ABSTRACT

Product allocation optimally minimizing the inventory cost such shortage cost, it caused by demand fluctuation increasing with the result that the current inventory can't meet a demand. Allocation LPG with the label Elpiji is need to apply in order to optimize amount of Elpiji which order by SPPBE in skid tank and Agent in bamboo tube. By allocating LPG from PERTAMINA UPMS V to SPPBE and Agent which hopefully can complete the objectives of enterprise such maximize profit, minimize shortage and maximize business transaction between PERTAMINA and SPPBE / Agent. Because of the reasons the enterprise needs an allocation model to count out the objectives simultaneously.

The objectives of this research is developing allocation model of Elpiji from Pertamina to SPPBE and Agent to accommodate the objectives of the enterprise. By using the Analytic Hierarchy Process a decision making method which give chances to personal or group to develop idea, definite the problem through the assumption in order to get the solution. In this research the decision maker is the marketing supervisor. The next step is, making the allocation model into a multi-attribute utility function form, where every objectives modified to a utility function then the optimization of this utility function will solve by using Lindo.

The result from this research is the objectives priority that enterprise want to gain such maximize profit in the first priority, then maximize business transaction and minimize shortage in the third place. While the allocation models result in a utility function form explain that LPG's allocation to each SPPBE and Agent is comply with the desire of the enterprise. The result of this research hopefully gives a recommendation about allocating LPG from Pertamina UPMS V to SPPBE and Agent.