ABSTRACT

PT. ABC has carried out the NC212i rear cone assembly project which experienced problems in the form of delays in five operations and many material issues since 2017 even though the project was only implemented in 2020. The evaluation process for project delays is also carried out using the fault tree analysis method and the method of obtaining cut sets (MOCUS). aims to identify the source of the problem.

The delay evaluation process starts from the identification of late work based on project progress report data and project delay data. The next evaluation stage is to identify prerequisites and develop a combination of factors for delay. The preparation of this combination of factors is divided into four types, namely events, agents, factors, and delay sub-factors. The next evaluation process is fault tree analysis (FTA) followed by MOCUS analysis which aims to find the minimum cut set.

The three delay factors are given their respective preventive solutions. Determination of the solution is associated with aspects that exist in the form of man, methods, and information. The solution for the delay mitigation action is in the form of a system design that integrates these three aspects.

This delay evaluation process is compiled into a spreadsheet-based dashboard to make it easier for the company to understand and visualize. This project has been completed so that the results of the research will be used as lessons learned for the next project.

Keywords— delay, evaluation of project delay, fault tree analysis, MOCUS, and delay factors