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**Evaluation of Load Rejection to House Load Test at 100% Power  
for UCN 3**

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**Abstract**

The Load Rejection to House Load test at 100% power was successfully performed during the UCN 3 Power Ascension Test(PAT) period. In this test, all plant control systems automatically controlled the plant from 100% power to house load operation mode. The KISPAC computer code, which was used in the performance analysis during the design process of UCN 3&4, was used for predictions of the test. The results agreed with the measured data demonstrating the validity of the code as well as the completeness of the plant design.

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**Evaluation of Loss of a Main Feedwater Pump Test for UCN 3**

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**Abstract**

The Loss of a Main Feedwater Pump event is one of the major design bases events which characterize the advanced capability of the Korean Standard Nuclear Power Plants. During this event, all NSSS Control Systems including Reactor Power Cutback System are designed to automatically control the plant to prevent reactor trip and continue power operation. The Loss of a Main Feedwater Pump test at 100% power was performed during UCN 3 Power Ascension Test period. All plant control systems worked properly as designed and successfully stabilized the test transients. The test results well agree with computer simulations using the KISPAC code which is a best-estimate plant performance analysis tool used for the design of the UCN 3&4.