Record Nr. UNINA9910141048803321 Managing spent nuclear fuel [[electronic resource]]: strategy **Titolo** alternatives and policy implications / / Tom LaTourrette ... [et al.] Pubbl/distr/stampa Santa Monica, Calif., : RAND, 2010 **ISBN** 0-8330-5115-6 Descrizione fisica 1 online resource (98 p.) Altri autori (Persone) LaTourretteTom <1963-> 363.72/895610973 Disciplina Soggetti Radioactive waste disposal - Government policy - United States Spent reactor fuels - Storage - Government policy - United States Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "MG-970-RC." Note generali Nota di bibliografia Includes bibliographical references. Cover: Title Page: Copyright: Preface: Contents: Figures: Tables: Nota di contenuto Untitled; Summary; Acknowledgments; Abbreviations; Chapter One -Where We Are Now, How We Got Here, and the Decisions We Face: The Current Situation; Historical Background; Confronting the Problem Anew; Objectives and Approach of This Monograph; Chapter Two -Technical Approaches to Spent-Nuclear Fuel Management; On-Site Storage; Spent-Fuel Pools; Dry-Cask Storage; Evaluation of Extended Reliance on On-Site Storage; Centralized Interim Storage; Evaluation of Centralized Interim Storage; Advanced Fuel Cycles; Uranium Resources Proliferation RiskWaste Management; Evaluation of Advanced Fuel Cycles; Permanent Geological Disposal; Evaluation of Permanent Geological Disposal; Comparison of Technical Approaches; Safety; Security; Technical Obstacles; Public Acceptance; Cost; Chapter Three -Review of Institutional, Statutory, and Regulatory Arrangements; Overview of Current Institutional Framework; Assessment of the Current Framework; Organizational Competence and Capacity; Performance of Decision Processes; Considerations for Moving Forward; Chapter Four - Policy Implications of Alternative Strategies Expeditiously Proceed with Yucca MountainDevelop Centralized Interim Storage in Conjunction with Permanent Geological Disposal; Pursue Advanced Fuel Cycles; Maintain Continued On-Site Storage;

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Nuclear power is receiving renewed interest because of its low

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greenhouse gas emissions. However, if nuclear power is to be sustainable option for the United States, methods for managing spent fuel that meet stringent safety and environmental standards must be implemented. This report examines technical and institutional approaches to spent fuel management and highlights policy implications of pursuing alternative strategies.