

# The Code Modifications for RELAP5/MOD3.3/K

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1. Introduction for RELAP5/MOD3.3/K
2. Code Modifications

3. Conclusion

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# 1. Introduction for RELAP5/MOD3.3

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## 1.1 Code Selection for CAREM: RELAP5/MOD3.3

## 1.2 Code Characteristics of RELAP5/MOD3.3

- ✓ PSI reflood model was developed to improve quench front behavior during the reactor core reflood process.
- ✓ PSI reflood model was assessed against FLECHT-SEASET Test 31504 and 31701 during the developmental stage.
- ✓ FLECHT-SEASET tests have been demonstrated that improvements to the models in the code have strengthened the code's ability to calculate more accurately the thermal-hydraulic phenomenon associated with low and high rate reflood.

# 1. Introduction for RELAP5/MOD3.3/K

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## 1.3 Findings of RELAP5/MOD3.3

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# 2. Code Modifications

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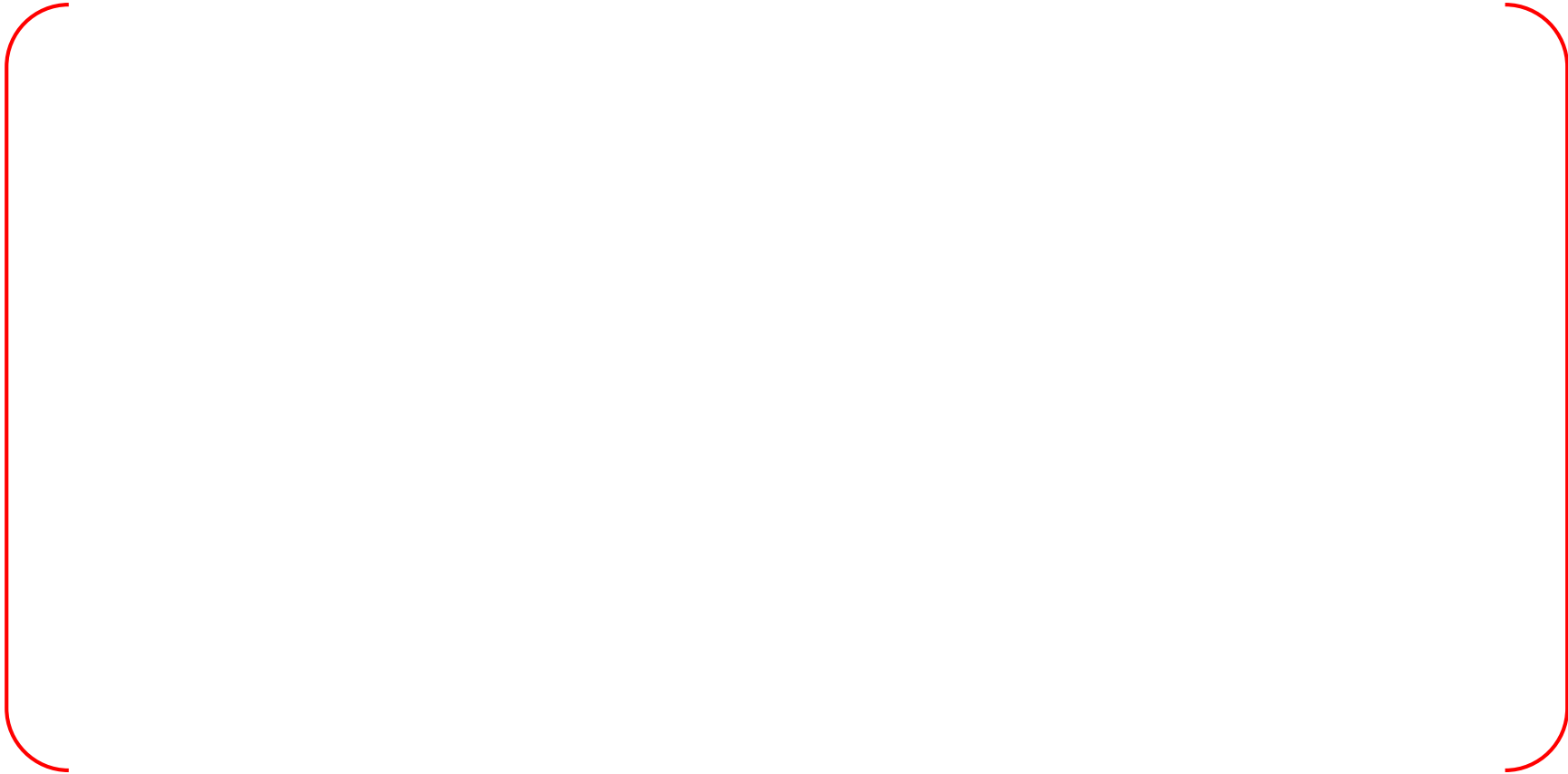
## 2. Code Modifications

