## **ABSTRACT**

This study aims to analyze the mental workload of warehouse employees at the Cilacap Steam Power Plant (PLTU), and evaluate its impact on employee well-being. High mental workload can lead to stress, psychological fatigue, and decreased performance. The research employed the Subjective Workload Assessment Technique (SWAT) with a quantitative approach, distributing questionnaries to 10 warehouse employees. The analysis revealed that mental workload is influenced by irregular shift schedules, high job demand, and time pressure. The average mental workload level ranged from moderate to high, dominated by time load and mental effort load factors. Based on these findings, improvement strategies were proposed, including adjusting work schedules, providing sufficient rest periods, and enhancing inter-shift coordination. The implementation of these strategies has the potential to improve employees psychological well-being and reduce the risk of work errors.

Keywords: Mental Workload, SWAT, Shift Work, Employee Well-being, Cilacap Steam Power Plant.