This case study is about electricity manufacturing company whose long lead time in the procurement process has caused the internal customer to complain. This problem affects the reliability of ABC Company. Therefore, this research applied the VSM methodology to reduce lead time and improve procurement process.

Procurement process long lead time is caused by the long lead time in the purchase order process at the procurement department to provide spare part and service requirement. From the historical data of purchase order from May 2015 to April 2016, it was found that the lead time in purchase order process or PO processing time is over the standard time of about 26%. The Written Biding method has the highest number of purchase order which is PO processing time over the standard time with a total of 151 issues or 54%. The average PO processing time of Written Bidding method is 50.5 days but standard time is 15 days and the percentage of value-added time is 0.15%. The major causes of this problem came from waste of communication to confirm specification and condition activity and seek for supplier from multiple sources. After the root causes had been revealed, the work plans were developed to eliminate waste and improve purchase order process in order to reduce PO processing time to achieve the standard time. Work plans include control plan to monitor performance and control and sustain the improvement process.

The result of the work plans show that the proposed solution can be successful to eliminate waste and reduce lead time in order to improve the purchase order process. Therefore, VSM methodology is an effective tool to improve the process by reducing lead time and eliminating waste in many kinds of processes not only in manufacturing process.