Mr. Morison's description of the study is more one of a search for facts to maintain the status quo rather than, as the Technicians' Subcommittee believes, a search for facts to determine whether or not the status quo was proper.

An interesting aftermath to the study which Mr. Morison states "produced results which preclude the necessity of undertaking another project of such magnitude and such expense in the foreseeable future" is pointed up in the following statement submitted by a company which participated in the study:

"In studying this data, (analysis of expense by size of risk for policy year 1963 and analysis of size of policy for the calendar year 1963) it became immediately apparent that our former actuary had included, for the expenses classified as Inspection, Boards and Bureaus, only Bureau expenses in the company's analysis for policies carrying an annual premium size of \$999 or less and that he had charged the entire Inspection expense to policies carrying an annual premium size of \$1,000 and over. This error produces an expense understatement of approximately two percentage points for policies with a premium size of \$999 or less and an expense overstatement of about .38% for policies carrying a premium size of \$1,000 or more.

"We also noted that under the expenses classified as Payroll Audit there is apparently a misallocation of such expenses, particularly in the premium categories of \$500 to \$749 and \$750 to \$999. In the company study this is indicated at 1% and 0.7% respectively for the two premium size categories."

If respected participants in this study can now disown their own company's figures we can well ask whether or not Mr. Morison is correct in assuming no further study is necessary in the foreseeable future.

## DISCUSSION BY PAUL A. VERHAGE

The paper provided by Mr. Morison gives us an excellent chronological summary of the progress and results of the 1965 expense study by size. This paper will remain a permanent record for members and students alike of the Casualty Actuarial Society of the difficult and time-consuming labors performed to bring the study to completion.

The author has placed the actual allocation techniques in a secondary position. He leaves this aspect of the study to be summarized in the circular letter from the National Council which suggested available allocation

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procedures. A future valuable contribution to the Society *Proceedings* might be a more detailed description of the actual allocations used by an individual company in fulfilling the requirements of the expense study. This could well be tied in with a discussion of the general expense allocation philosophy used for the insurance expense exhibit.

As Mr. Morison has indicated, the third party liability lines were originally included in the expense study but were later deleted from the Special Call. As suggested, a major reason for this withdrawal was the difficulty in obtaining a realistic standard premium due to the effect of expense modification and schedule rating plans. In addition, other technical difficulties were foreseen which contributed to the decision to exclude the third party lines. One of these was the expense distribution by line problem encountered with multi-line policies which include both automobile liability and general liability as well as automobile physical damage. If expenses are first allocated by policy and then by annual statement line, the significance of the expense data by line becomes vague. (This difficulty also becomes apparent in the insurance expense exhibit itself.) To compound the problem, the assignment of the premiums and expenses of an individual line to a particular premium group becomes difficult. It would be realistic to assign the data to the premium group corresponding to the total third party premium. This is compatible with the general technique of determining premium discount and retrospective rating expense provisions on the basis of total third party standard premium. But this does not fit into a scheme of studying general liability and automobile liability separately by size.

Another contributing factor in the decision to drop the third party liability lines from the study was the introduction of the commercial package policies. This added to the problems of determining the premium size category as well as siphoning premiums into another annual statement line.

The data used in developing the revised expense program was that submitted by the non-participating stock companies. The expense allocations submitted by other companies were not used since manual rate provisions are based on the indications from the stock companies exclusively. This does not mean that the work done by other companies was in vain. This information was available on a combined basis for review of nonstock premium discount and expense provision gradations. In addition, individual companies can use their results for analysis of their own experience by premium size, and analysis of retrospective rating plans, dividend schedules by size, variable dividend plans, and other net cost analyses.

As Mr. Morison outlined, many systems of expense constants were

considered. One of the original plans was the one suggested by the NAIC Subcommittee. This program consisted of a \$12 expense constant up to \$1,000 premium size with accompanying expense percentage loadings. Further review brought the conclusion that expense constants for policies above \$500 were not strongly justified on the basis of the stock companies' data.

The propriety and necessity of expense constants at the present time for risks in excess of \$500 is questionable in general. The possible \$5 expense constant for the \$500 to \$1,000 risk is small in comparison to the \$200 to \$400 which these risks currently pay through the manual expense provisions.

Mr. Morison has good justification for anticipating that another study will not be requested in the foreseeable future. It is questionable, however, whether the industry will be justified in waiting fifteen years to complete another study as was done between 1950 and 1965. The effect of inflation upon incurred expenses and written premiums could well have a dramatic effect upon expense ratios by size within five to ten years. Hopefully, company efforts to pare expenses, particularly for the small risk, will have an effect upon the need for greater expense constants and further extension of the Three Year Fixed Rate Program.