

ABSTRACT

PT PLN (Persero) is a state-owned enterprise that manages the electricity business in Indonesia since the late 19th century. As a monopoly company in the electricity management business in Indonesia, PT PLN should keep the company's image by improving and maintaining the trust of customers for its business continuity. The best service and quality for the customer become a very strong capital for the company to run its business.

In order to control and improve its service quality, PT PLN is now implementing the Service Quality Level (TMP). In the fourth quarter of 2009, connection Low Voltage (TR) service at PT PLN UPJ Bogor Kota didn't achieve the determined target. The unreached target is related to its speed of service, the completion of the connecting process is over 14 working days. Because of this background and some constraints faced by company, PT PLN needs an improvement of TR quality service to overcome this problem.

Lean-Sigma is a method used in this research in order to identify and reduce factors that cause Waste, so it can improve quality dramatically to get the best efficiency (Lean) and zero failure rate (zero defect) or a six sigma level of performance. This research consists of Define, Measure, Analyze, and Improve phases.

Based on the research, the critical Wastes found in the TR connection service are critical Waste categories of Defect, Excess Processing, Waiting, and NUE. The achievement sigma levels of those four critical Waste are Defect sigma level at 1.77, Excess Processing sigma level at 1.54, Waiting sigma level at 1.8, and NUE sigma level at 1.85. The achievement performance of TR PT PLN UPJ Bogor City is still low because the performance level reached is still far from six sigma performance level and the process efficiency is still low, equal to 66.19%. The causes of those critical Wastes are inefficient existing business process and lengthy administrative processes, entering the wrong number of normalization, unclear Job Desk on the PP unit, and others.

Improvements given as corrective actions include repairing the process using streamlining, designing material order information system, designing job desk blue print, and others. In determining improvement priority, the sequence of critical Waste that should be improved based on FMEA, are long bureaucracy of TR connection request, unfulfilled time appointed in completing TR connection, inadequate physical facilities, impolite service personnel, no manual instruction for customers about getting the TR connection service, and long queue in service counter.

Keywords : quality, service, lean-sigma, critical waste, sigma level.