## REVIEWS

Liability Insurance for the Nuclear Energy Hazard, by RICHARD H. BUTLER.

The author points out that fundamentally most of this insurance is only an extension of lines that have been written by companies for many years —premises-operations and products liability and general liability, together with transportation exposures. Nevertheless there are five factors involved that have led to the development of a bewildered set of policy forms, rating procedures and mechanics.

I. The potential catastrophe hazard which is without parallel in past experience.

2. The demand for much higher liability limits than have been written in the past and a system of government indemnity on top of these limits.

3. The intermeshing of a liability policy with a federal law establishing the form and amount of financial responsibility of the operator.

4. The possible slow emergence of claims.

5. The unreasonable concern of many persons about the possibilities of radiation injuries.

The author describes the stock and mutual nuclear liability insurance pools and methods of operation and the policy forms used. The premiums charged are higher than it is hoped will be proved to be necessary and provision is made for the return to the insured of the excess premiums paid after a period of ten years.

Some Further Notes on Estimating Ultimate Incurred Losses in Auto Liability Insurance, by FRANK HARWAYNE.

This paper is mainly a study in curve fitting. The author examines the proportion of claims paid in the interval t between the time of the accident and the time of review which he assumes to be of the form  $[1 - e^{-(1+k)t}]$ . From this he develops formulae suitable for application to policy year loss experience and shows that a close fit is obtained between calculated and observed results.

Notes of Some Actuarial Problems of Property Insurance, by L. H. LONGLEY-COOK.

The author discusses some of the current problems on fire insurance rate making in the U.S. and makes suggestions on modifying certain of the techniques used so that rates may be more accurate in the future.

Ocean Marine Rate Making, by D. DOUGLAS ROBERTSON.

A brief discussion of methods used to develop rates for cargo and hull insurance.

A Review of the Experience of Massachusetts Workmen's Compensation Experience Rated Risks, by WALDO A. STEVENS.

Experience rating plans for Workmen's Compensation insurance have been in effect in Massachusetts since 1916 and the present plan has been in use without substantial review since 1940. In recent years there has been a change in the underwriters' approach to the acceptance of risks, it being now generally considered that risks which develop a debit rating are less likely to prove profitable. The concept that it is safer to write credit risks