

Poehler, Jeffrey

34

**From:** Fairbanks, Carolyn  
**Sent:** Tuesday, February 12, 2013 10:28 AM  
**To:** Poehler, Jeffrey  
**Subject:** RE: Doel 3 - Tihange 2 RPV: FANC Provisional Evaluation Report

Thanks – I did not get those!

**From:** Poehler, Jeffrey  
**Sent:** Tuesday, February 12, 2013 8:18 AM  
**To:** Fairbanks, Carolyn  
**Subject:** FW: Doel 3 - Tihange 2 RPV: FANC Provisional Evaluation Report

Carolyn,

I wasn't sure you got these. These are public documents that may be useful for writing the IN.

Jeff

**From:** CREEMERS Joris [<mailto:Joris.CREEMERS@FANC.FGOV.BE>]  
**Sent:** Thursday, February 07, 2013 10:29 AM  
**To:** WERTELAERS An; [adrien.thibault@asn.fr](mailto:adrien.thibault@asn.fr); WEYN Andre; [bernhard.elsing](mailto:bernhard.elsing); [Carol.Nove@nrc.gov](mailto:Carol.Nove@nrc.gov); [drozanski@vincotte.be](mailto:drozanski@vincotte.be); ['erik.zeelenberg@lr.org](mailto:'erik.zeelenberg@lr.org); [gerard.cattiaux@irsn.fr](mailto:gerard.cattiaux@irsn.fr); [hvandriessche@vincotte.be](mailto:hvandriessche@vincotte.be); [janssens@nrg.eu](mailto:janssens@nrg.eu); [kck@kins.re.kr](mailto:kck@kins.re.kr); [martin.ryf@ensi.ch](mailto:martin.ryf@ensi.ch); [matsumoto-mitsuyoshi@jnes.go.jp](mailto:matsumoto-mitsuyoshi@jnes.go.jp); MENDOZA GOMEZ CARLOS; [Michel.bieth@ec.europa.eu](mailto:Michel.bieth@ec.europa.eu); [Olavi.Valkeajarvi@stuk.fi](mailto:Olavi.Valkeajarvi@stuk.fi); [Richard.Sundberg@ssm.se](mailto:Richard.Sundberg@ssm.se); [Robert.Hardies@nrc.gov](mailto:Robert.Hardies@nrc.gov); Tony.Wooldridge; [vincent.deledicque@belv.be](mailto:vincent.deledicque@belv.be); [A.Zeman@iaea.org](mailto:A.Zeman@iaea.org); TOMBUYES Beatrice; [bernard.monnot@irsn.fr](mailto:bernard.monnot@irsn.fr); [fvanherck@vincotte.be](mailto:fvanherck@vincotte.be); [g.diego@ciemat.es](mailto:g.diego@ciemat.es); [Gareth.Hopkin@hse.gsi.gov.uk](mailto:Gareth.Hopkin@hse.gsi.gov.uk); [Jeffrey.Poehler@nrc.gov](mailto:Jeffrey.Poehler@nrc.gov); [jesus.lq@ciemat.es](mailto:jesus.lq@ciemat.es); [kanno-masanori@jnes.go.jp](mailto:kanno-masanori@jnes.go.jp); [marc.deprez@belv.be](mailto:marc.deprez@belv.be); [marc.pic@asn.fr](mailto:marc.pic@asn.fr); [Peter.Ekstrom@ssm.se](mailto:Peter.Ekstrom@ssm.se); [Ralf.ahlstrand@ec.europa.eu](mailto:Ralf.ahlstrand@ec.europa.eu); [sebastien.crombez@asn.fr](mailto:sebastien.crombez@asn.fr); [Stephen.Druce@hse.gsi.gov.uk](mailto:Stephen.Druce@hse.gsi.gov.uk); [Uwe.Jendrich@grs.de](mailto:Uwe.Jendrich@grs.de); [ybkim@kins.re.kr](mailto:ybkim@kins.re.kr); [Bjorn.Brickstad@ssm.se](mailto:Bjorn.Brickstad