

ABSTRACT

*The increasing electricity consumption in Indonesia and the disruptive changes in client demands are pushing companies, particularly in the renewable energy sector, to continuously adapt and stay competitive. One of the main challenges in project execution is the high occurrence of delays, often caused by suboptimal project management. At PT XYZ, delays were attributed to the low competence of supplier personnel, limited information about supplier track records, and significant gaps between actual progress and project plans. Interview results revealed that most of the problems originated from suppliers who failed to fulfill the contract in the beginning. This was due to the supplier selection process not using comprehensive evaluation criteria, especially from a project management perspective. To address this issue, the proposed solution is to design supplier performance criteria using the Analytic Hierarchy Process (AHP). This method was chosen for its ability to structure criteria into a decision-making hierarchy that supports the selection of qualified suppliers. The proposed criteria consist of five main aspects and ten sub-criteria: Financial Capability, Material Condition, Delivery Time, Customer Services, and Management Capability. AHP weighting results showed that material quality received the highest global weight (21.15%), followed by delivery speed (17.99%), and payment policy (12.18%). Suppliers are considered eligible to be included in the list of selected vendors if they obtain a final score of at least 68.21%.
Keyword – **Project Management, Procurement, Supplier, Performance Criteria, Analytic Hierarchy Process (AHP)***