

strategy testing subsystem, and a risk-return measurement subsystem. The simulation model was tested over a multi-period time horizon for a series of commodity market hedging strategies, and extensive test results are presented.

USING THE COMPUTER TO
PLAN PRODUCTION IN A FLOW SHOP

Dana B. Hopkins, Jr.

Babcock & Wilcox, Alliance, Ohio

Management of one of the Company's product lines must submit contract bids during one year for manufacture, with start and due dates, any time in the next five years. In the past, management had insufficient information as to the effects a new contract would have on their manpower requirements, resource utilization, and present contracts. The solution was to simulate production. The results of the simulation was a general schedule for production along with manpower utilization under given capacity constraints. This general schedule is not used for day-to-day scheduling of operations. Rather, it is used for "middle range planning", three months to a couple of years, where manpower levels and equipment are variables instead of constraints. Management reviews the output and makes any desired capacity and/or contract changes. A new simulation is made and the process repeats itself until management has determined what contracts to bid on and what their manpower and equipment needs will be during the "middle range".