@ssm.se); [bsf@csn.es](mailto:bsf@csn.es); [car@csn.es](mailto:car@csn.es); [Daniel.kjellin@ssm.se](mailto:Daniel.kjellin@ssm.se); [francois.balestreri@irsn.fr](mailto:francois.balestreri@irsn.fr); [Gary.Stevens@nrc.gov](mailto:Gary.Stevens@nrc.gov); [guy.roussel@Belv.be](mailto:guy.roussel@Belv.be); [hasegawa-kunio@jnes.go.jp](mailto:hasegawa-kunio@jnes.go.jp); [igor.simonovski@ec.europa.eu](mailto:igor.simonovski@ec.europa.eu); [John.Highton@hse.gsi.gov.uk](mailto:John.Highton@hse.gsi.gov.uk); [Juergen.Sievers@grs.de](mailto:Juergen.Sievers@grs.de); OULIDDREN Kamreddine; [Ki-Sig.KANG@iaea.org](mailto:Ki-Sig.KANG@iaea.org); [Klaus.Germerdonk@ensi.ch](mailto:Klaus.Germerdonk@ensi.ch); [laurent.streibig@asn.fr](mailto:laurent.streibig@asn.fr); [Lutz.lindhorst@ilent.nl](mailto:Lutz.lindhorst@ilent.nl); [Nancy.SALGADO@oecd.org](mailto:Nancy.SALGADO@oecd.org); [sangmin.lee@kins.re.kr](mailto:sangmin.lee@kins.re.kr); [Benoit.ZERGER@ec.europa.eu](mailto:Benoit.ZERGER@ec.europa.eu); [daniel.marloye@belv.be](mailto:daniel.marloye@belv.be); [Frank.Michel@grs.de](mailto:Frank.Michel@grs.de); [Martti.Vilpas@stuk.fi](mailto:Martti.Vilpas@stuk.fi); [petteri.tiippana@stuk.fi](mailto:petteri.tiippana@stuk.fi); [pierre.briegleb@belv.be](mailto:pierre.briegleb@belv.be); SCHRAUBEN Manfred; [simon.hoebeeck@belv.be](mailto:simon.hoebeeck@belv.be); [tomita-kazuhide@jnes.go.jp](mailto:tomita-kazuhide@jnes.go.jp); BENS Jan; Dirk Vandepitte; William D'haeseleer; [jvereck@vub.ac.be](mailto:jvereck@vub.ac.be); [michel.giot@uclouvain.be](mailto:michel.giot@uclouvain.be); [mscibett@sckcen.be](mailto:mscibett@sckcen.be); [rchaouad@sckcen.be](mailto:rchaouad@sckcen.be); [thomas.pardoen@uclouvain.be](mailto:thomas.pardoen@uclouvain.be); Ludovic Noels; [rudi.denys@ugent.be](mailto:rudi.denys@ugent.be); Tim Williams; Martens Benedikt; [helmut.Schulz.krtn@t-online.de](mailto:helmut.Schulz.krtn@t-online.de); [andre.pineau@mines-paristech.fr](mailto:andre.pineau@mines-paristech.fr); [Kim.Wallin@vtt.fi](mailto:Kim.Wallin@vtt.fi); [stvim@ims.bas.bg](mailto:stvim@ims.bas.bg); [ki-sig.kang@iaea.org](mailto:ki-sig.kang@iaea.org); [Alejandro.HUERTA@oecd.org](mailto:Alejandro.HUERTA@oecd.org); Labeau Pierre-Etienne; Kirk, Mark; 'Benoît DE BOECK'; TOMBUYES Beatrice; OULIDDREN Kamreddine  
**Cc:** FAIDHERBE Céline  
**Subject:** RE: Doel 3 - Tihange 2 RPV: FANC Provisional Evaluation Report

Dear all,

With this message, we would like to inform you that today the Provisional Evaluation Report on the Doel 3 and Tihange 2 RPV issue was published on our public website.

