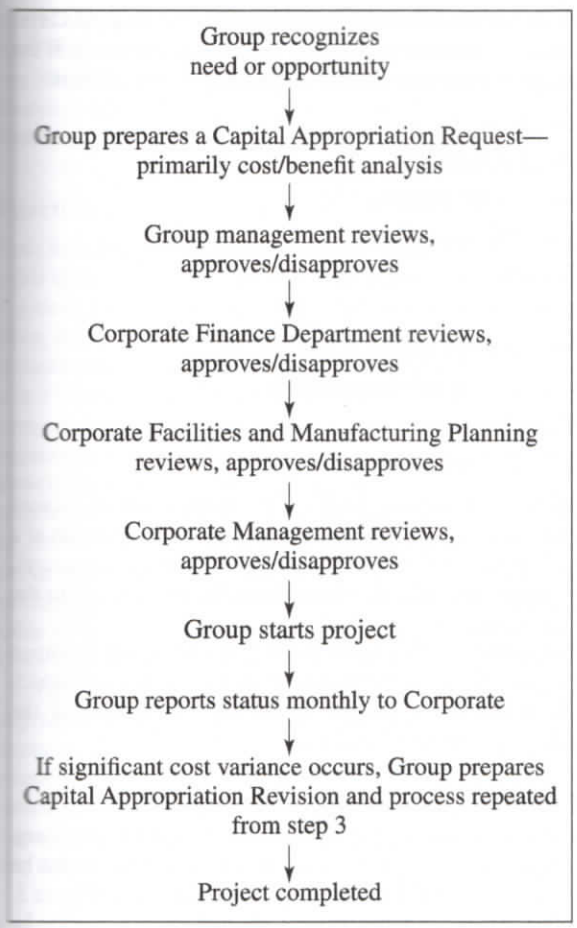

FIGURE 2 Capital project progress prior to PM&C.

projects by implementing PM&C. Responsibility for this program was placed with the Corporate Facilities and Manufacturing Planning (F&MP) Department, which, in addition to reviewing all Capital Appropriation Requests, provided technical consulting services to the corporation.

Feasibility Study

Lacking specialized expertise in project management, the Director of Corporate (F&MP) decided to use a consultant in the field. Interviewing of three consultants was undertaken to select one who had the requisite knowledge, compatibility with the style and goals of the firm, and the ability to communicate to all levels and types of managers. The latter requirement was important because of the diversity of the engineering department structures and personnel involved. The first author was selected as the consultant.

With the consultant selected, an internal program manager for PM&C was selected. The deferral of this choice until after selection of the consultant was deliberate, to allow for development of interest and enthusiasm among candidates for this position and so that both the selected individual and the selection committee would have a clear picture of the nature of the program. A program manager was chosen from the corporate staff (the second author).

Having the key staff in place, ground rules were established as follows:

- The PM&C program would be developed internally to tailor it to the specific needs of the Groups. A "canned" or packaged system would limit this flexibility, which was deemed essential in this application of project management principles.
- The directors of the engineering departments of each of the Groups were to be directly involved in both the design and implementation of the PM&C system in total and for their particular Group. This would assure the commitment to its success that derives from ownership and guarantees that those who know the needs best determine the nature of the system.

To meet the above two ground rules, a thorough fundamental education in the basic principles of project management would be given to all involved in the system design.

The emphasis was to be project planning as opposed to project control. The purpose of PM&C was to achieve better performance on projects, not catch mistakes after they have occurred. Success was the goal, rather than accountability or identification of responsibility for failure.

Program Design

The option of defining a uniform PM&C system, to be imposed on all engineering departments by corporate mandate, was rejected. The diversity of projects put the weight in favor of individual systems, provided planning and control was such that success of the projects was facilitated. The advantage to corporate staff of uniform planning and reporting was given second place to accommodation of the unique needs of each Group and the wholehearted commitment of each engineering manager to the effective use of the adopted system. Thus, a phased implementation of PM&C within Heublein was planned in advance. These phases were:

Phase I. Educational overview for engineering department managers

A three-day seminar with two top-level educational objectives: (1) comprehension by participants of a maximal set of project management principles and (2) explanation of the corporate objectives and recommended approach for any PM&C system.

Phase II. PM&C system design

A "gestation period" of three weeks was deliberately introduced between Phases I and II to allow for absorption, discussion, and review of the project management principles and objectives by the engineering department managers. At the end of this period a session was called for the explicit purpose of defining the system. The session was chaired by the consultant, a deliberate