

Abstract

An overall plant condition assessment that included a plant integrity assessment and maintenance review has been conducted on Duvha Power Station Units 1 to 6 Generators. Plant process parameters revealed instrumentation errors and discrepancies between plant gauges and the operator's mimic across all units. Various parameters were also found not to be correctly set to design specifications. The plant integrity assessment supported by input streams from monitored, inspection and feature findings are then combined to develop an assessment of the unit's sub-components condition which are then summed to obtain an overall assessed condition score. A criticality review then develops the sub component analysis and assessed condition score to achieve a ranked sub component score. Unit 4 was found to have the highest overall condition and criticality assessed score. Units 1, 3, 4 and 5 outage plans are in line with the assessment recommendations. Recommendations, classified in terms of immediate, short and long term actions, are then made based on the findings.