

## **KHNPDCDRAIsPEm Resource**

---

**From:** Ciocco, Jeff  
**Sent:** Thursday, April 14, 2016 12:48 PM  
**To:** apr1400rai@khnp.co.kr; KHNPDCDRAIsPEm Resource; Jung-ho Kim (jhokim082@gmail.com); Andy Jiyong Oh; Christopher Tyree  
**Cc:** Dinh, Thinh; Dias, Antonio; Wunder, George; Williams, Donna; Umana, Jessica  
**Subject:** APR1400 Design Certification Application RAI 459-8573 (09.05.04 - Emergency Diesel Engine Fuel Oil Storage and Transfer System)  
**Attachments:** APR1400 DC RAI 459 SPSB 8573.pdf

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. However, KHNP requests, and we grant, 45 days to respond to this RAI. We may adjust the schedule accordingly.

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:** 511

**Mail Envelope Properties** (11bc373b968e421a9f0bdd3fd463fa01)

**Subject:** APR1400 Design Certification Application RAI 459-8573 (09.05.04 - Emergency Diesel Engine Fuel Oil Storage and Transfer System)  
**Sent Date:** 4/14/2016 12:48:20 PM  
**Received Date:** 4/14/2016 12:48:21 PM  
**From:** Ciocco, Jeff

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

**Recipients:**

"Dinh, Think" <Think.Dinh@nrc.gov>  
Tracking Status: None  
"Dias, Antonio" <Antonio.Dias@nrc.gov>  
Tracking Status: None  
"Wunder, George" <George.Wunder@nrc.gov>  
Tracking Status: None  
"Williams, Donna" <Donna.Williams@nrc.gov>  
Tracking Status: None  
"Umana, Jessica" <Jessica.Umana@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  
"JungHo Kim (jhokim082@gmail.com)" <jhokim082@gmail.com>  
Tracking Status: None  
"Andy Jiyong Oh" <jiyong.oh5@gmail.com>  
Tracking Status: None  
"Christopher Tyree" <Christopher.tyree@aecom.com>  
Tracking Status: None

**Post Office:** HQPWMSMRS07.nrc.gov

<b>Files</b>	<b>Size</b>	<b>Date &amp; Time</b>
MESSAGE	608	4/14/2016 12:48:21 PM
APR1400 DC RAI 459 SPSB 8573.pdf		94648
image001.jpg	5040	

**Options**

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

## REQUEST FOR ADDITIONAL INFORMATION 459-8573

Issue Date: 04/14/2016

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 09.05.04 - Emergency Diesel Engine Fuel Oil Storage and Transfer System

Application Section:

### QUESTIONS

09.05.04-14

In response to RAI 152-8006, Question 09.05.04-5, the applicant stated that the capacity of the fuel oil storage tank, fuel oil transfer pump, and fuel oil day tank will be based on the fuel consumption rate provided by the Emergency Diesel Generator (EDG) supplier. Consequently, the fuel consumption rates and capacity information were deleted from Table 9.5.4-1. The deletion of this information, however, does not address the original RAI question as to how design commitments can be verified against as-built configurations via inspection, tests, analyses, and acceptance criteria (ITAAC). Therefore, the applicant is requested to identify the designed fuel consumption rates and capacity of the fuel oil storage tank, fuel oil transfer pump, and fuel oil day tank in Table 9.5.4-1 and to provide the proper acceptance criteria in Table 2.6.2-3 (ITAAC) to confirm that the as-built conditions meet the design commitments. The reference to a future EDG-supplier report is not the proper acceptance criteria to be used in an ITAAC.



**U.S.NRC**

United States Nuclear Regulatory Commission

*Protecting People and the Environment*