

## KHNPDCDRAIsPEm Resource

---

**From:** Ciocco, Jeff  
**Sent:** Tuesday, August 25, 2015 10:29 AM  
**To:** apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; Harry (Hyun Seung) Chang; Andy Jiyong Oh; James Ross  
**Cc:** Downey, Steven; Mitchell, Matthew; Ward, William; Lee, Samuel  
**Subject:** APR1400 Design Certification Application RAI 169-8162 (05.03.02 - Pressure-Temperature Limits, Upper-Shelf Energy, and Pressurized Thermal Shock)  
**Attachments:** APR1400 DC RAI 169 MCB 8162.pdf; image001.jpg

KHNP,

The attachment contains the subject request for additional information (RAI). This RAI was sent to you in draft form. Your licensing review schedule assumes technically correct and complete responses within 30 days of receipt of RAIs.

Please submit your RAI response to the NRC Document Control Desk.

Thank you,

Jeff Ciocco  
New Nuclear Reactor Licensing  
301.415.6391  
[jeff.ciocco@nrc.gov](mailto:jeff.ciocco@nrc.gov)



**Hearing Identifier:** KHNP\_APR1400\_DCD\_RAI\_Public  
**Email Number:** 218

**Mail Envelope Properties** (e7af7758208d4d078759995b08d82387)

**Subject:** APR1400 Design Certification Application RAI 169-8162 (05.03.02 - Pressure-Temperature Limits, Upper-Shelf Energy, and Pressurized Thermal Shock)  
**Sent Date:** 8/25/2015 10:28:57 AM  
**Received Date:** 8/25/2015 10:28:58 AM  
**From:** Ciocco, Jeff

**Created By:** Jeff.Ciocco@nrc.gov

**Recipients:**

"Downey, Steven" <Steven.Downey@nrc.gov>  
Tracking Status: None  
"Mitchell, Matthew" <Matthew.Mitchell@nrc.gov>  
Tracking Status: None  
"Ward, William" <William.Ward@nrc.gov>  
Tracking Status: None  
"Lee, Samuel" <Samuel.Lee@nrc.gov>  
Tracking Status: None  
"apr1400rai@khnp.co.kr" <apr1400rai@khnp.co.kr>  
Tracking Status: None  
"KHNPDCDRAIsPEM Resource" <KHNPDCDRAIsPEM.Resource@nrc.gov>  
Tracking Status: None  
"Harry (Hyun Seung) Chang" <hyunseung.chang@gmail.com>  
Tracking Status: None  
"Andy Jiyong Oh" <jiyong.oh5@gmail.com>  
Tracking Status: None  
"James Ross" <james.ross@aecom.com>  
Tracking Status: None

**Post Office:** HQPWMSMRS08.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	520	8/25/2015 10:28:58 AM
APR1400 DC RAI 169 MCB 8162.pdf		82309
image001.jpg	5040	

**Options**

**Priority:** Standard  
**Return Notification:** No  
**Reply Requested:** No  
**Sensitivity:** Normal  
**Expiration Date:**  
**Recipients Received:**

## REQUEST FOR ADDITIONAL INFORMATION 169-8162

Issue Date: 08/25/2015

Application Title: APR1400 Design Certification Review – 52-046

Operating Company: Korea Hydro & Nuclear Power Co. Ltd.

Docket No. 52-046

Review Section: 05.03.02 - Pressure-Temperature Limits, Upper-Shelf Energy, and Pressurized Thermal Shock

Application Section: Technical Report APR1400-Z-M-NR-14008-P

### QUESTIONS

05.03.02-1

In Enclosures 2 (proprietary) and 3 (ML15198A559) to the letter dated July 17, 2015 (ML15198A557), the applicant provided the data points (pressure and temperature) for all operating limit curves in the PTLR (Technical Report APR1400-Z-M-NR-14008-P). To enable the staff to complete its review, please provide the stress intensity factors used to determine the allowable pressures corresponding to all points with a temperature greater than 70 degrees Fahrenheit on the heatup, core critical, cooldown, flange heatup, and Inservice Leak and Hydrotest (ISLH) curves.

