## **ABSTRACT**

Until now economic condition still in low level economic, there is no growth in change. It mekes society live in poor economic. Nowdays, government build so many facility that it use by society with minimal cost, one of example is save and reacheable transportation facility.

That is Electric Rail Train. In order in using this facility, PT. KAI has given policy in control the operation. Most of the train are fill with sophisticated electronic part, because of that the train need to given fast maintenance damage detected for countinously used.PT. KAI give a trust to PT. LEN for doing the maintenane and service this train. Because this train now only used in Jabotabek, this duty is thr first duty for PT. LEN. So this duty has to look from the manual book of Train Set HOLEC which is this train came from HOLEC, Jerman. So order every component must be correct for order not doing twice.

Writer interested to give solve of this problem. Build Decision Support System with Fuzzy Logic Method. It given output summary of component has to prepared and this result can be made as an recomendation of decision based on criterias. Calculation that is doing based on crisp value fram each criteria's data.

By calculating the data wil provide component exact value which must available to provide needed in next period. The connecting the result in decision, the result value compare with stok value in last periode, so LPC can analize from the different.