

PREFACE

SAFETY OF NEXT GENERATION POWER REACTORS

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The July and August issues of *Nuclear Technology* feature two dozen papers based on material presented at the International Topical Meeting on Safety of Next Generation Power Reactors held May 1–5, 1988, in Seattle, Washington.

The Seattle conference drew together approximately 250 experts from 19 nations to focus on special new reactor features and designs that emphasize passive safety, enhanced engineered safety systems, and improved operability and maintainability. The general theme of the conference was reactor simplification, enhanced safety margins, and overall design and operational thoroughness. A total of 128 papers were presented at the conference.

The papers in these two special issues of *Nuclear Technology* represent selections from each of the 12 technical sessions and from two of the four plenary sessions.

The principal significance of these papers is their focus on the next generation power reactors—in the midst of a U.S. commercial reactor order hiatus dating back to a time prior to the Three Mile Island Unit 2 accident. Although it is well recognized that safety is not the only issue that has led to the zero growth of commercial orders in the United States, a specific focus on safety is recognized to represent a very timely topic. Despite the enviable safety record compiled by the commercial nuclear power plants to date (as compared to any other large commercial endeavor), the public is understandably a bit skeptical following the accident at Chernobyl. Hence, it is important to take stock on where additional safety improvements are being incorporated into the next generation plants.