

Refurbishing and Upgrading Old Spillway Gate Installations

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SYNOPSIS Many old spillway gate systems are approaching the limit of operating life in their present form. The majority were designed and constructed robust, with little or no redundancy, and incorporate many single point and common cause failures. Design deficiencies, age and degradation present a reliability risk to the dam system and the downstream population. The paper sets out the requirements for safety and reliability, how these can be attained and to what extent, recognising the wide variations in installation design and condition. The degree of reliability obtained as a result of upgrade and refurbishment must be consistent with that required by the dam consequence category.