World Academy of Science, Engineering and Technology International Journal of Energy and Environmental Engineering Vol:10, No:07, 2016

Further Investigation of Core Degradation Using Quench Test Facility Results

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Abstract: This paper presents an application of the ASTEC V2r3p3 computer code for simulation of QUENCH-12 experiment. The test has been performed to investigate the behavior of VVER type of fuel assemblies during severe accident conditions. In the performed analyses it has been assessed the mass of generated hydrogen during the experiment flooding of overheated core. The comparison of ASTECv2r3p3 calculated results with measured test data shows good agreement.

Keywords: hydrogen production, VVER, QUENCH facility, severe accident, reactor core

Conference Title: ICEER 2016: International Conference on Energy and Environment Research

Conference Location: Istanbul, Türkiye Conference Dates: July 21-22, 2016