

## **KHNPDCDRAIsPEm Resource**

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**From:** Ciocco, Jeff  
**Sent:** Wednesday, February 03, 2016 11:21 AM  
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**Cc:** Budzynski, John; Karas, Rebecca; Steckel, James; Lee, Samuel  
**Subject:** APR1400 Design Certification Application RAI 397-8519 (15.00.02 - Review of Transient and Accident Analysis Methods 01/2006)  
**Attachments:** APR1400 DC RAI 397 SRSB 8519.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.

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

Thank you,

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**Hearing Identifier:** KHNP\_APR1400\_DCD\_RAI\_Public  
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## REQUEST FOR ADDITIONAL INFORMATION 397-8519

Issue Date: 02/03/2016

Application Title: APR1400 Design Certification Review – 52-046

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

Docket No. 52-046

Review Section: 15.00.02 - Review of Transient and Accident Analysis Methods 01/2006

Application Section: 15.0.2

### QUESTIONS

15.00.02-5

Item (A) in Section II.1 of the SRP for 15.0.2 states that the documentation must include “An overview of the evaluation model which provides a clear roadmap describing all parts of the evaluation model, the relationships between them, and where they are located in the documentation.”

Sections 2.5.2 and 3.2 of technical report APR1400-Z-A-NR-14006-P do not specifically identify any Chapter 15 non-LOCA safety analysis applications for COAST. Section 5 of the technical report does not identify COAST being used in combination with any other code. The technical report does not discuss any application of COAST except as an independent computer program used to verify CESEC-III. However, Figure 2.6-3 of the technical report shows COAST being used to calculate time-variant core flow rate that is input into HERMITE as part of the analysis process for a single RCP rotor seizure event. However, Section 15.3.3.3 of the APR1400 DCD does not identify the use of COAST for a single RCP rotor seizure analysis. The inconsistencies between information in various sections of the technical report and APR1400 DCD Section 15.3 has caused NRC staff to question how COAST is used in the analysis of the APR1400. NRC staff requests that the DCD and APR1400-Z-A-NR-14006-P be updated as appropriate to accurately and consistently reflect the use of COAST in transient analyses of the APR1400.



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