Question 3.37

Topic: Flow-to-load Ratio Test -- Multiple Stacks

Question: For a multiple stack configuration, if both primary and redundant backup flow monitors are installed on each stack, how do I perform and report the results of the quarterly flow-to-load ratio or GHR test?

Answer: For purposes of illustration, assume that the unit has two stacks (A and B). Stack A has a primary flow monitor (A_p) and a redundant backup flow monitor (A_b). Stack B has a primary flow monitor (B_p) and a redundant backup flow monitor (B_b). To meet the flow-to-load or GHR test requirements, submit separate ,<FlowToLoadReferenceData> and <FlowToLoadCheckData> test records for each primary and each redundant backup flow monitoring system, as follows:

(1) The reference information in the "F2LREF" test record for the stack A monitoring systems (A_p and A_b) and for the stack B systems (B_p and B_b) will, of course, be different if the data analysis is done on an individual stack basis. However, the reference information will be the same in the,<FlowToLoadReferenceData> test records for stacks A and B if the reference flow-to-load ratio or GHR is derived on a combined basis, using data from the most recent normal load flow RATAs at the individual stacks.

(2) Perform the flow-to-load or GHR data analysis either on an individual stack basis or on a combined basis (as described in Question 3.36).

_ If the analysis is done on an individual stack basis, perform separate flow-to-load or GHR evaluations of the primary and backup monitoring systems on each stack (e.g., A_p and A_b).

_ However, if the analysis is done on a combined basis, separate analyses of the individual primary and backup monitoring systems is not feasible, since the primary system may be in use at stack A while the backup system is in service on stack B (or vice-versa). Therefore, when the analysis is done on a combined basis, you will only obtain a single flow-to-load or GHR test result and will apply this one test result to all of the primary and backup monitoring systems on both stacks, with one exception: if none of the data used in the quarterly flow-to-load data analysis was generated by a particular monitoring system (e.g., if none of the data used in the analysis came from backup monitor B_b), report a result of "FEW168H" in the <TestResultCode> field of the <TestSummaryData> record for that monitoring system.

References: Appendix B, Section 2.2.5; ECMPS Quality Assurance and Certification Reporting Instructions, Section 2.5 and 2.6

History: First published in December 2000, Update #13; revised in October 2003 Revised Manual; revised in 2013 Manual