Primary Water Stress Corrosion Cracking (PWSCC). Please provide a supporting discussion to indicate why you came to this conclusion. The discussion should also address what actions were taken to assure other welds of similar design and construction do not have this defect.
- 6) The Relief Request states that the specification was 0/25%. Please identify the specific carbon content of this nozzle from the certified material test reports in case a higher carbon content nozzle was installed and accepted during original construction.
- 7) Please identify the Construction Code or Addenda applicable to the original nozzle weld or that which will govern the overall repair, rather than having to assume from the list provided in the Relief Request which listed reference applies.
- 8) Please discuss your ability to achieve the required preservice inspection examination volume (25% of base metal under overlay). The discussion should address what action will be taken if the examination volume does not get 100% coverage.
- 9) Please discuss if you are performing an Appendix VIII, Supplement 11 examination of the overlay for the examination required by N-504-2. Since there have been problems meeting the Code version of Supplement 11, if you intend to use the PDI version of Supplement 11 as an alternative, has a relief request been submitted to address this prior to obtain authorization prior to startup?

From: Terence Chan
To: TXS3@nrc.gov,CFL@nrc.gov
Date: 4/15/05 12:49PM
Subject: Re: RAI Writeup

Tim/Carl,

Let's try to separate the questions we really need for the Relief request from the global nice-to-know answers. To avoid complaints about asking questions not necessary for us to make as safety finding relative to the request, we may want to acknowledge the different categories of questions in a preface to the list of questions. Specific comments are provided below.

Q1. Ok

Q2. Change "... controls necessary ..." to "...controls provided ..."

Q3. Change "... carbon steel area in an area ..." to "... carbon steel in an area ..."

Q4. I don't understand the need for the second part of the second sentence. Since they didn't have a through-wall flaw I thought the pressure test requirement for N-504-2 was the same as N-416-1/2? Did I misread something.

Q5. Add to the third sentence "... welds of similar design and construction, and operational conditions do not have this defect.

Q6. Ok.

Q7. Ok.

Q8. Add a first sentence "The weld overlay should be designed to allow for full volume examination of the effective area of the weld overlay plus 25% of the base metal thickness under the overlay." The parenthetic in the second sentence can then be deleted.

Q9. Ok, but may not be necessary according to Fred Lyon since the licensee acknowledges that need to submit a relief to use the PDI version of Supp. 11. The fewer the questions, the better.

>>> Timothy Steingass 04/15/05 10:28 AM >>>
Carl:

Per your request, attached is a draft version of my RAI submittal for Terence's signature. There may be minor changes and additional questions added to the draft after Terence's review.

Tim

CC: whk@nrc.gov

From: Carl Lyon
To: internet:mkscarpello@aep.com
Date: 4/15/05 1:23PM
Subject: RAI Questions

All of the questions except No. 5 are considered need-to-know to make a finding on the relief request. No. 5 is a more "global" question, except as it refers to 1-PZR-23.

CC: internet:jrwaters@aep.com

Mail Envelope Properties (425FF896.D7D : 2 : 21222)

Subject: RAI Questions
Creation Date: 4/15/05 1:23PM
From: Carl Lyon

Created By: CFL@nrc.gov

Recipients	Action	Date & Time
aep.com jrwaters CC (internet:jrwaters@aep.com)	Transferred	04/15/05 01:24PM

aep.com mkscarpello (internet:mkscarpello@aep.com)	Transferred	04/15/05 01:24PM
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Post Office	Delivered	Route
aep.com		internet aep.com

Files	Size	Date & Time
MESSAGE	514	04/15/05 01:23PM
RAI.wpd	5690	04/15/05 01:18PM

Options

Auto Delete: No
Expiration Date: None
Notify Recipients: Yes
Priority: Standard
Reply Requested: No
Return Notification: None

Concealed Subject: No
Security: Standard

To Be Delivered: Immediate
Status Tracking: Delivered & Opened

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