

# Foreword

## Contributors and Reviewers

Donald G. Eagling

This 1996 *Seismic Safety Manual* is a second generation publication that evolved from the *Seismic Safety Guide* first published in 1983. The stimulus for the 1983 publication came from the 1971 San Fernando, California earthquake, the subsequent seismic evaluation and rehabilitation program at the Lawrence Berkeley National Laboratory (LBNL), and James R. Hill who saw the need to bring the lessons learned from the LBNL experiences to the Department of Energy (DOE) community. An important objective of the 1983 publication as well as this one is to provide managers and operators of DOE facilities with practical advice so that they can achieve a comfortable level of understanding for the decisions they must make relative to seismic risk management.

The 1983 publication included the work of nine authors and a few reviewers. Nineteen authors and 14 reviewers contributed topics to this publication which gives one some sense of the rapid growth and increased sophistication that the field of earthquake engineering has experienced during the last decade. It also provides some measure of the challenge it was for the authors to make their subjects readable and practical for managers and engineers who are not specialized in earthquake engineering.

Each author has extensive practical experience in his or her field and has studied first hand the lessons learned in the aftermath of damaging earthquakes. Biographical sketches for authors of the text and the Preface are included in Appendix A.

Special acknowledgments are due the reviewers who were undoubtedly challenged by the comprehensive nature of the subject matter as well as the frailties of unpolished manuscript. However, their efforts were very influential and valuable to this publication and greatly appreciated by the editor.

These professionals whose critique and comments are incorporated throughout the publication are listed hereafter in alphabetical order.

- |                   |                                                                                                                                                                                      |
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Additional acknowledgements for those who were instrumental in the conceptual development, planning and production of this publication are found at the end of Chapter 1, Introduction.

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#### CAUTIONARY NOTICE

This document was completed in October 1995. The Department of Energy was, at that time, involved in an intense and accelerated effort for reduction of directives. As a part of this effort, DOE Order 5480.28 on Seismic Hazards Mitigation was cancelled and the seismic policy significantly revised and consolidated in October 1995 into DOE Order 420.1, "Facility Safety," and its associated implementation guides. DOE Order 6430.1 was also cancelled. In addition, the DOE Standards referenced in this manual have already been revised to reflect the changes in DOE Order 420.1 issued after completion of this manual.

This document is oriented to standard occupancy structures and essential facilities and includes much guidance from commercial sources. Therefore, it may have limited applicability to DOE nuclear facilities. Hence users are advised to use this document with suitable caution taking these points into account.