## **ABSTRACT**

Yama Wicaksono, 50134859. N, 2018, "Optimization of Loading and Unloading Activities of Coal At MV. Lumoso Permai In PLTU Nagan Raya Meulaboh Aceh", Nautica Study Program, Diploma IV Program, Merchant Marine Polytechnic of Semarang, 1<sup>st</sup> Supervisor: Capt. Rudy Susanto, M.Pd., 2<sup>nd</sup> Supervisor: Laksmi Setyorini, S.Pd., M.Si.

Delays during unloading process is the most untoward thing for anyone, because it can inflict disadvantage many parties specially for company and the owner of the cargo. Such a case at MV. Lumoso Permai when loading and unloading acivities in PLTU Nagan Raya Meulaboh Aceh. The constraints caused by weather condition and also waiting for the barge come, it caused loading and unloading process on the vessel isn't optimal, therefore proper handling is expected to make the loading and unloading process to be optimal.

The method used in this study that researchers in conveying problem is a qualitative methods to generate descriptive data for showing and describe the object under study, with data collection techniques based on observation, interview and literatures. The writer used USG data analysis techniques (Urgency, Seriousness, Growth) to determine the issue a top priority in the oprimization of loading and unloading activities until the solutions can be found.

The results showed (1) the cause of isn't optimal loading and unloading activities in PLTU Nagan Raya Meulaboh Aceh (2) the solution of loading and unloading activities to be optimal. The conclusion of this indicate that (1) weather is a dominant factor that causes loading and unloading activities not to be optimal (2) the solutions is increase the number of fenders and do towing on the vessel when loading and unloading activities.

**Keyword**: Optimization, (USG) method, loading and unloading.