You can find the report and its supporting documents (all in English) on the following webpage:  
<http://www.fanc.fgov.be/nl/page/dossier-pressure-vessel-doel-3-tihange-2/1488.aspx> (Dutch)  
<http://www.fanc.fgov.be/fr/page/dossier-pressure-vessel-doel-3-tihange-2/1488.aspx> (French)

Direct link to the Provisional Evaluation Report (in English):  
<http://www.fanc.fgov.be/GED/00000000/3300/3391.pdf>

Best regards,

Joris Creemers  
Federal Agency for Nuclear Control

**From:** WERTELAERS An

**Sent:** 01 February 2013 17:08

**To:** 'adrien.thibault@asn.fr'; WEYN Andre; 'bernhard.elsing'; 'Carol.Nove@nrc.gov'; 'drozanski@vincotte.be'; 'erik.zeelenberg@lr.org'; 'gerard.cattiaux@irsn.fr'; 'hvandriessche@vincotte.be'; 'janssens@nrg.eu'; 'kck@kins.re.kr'; 'martin.ryf@ensi.ch'; 'matsumoto-mitsuyoshi@jnes.go.jp'; 'MENDOZA GOMEZ CARLOS'; 'Michel.bieth@ec.europa.eu'; 'Olavi.Valkeajarvi@stuk.fi'; 'Richard.Sundberg@ssm.se'; 'Robert.Hardies@nrc.gov'; 'Tony.Wooldridge'; 'vincent.deledicque@belv.be'; 'A.Zeman@iaea.org'; TOMBUYES Beatrice; 'bernard.monnot@irsn.fr'; 'fvanherck@vincotte.be'; 'g.diego@ciemat.es'; 'Gareth.Hopkin@hse.gsi.gov.uk'; 'Jeffrey.Poehler@nrc.gov'; 'jesus.lg@ciemat.es'; 'kanno-masanori@jnes.go.jp'; 'marc.deprez@belv.be'; 'marc.pic@asn.fr'; 'Peter.Ekstrom@ssm.se'; 'Ralf.ahlstrand@ec.europa.eu'; 'sebastien.crombez@asn.fr'; 'Stephen.Druce@hse.gsi.gov.uk'; 'Uwe.Jendrich@grs.de'; 'ybkim@kins.re.kr'; 'Bjorn.Brickstad@ssm.se'; 'bsf@csn.es'; 'car@csn.es'; 'Daniel.kjellin@ssm.se'; 'francois.balestreri@irsn.fr'; 'Gary.Stevens@nrc.gov'; 'guy.roussel@Belv.be'; 'hasegawa-kunio@jnes.go.jp'; 'igor.simonovski@ec.europa.eu'; 'John.Highton@hse.gsi.gov.uk'; 'Juergen.Sievers@grs.de'; OULIDDREN Kamreddine; 'Ki-Sig.KANG@iaea.org'; 'Klaus.Germerdonk@ensi.ch'; 'laurent.streibig@asn.fr'; 'Lutz.lindhorst@ilent.nl'; 'Nancy.SALGADO@oecd.org'; 'sangmin.lee@kins.re.kr'; 'Benoit.ZERGER@ec.europa.eu'; CREEMERS Joris; 'daniel.marloye@belv.be'; 'Frank.Michel@grs.de'; 'Martti.Vilpas@stuk.fi'; 'petteri.tiippana@stuk.fi'; 'pierre.briegleb@belv.be'; SCHRAUBEN Manfred; 'simon.hoebeeck@belv.be'; 'tomita-kazuhide@jnes.go.jp'; WERTELAERS An; BENS Jan; 'Dirk Vandepitte'; 'William D'haeseleer'; [jvereck@vub.ac.be](mailto:jvereck@vub.ac.be); [michel.giot@uclouvain.be](mailto:michel.giot@uclouvain.be); [mscibett@sckcen.be](mailto:mscibett@sckcen.be); [rchaouad@sckcen.be](mailto:rchaouad@sckcen.be); [thomas.pardoen@uclouvain.be](mailto:thomas.pardoen@uclouvain.be); Ludovic Noels; [rudi.denys@ugent.be](mailto:rudi.denys@ugent.be); Tim Williams; 'Martens Benedikt'; [helmut.Schulz.krt@t-online.de](mailto:helmut.Schulz.krt@t-online.de); [andre.pineau@mines-paristech.fr](mailto:andre.pineau@mines-paristech.fr); [Kim.Wallin@ytt.fi](mailto:Kim.Wallin@ytt.fi); [stvims@ims.bas.bg](mailto:stvims@ims.bas.bg); [ki-sig.kang@iaea.org](mailto:ki-sig.kang@iaea.org); [Alejandro.HUERTA@oecd.org](mailto:Alejandro.HUERTA@oecd.org); 'Labeau Pierre-Etienne'; [Mark.Kirk@nrc.gov](mailto:Mark.Kirk@nrc.gov); 'Benoît DE BOECK'; TOMBUYES Beatrice; OULIDDREN Kamreddine

