Peran konsultan pengawas terhadap peningkatan kinerja proyek pembangunan pembangkit listrik tenaga air di Indonesia : studi kasus proyek PLTA di lingkungan Nippon Koei Co., Ltd

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Abstrak

The Role of an Engineer in Accelerating the Progress of a Hydroelectric Power Construction Project (PLTA) in Indonesia (Case Study of Nippon Koei Co., Ltd.'S Hydroelectric Power Projects)Indonesia is well endowed with hydropower potential, which is renewable and indigenous energy, with natural support of ample rainfall. The construction of hydropower (PLTA) will conserve the exportable resources such as oil, natural gas and coal, and thus contribute to Indonesia's foreign exchange earnings. The fact that the hydroelectric power is a kind of complex and diversified project involving many parties within the limited space and management, then the presence of a qualified consulting engineer is required to ensure that the Project be completed to quality, to time and to cost.

Selecting a consultant is one of the most important decisions an owner or client makes. The success of the Project often depends on obtaining the most able, experienced, and reputable consulting firm. The procurement of a consulting engineer is merely based on the following 3 (three) principal categories: (a) Experience in similar projects (20 % weight) ; (b) Approach and methodology (30 % weight) ; (c) Qualification and competence of the personnel proposed (50 % weight). These categories justify the qualification of a consulting firm selected. This thesis investigates the relationship between the qualification of a consulting engineer supervising the construction of a hydroelectric power and its progress.

Nippon Koei Co., Ltd., being the first private independent consulting firm in Japan established in 1946, was selected as the consulting firm with samples of projects including Tanggari-II, Besai, Renun and Musi Hydroelectric Power. Nippon Koei Co., Ltd. has been involved over a long period of time in the development of a number of hydroelectric power projects in Indonesia providing extensive accumulated experience and knowledge therefrom.

The required data (secondary data) was obtained from the Monthly Progress Report. The progress of the Project was easily noted from the "S-Curve" and the quality of the Consultant was reflected in the Manning Schedule. Other variables such as productivity level of each expert, the role of Owner and Contractor, and procurement method were assumed to be constant. SPSS 7.5 for Windows was used to run the data for regression analysis.

The result yielded a significant relationship in the form of a positive correlation between quality of the Consultant and progress of the Project. It is, therefore, justifiable to conclude that the more qualified consulting firm will positively accelerate the completion of the hydroelectric power projects in Indonesia.