

RESPONSE TO AUDIT ISSUES

APR1400 Topical Reports

Korea Electric Power Corporation / Korea Hydro & Nuclear Power Co., LTD

Docket No. PROJ0782

Review Section	TR Realistic Evaluation Methodology for LBLOCA of the APR1400
Application Section	Topical Report: APR1400-F-A-TR-12004 Realistic Evaluation Methodology for Large-Break LOCA of the APR1400
Issue Date	08/13/2015

Audit Issues No. 81

NUREG-0800, Section 15.0.2 establishes review guidance related to the documentation of the evaluation model. Provide the input decks used for the RELAP5/MOD3.3/K assessments against the ATLAS tests 9, 11, and 15 described in Section 3 of Appendix E.

Response

As described in Appendix E of topical report, code assessment for the ATLAS test 09 and 11 are focused on the experiment data after 200 s and 210 s, respectively. Code calculations conducted from time 0 s to 200 s and 210 s for ALTAS Test 09 and 11 were done just for adjusting thermal-hydraulic conditions at 200 s and 210 s. And restart option of RELAP5/MOD3.3/K code was used to calculate after 200 s and 210 s. On the other hand, code assessment for the ATLAS Test 15 was conducted from 0 s to the end of the test.

Therefore, two input files for each ATLAS test 09 and 11 are required, and only one file is needed for ATLAS test 15 as follows.

ATLAS test 09:

1. ATLAS9-090320-annulus-t2.i Input file for 0 to 200 s
2. t_ATLAS09-090320-annulus_t2_126.i Input file for 200 s to end of test

Code calculation using input file for 200 s to the end of the test needs restart file of calculation result using input file for 0 to 200 s.

ATLAS test 11:

1. ATLAS11-090923-annulus.i Input file for 0 to 210 s
2. t_ATLAS11-090923-annulus_126.i Input file for 210 s to end of test

Code calculation using input file for 210 s to the end of test needs restart file of calculation result using input file for 0 to 210 s.

ATLAS test 15:

1. ATLAS-LB15-U10_126

Input decks for ATLAS test assessment will be submitted in face-to-face meeting because ERR system has no download function.

Impact on DCD

There is no impact on the DCD.

Impact on PRA

There is no impact on the PRA.

Impact on Technical Specifications

There is no impact on the Technical Specifications.

Impact on Technical/Topical/Environmental Report

There is no impact on any Technical, Topical, or Environmental Report.