

ABSTRACT

The Tiu Suntut Dam Construction Project in Sumbawa, West Nusa Tenggara experienced delays in the completion of work so that the tendency of time and costs did not match the plan, so it was necessary to conduct a time and cost performance analysis based on the Earned Value concept to obtain the fastest completion time with the lowest costs.

The objective of this research is to determine the time and cost performance and to determine the fastest project time with the lowest cost for the Tiu Suntut Dam Construction Project in Sumbawa, West Nusa Tenggara, using the Earned Value concept. The method used in this research is descriptive quantitative, research that describes the conditions of a particular project by analyzing existing data.

The results of the study show that the time and cost performance of the Tiu Suntut Dam Construction Project in Sumbawa, West Nusa Tenggara can be seen from the average time performance index (SPI) of $0.950 < 1$, this indicates that the time performance of the Tiu Suntut Dam Construction Project in Sumbawa, West Nusa Tenggara is not good, because it is unable to achieve the planned work targets, although in the end the project can be completed on time according to the contract and the average cost performance index (CPI) = 1,000, this indicates good cost performance because the costs incurred are in accordance with the budget. The fastest time estimate (ETC) to complete the Tiu Suntut Dam Construction Project in Sumbawa, West Nusa Tenggara is 31 months and the lowest cost estimate (EAC) to complete the Tiu Suntut Dam Construction Project in Sumbawa, West Nusa Tenggara is Rp. 633,257,089,552.24.

Keywords: *Earned Value, Time Performance, Cost Performance*