



# CONTENTS

1. SUMMARY .....	1
2. NUCLEAR POWER PROGRAMMES .....	6
2.1. Current status .....	6
2.2. Technical performance experience .....	13
2.3. Economic performance experience .....	29
3. NUCLEAR POWER PROSPECTS TO 2000 .....	33
4. NUCLEAR POWER CONSTRAINTS AND PROBLEMS IN DEVELOPING COUNTRIES .....	37
4.1. Status of nuclear power in the developing countries .....	39
4.2. Planning and decision-making capability and organizational structures .....	41
4.3. Electricity grid size and structure .....	42
4.4. Qualified manpower .....	43
4.5. Industrial support .....	44
4.6. Financing .....	44
4.7. Overview of prospects and constraints .....	45
5. ADVANCED SYSTEMS AND NEW APPLICATIONS FOR NUCLEAR POWER .....	47
5.1. Advanced nuclear power systems .....	47
5.1.1. Fast breeder reactors .....	47
5.1.2. Trends in HTR development .....	51
5.1.3. Advanced converter reactors .....	53
5.1.4. Fusion reactors .....	54
5.2. Low-temperature heat applications .....	54
5.3. Small and medium power reactors (SMPR) .....	55
LIST OF ABBREVIATIONS .....	59
Countries .....	59
Operators .....	60
Contractors .....	63
Reactor types .....	64