producer milk utilized in Class II products (RAC2), producer milk deliveries to handlers (approximately equivalent to the monthly production rate, MPR), blend price (BP), proportion of producer milk used in Class I products (P), and total producer returns (TPR=MPR · BP).

Since all simulations were based on a solution interval (DT) of one-twentieth of a month, 20 values per month can be generated on each variable. In actual runs the variables were printed at intervals of 10 DT's, i.e. approximately mid-month and end-of-month. A monthly value was constructed by averaging the mid-month and end-of-month values. Consistency was checked by comparing the simulated and observed values of the six variables on a quarterly basis, i.e. the average of the three monthly values in each quarter (Jan.-Feb.-Mar., Apr.-May-June, July-Aug.-Sept., Oct.-Nov.-Dec.).[6] Table 1 gives the simulated and actual values of the six variables, the difference between the simulated and actual value, and the difference as a percentage of the actual value. For example, the first quarter 1966 figures for RAC1 show that simulated Class I utilization is 1,089 million pounds or 2.62 percent below actual utilization. Absolute percentage differences are smallest for blend price (1.51%), followed by MPR (1.80%), RAC1 (2.16%), P (2.53%) and TPR (2.55%). For RAC2 the percentage differences are quite large with an average absolute percentage difference of 17.56 percent. Apparently, the model is least accurate in determining RAC2. This inaccuracy may be due in part to the importation of milk for Class II uses which is not accounted for by the model. However, since Class II utilization is small relative to Class I utilization, the in accuracies in RAC2 have only a minor effect on the consistency of other variables. The direction of the differences (positive or negative) between the simulated and actual values of the six variables does not exhibit a systematic pattern. In general, the comparisons indicate that the basic model accurately generates milk production, utilization, and farm prices in the southeast Florida milk market. For this reason the basic model is judged to be an acceptable mathematical representation of the real system.

V. ANALYSIS OF INTERREGIONAL COOPERATIVE

The interregional cooperative analysis is primarily concerned with investigating the changes in net returns to producers, processors, and retailers that would occur if some Florida producers become associated with an interregional dairy cooperative. As viewed here the dairy cooperative's primary objective would be