

A-49

Kusnick, Joshua

From: Johnson, Kevin
Sent: Tuesday, August 28, 2012 10:52 AM
To: Dion, Jeanne
Cc: Rini, Brett; Csontos, Aladar
Subject: RE: Research Assistance Request

Good Morning!

A new action has been assigned to your Division:

ATMIS: 2012558

Subject: Research Assistance Request to assess the implications of the indications discovered in the Doel 3 reactor pressure vessel forgings to domestic reactor pressure vessel forgings NRR-2012-005 (RAR)

Update the FO - 9/18/2012

Please forward Patrick Hiland email to your division AAs to add to ADAMS, that will be considered our incoming for the record.

Thank you.

Kevin

One Team/One Goal

Kevin D. Johnson
Research Information Specialist
Office of Nuclear Regulatory Research
RES/PMDA/HCCB
Email: Kevin.Johnson@nrc.gov
O6A06a
Office: 301-251-7665
Cell: (b)(6)

From: Dion, Jeanne
Sent: Tuesday, August 28, 2012 8:21 AM
To: Johnson, Kevin
Cc: Rini, Brett; Csontos, Aladar
Subject: FW: Research Assistance Request

Hi Kevin,

Can you please ticket DE/Al Csontos to formulate an email response regarding NRR's research assistance request by September 18th?

The email will be from Mike Case to Pat Hiland.

Thanks,

C/666

Jeanne Dion
Technical Assistant
U.S. Nuclear Regulatory Commission
Office of Nuclear Regulatory Research
Division of Engineering
jeannedion@nrc.gov
301-251-7482

From: Case, Michael
Sent: Tuesday, August 28, 2012 7:20 AM
To: Dion, Jeanne
Cc: Rini, Brett; Sheron, Brian; Uhle, Jennifer; Richards, Stuart; Csontos, Aladar
Subject: FW: Research Assistance Request

Hi Jeanne. Can you work with the front office and ticket this back to us (CIB) for a response. Since it's a RAR, we can respond at the division level.

From: Hiland, Patrick
Sent: Monday, August 27, 2012 3:42 PM
To: Case, Michael
Cc: Richards, Stuart; Fairbanks, Carolyn; Rosenberg, Stacey; Cheok, Michael; Hardies, Robert; Dorman, Dan; Boger, Bruce; Evans, Michele
Subject: Research Assistance Request

The Office of Nuclear Reactor Regulation (NRR), Division of Engineering is requesting that the Office of Nuclear Regulatory Research (RES), Division of Engineering provide research assistance to assess the implications of the indications discovered in the Doel 3 reactor pressure vessel forgings to domestic reactor pressure vessel forgings. Specifically, NRR is requesting technical assistance in the areas of nondestructive examination (NDE) and deterministic and probabilistic fracture mechanics

In the area of NDE, NRR request technical expertise to assess the procedures, techniques, equipment, standards, qualifications, inspections, acceptance criteria and other relevant NDE variables used to examine the Doel 3 reactor pressure vessel forgings. This assistance may include contact with the licensee (Doel 3), the Belgian nuclear regulatory authority and possibly contractors. Travel to Belgium may also be necessary.

In the area of fracture mechanics, NRR requests assistance to support the Belgian regulator, FANC. FANC has requested the participation of Dr. Mark Kirk in an expert peer review panel. The peer review panel would assist the regulator in assessing the deterministic and probabilistic fracture mechanics analyses being prepared by the licensee for Doel 3. Telephone, video conference, and in-person meetings in Belgium would likely be necessary for this effort.

Also in the area of fracture mechanics, NRR requests assistance to perform analyses related to the implications of similar indications (to Doel 3) in domestic reactor pressure vessel forgings. This effort is currently less well defined. The industry has proposed performing both deterministic and probabilistic fracture mechanics analyses of generic reactor pressure vessel forgings with indications similar to those discovered in Doel 3. If the industry performs these analyses, RES would perform confirmatory analyses. In the event that industry did not perform analyses of hypothetically flawed vessels, this request would be for RES to perform research to verify the adequacy of current ASME Section III acceptance criteria for laminar flaws in reactor pressure vessel forgings by performing appropriate deterministic or probabilistic fracture mechanics analyses.