## **ABSTRACT**

Petrochina Intl Jabung Ltd is the largest oil and gas company in China, whose operations include exploration, development, production and marketing of crude oil and natural gas, including refining, transportation, storage, marketing of oil and gas products and their derivatives in Indonesia. This study analyzes the mental workload in the Audit Division of the Finance Control & Compliance Department at Petrochina Intl. Jabung Ltd. This Audit Division is in charge of auditing the data of income or expenditure at PetroChina Company. In this division experiencing fatigue, because the workload of the Audit Division employees is very high due to the lack of employees in the Supervisor department and auditor staff in the Government section. The purpose of this study is to analyze the workload and determine the proposed human resources in the Audit division. NASA-TLX is used as tools because the research object produces output in the form of a work process and can be used to examine different work assignments. The research phase is carried out preliminary problem formulation, data collection, data processing using NASA-TLX and manpower requirements planning. The results of research in measuring mental workload in the audit division are known that Managers have a high workload (74.00%), Superintendents have a very high workload (84.00%), Supervisors (Government) have a very high workload (93, 33%), Secretary has a high workload (80.67%), and Staff Auditor has a high workload (90.67%). Based on the measured workload, Petrochina requires seven employees for the audit division. The number is more than two employees from the existing condition of the company which has five employees. So that the research has the output of a proposed workforce, a proposed Job Specification and a proposed Job Description. within the company. The Managerial implication in this research is that the company can consider adding manpower and then checking the condition of supply manpower within the company's internal.

Keywords: Mental Workload, Manpower Planning, NASA-TLX, External Audit