



Development of Database System for Accessing the Reliability of Ultrasonic Inspection Results

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Abstract

The database system based on the website was established for the assessment of reliability and an effective and efficient management of ultrasonic inspection results. The ultrasonic inspection has been mainly used as one of the most important methods for in-service inspection (ISI) of nuclear power plant (NPP) components. Since the reliability is related to the safety, integrity, and life prediction of components, the assessing the reliability of ultrasonic inspection results is very important as well as the management of a lot of ISI data in NPP. This system consists of 6 categories including code/standard, the analysis of advanced UT techniques, ISI flaw data, probability of detection (POD)/round robin test (RRT), flaw data analysis and ISI regulation guideline. In addition, the database system was designed to update the additional inspection data and contents easily. The web-based database system can be utilized as a powerful expert tool to investigate the ultrasonic inspection data so that the time-consuming and laborious data management can be avoided.