**Cc:** FAIDHERBE Céline

**Subject:** Doel 3 - Tihange 2 RPV: FANC Provisional Evaluation Report

**Importance:** High

Dear all,

On behalf of the Federal Agency for Nuclear Control I would like to inform you that the FANC has issued a Provisional Evaluation Report on the Doel 3 and Tihange 2 RPV issue. In attachment you can find a copy of this report.

The main conclusions of this report are as follows:

*The Federal Agency for Nuclear Control received on 5 December 2012 two Safety Case reports on the flaw indications found in the Doel 3 and Tihange 2 reactor pressure vessels.*

*Based on the data provided these Safety Case Reports and the conclusions released by Bel V, AIB-Vincotte and the national and international experts groups, the Federal Agency for Nuclear Control has drawn its conclusions which can be found in the Provisional Evaluation Report in attachment.*

*Along the assessment process, a number of open issues were identified about the suitability of the in-service inspection technique, the possible evolution of the flaws during future operation, the characterization of the material properties, and the structural integrity of the reactor pressure vessels under penalizing loadings.*

*In the current state of knowledge and given the available data, these open issues do not represent conditions that require a definitive shutdown of the Doel 3 and Tihange 2 reactor units.*

*However, these open issues lead to some uncertainties that might reduce the conservatism of the licensee's safety demonstration and hence impair the level of confidence in the safe operability of the reactor units in question. As a consequence, the Federal Agency for Nuclear Control considers that, in the current state, the Doel 3 and Tihange 2 reactor units may only restart after the requirements listed in the present Evaluation Report are fulfilled by the licensee.*

*The licensee shall therefore elaborate an action plan to meet those requirements, including a methodology and associated acceptance criteria where applicable. This action plan shall be approved by the Belgian nuclear safety authority.*

*Once the licensee has implemented its action plan, the FANC, together with Bel V and AIB-Vinçotte, will evaluate whether all the safety concerns at the origin of the requirements are solved and whether the related reservations can be lifted. On this basis, the FANC will motivate its decision about the possible restart of the Doel 3 and Tihange 2 reactor units in a subsequent final evaluation report.*

As the FANC Provisional Evaluation Report has not yet been made public, we would like you to ask to treat this document with the necessary confidentiality. This means further distribution or disclosure of this report is not allowed to third parties without approval of the FANC. However, on the FANC website ([www.fanc.fgov.be](http://www.fanc.fgov.be)) a summary of this report ("technical information note") has been made public today, which can be freely distributed.

Best regards

An