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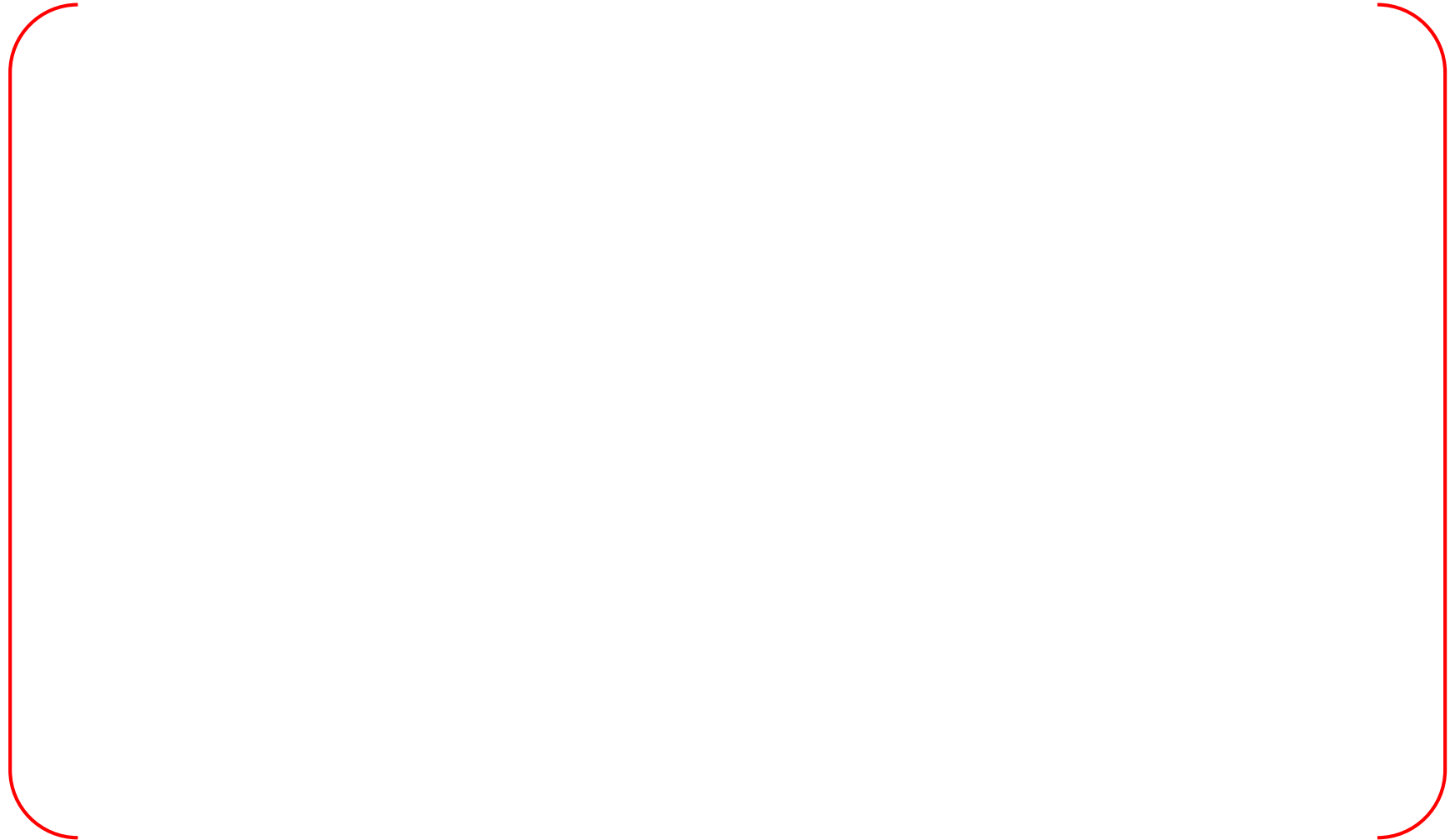
## 2. Code Modifications

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### 3. Conclusion

- ✓ In CAREM, RELAP5/MOD3.3 code is selected to calculate system thermal-hydraulic.

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- ✓ All the modifications have been incorporated into the modified RELAP5/MOD3.3, named RELAP5/MOD3.3/K, for a frozen code version.
- ✓ The validity of the modifications are confirmed through the assessment against SET, IET and Plant calculation.

# Thank you for your attention