Thesis Title Development of Ordering Procedure Information System for Maintenance System in Mae Moh Electrical Generation Machinery Department.

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ABSTRACT

The objective of this research is to develop an ordering procedure system in maintenance work by applying the information technology in order to increase the performance of Maintenance Division, Mechanical Section, Mae Moe Thermal Power Plant. Present document flows were studied and steps of ordering and receiving procedure together with working data recording system were analyzed. Then, questionnaires of the system needed were used with manager, operators and people who involved in the maintenance system. The analysis found that the problems were 1.) delays occurrence in ordering and receiving system. 2.) lack of data concerned ordering data, working data, materials, machines and working procedure. Therefore, information technology was used in this study in 2 different ways i.e. 1.) data recording e.g. data collection method, working history. 2.) The ways data were used e.g. in work planning, in materials procurement planning, and in machines tools and equipments procurement. Consequently, all data recorded were analyzed to develop an ordering procedural system to efficiently serve the requirements of operational section.

The calculation of working efficiently of the system developed showed higher when compared with the old system. The developed system decreased the ordering lead time 67 minute per order, from 82 minute, which equal to 81.7 % decrease. This affected the maintenance and

production performance in order to be able to meet delivery schedule. Moreover, it improved the management and administration of Maintenance Division that enhanced workers' motivations and perspectives.