

CONTENTS / JULY 1990—VOL. 91, NO. 1

SAFETY OF NEXT GENERATION POWER REACTORS

- 7 Editor's Note / *James F. Schumar*
- 9 Preface: Safety of Next Generation Power Reactors / *Alan E. Waltar*

TECHNICAL PAPERS

- 11 Next-Generation Power Reactor Information System / *Emil E. Leitz*
- 16 Conceptual Design and Safety Characteristics of a Natural-Circulation Boiling Water Reactor / *Yoshiyuki Kataoka, Hiroaki Suzuki, Sigeo Hatamiya, Michio Murase, Isao Sumida, Tetsuo Horiuchi, Minoru Miki*
- 28 Conceptual Design of the Integrated Reactor with Inherent Safety / *Yoshiro Asahi, Ichiro Sugawara, Toshiki Kobayashi*
- 51 Decay Heat Removal in the Sodium Advanced Fast Reactor with the MDSNP Code / *T. C. Hung, V. K. Dhir*
- 61 Role of Feedback Reactivities in the Passive Safety of Nuclear Reactors: The Case of the Fast Flux Test Facility / *Dong H. Nguyen*
- 75 Passive Containment Cooling for an Advanced Small Pressurized Water Reactor / *Brett J. Menaker, Russell E. Allen, Harry E. Painter*
- 81 The PIUS Pressurized Water Reactor: Aspects of Plant Operation and Availability / *Kåre Hannerz, Lars Nilsson, Tor Pedersen, Christen Pind*
- 89 Loss-of-Coolant Accident Aspects of the Combustion Engineering Advanced Light Water Reactor—System 80+™ / *Stanley Rosen, Richard D. Ivany, John F. Kapinos, Suk K. Sim*
- 95 Safety: Evolving Technologies for Tomorrow's Power Reactors / *Howard J. Bruschi, Ronald P. Vijuk*
- 102 Probabilistic Analysis for Conceptual Design of the Babcock & Wilcox Advanced Light Water Reactor / *Stanley H. Levinson, Robert S. Enzinna*
- 112 Probabilistic Risk Assessment Insights from New Westinghouse Pressurized Water Reactor Designs Studied in 1982–1987 / *Selim Sancaktar, T. van de Venne*

(Continued)

ON THIS COVER

This month's cover, which shows a reactor coolant pump, is taken from Fig. 1 in the paper by Bruschi and Vijuk.

CONTENTS / JULY 1990–VOL. 91, NO. 1

(Continued)

- 118** Loss-of-Coolant Accident Performance of the Westinghouse 600-MW(electric) Advanced Pressurized Water Reactor / *Robert M. Kemper, Christine M. Vertes*
- 129** Nuclear Power—A Path to the Future / *John J. Taylor, Karl E. Stahlkopf*

DEPARTMENT

- 1** Authors