

A Study on the Comprehensive Management System of Nuclear Power Plant Operational Inspection

HyunJoo Yoo¹

¹NDE, Korean, Republic of Korea

As being increments of the service period and construction of nuclear power plants, huge amount of in-service inspection results and records for the nuclear components have been produced. Therefore, it is necessary to develop a system to administrate the results and data systematically. Central Research Institute of Korean Hydro & Nuclear Power Co. Ltd. has been developing a integrated system to cover the entire nuclear power plants in Korea. After completion of Kori-1 nuclear plant in 1978, 23units are in operation in Korea. The system cover all operation units in NPP and inspection plan manager to choose and distribute inspection points and to control data such as inspection results manager to control the inspection results for the components such as piping welds and reactor, the inspection material manager to contain related codes, size information, iso and references, and the inspection resources manager to administrate the inspection personals, equipments and standards. It will be possible to analyze and investigate statistically every data and monitor the progress of in-service inspection of each plant through the system. In order to develop the reliable system, various procedures and input formats classified with non-destructive methods should be standardized and data should be recorded consistently. In this paper, key functionalities and technologies applied for implementation of the system are introduced herein.