

1. Record Nr.	UNIORUON00238640
Titolo	AION. Slavistica
Pubbl/distr/stampa	1 (1993)-
ISSN	1122-195X
Descrizione fisica	Napoli : Istituto Universitario Orientale, 1993.
Lingua di pubblicazione	Italiano
Formato	Materiale a stampa
Livello bibliografico	Periodico
2. Record Nr.	UNINA9911006558203321
Titolo	Good practices in heavy water reactor Operation
Pubbl/distr/stampa	[Place of publication not identified], : International Atomic Energy Agency, 2010
ISBN	1-5231-3000-8 1-282-99143-4 9786612991431
Edizione	[1st ed.]
Descrizione fisica	1 online resource (201 pages)
Soggetti	Heavy water reactors Nuclear power plants - Safety measures
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Cover -- Foreword -- Contents -- Summary -- Session I. Regulatory Aspects -- Regulatory Assessment Of Nuclear Power Plant Safety Performance In Canada -- 1. Introduction -- 2. Report Content -- 3. Rating Process and Rating System -- 4. Report Card -- 5. Informing Canadians and Cnsc Activities -- 6. Continuous Improvement -- Evolution Of Regulatory Requirements For Hwrs In Romania -- 1.

Introduction -- 2. Legislative Framework and Evolution of the Regulatory Body -- 3. Evolution of Hwr Regulatory Requirements in Romania -- 4. Hwr Licensing Practices in Romania -- 5. Conclusions -- Development Of Risk-Informed Regulatory Positions On Candu Safety Issues, Part I: Methodology Development For Risk Estimation And Evaluation -- 1. Introduction -- 2. Risk-Informed Decision Making Process -- 3. Methodology for Risk Estimation and Risk Evaluation -- 3.1. Underlying Principles -- 3.2. Risk Tolerability Scale and Risk Significance Levels -- 3.3. Risk Matrices -- 3.4. Risk Matrices for Risk Estimation and Evaluation in Selected Risk Areas -- 4. Summary -- Acknowledgements -- References -- Development Of Risk-Informed Regulatory Positions On Candu Safetyissues, Part Ii: Application Of Risk-Informed Decision Making Forcategorization Of Safety Issues -- 1. Introduction -- 2. Identification of Safety Issues, and the Process for Development of the Path Forward for Resolution of Issues -- 2.1. Issue Identification -- 2.2. An Approach for Initial Categorization of Safety Issues -- 2.3. Process for Determining the Risk Significance of Safety Issues -- 3. Application of the Rdim Process to Safety Issues for Pressurized Heavy Water Reactors -- 3.1. Adequacy of Eccs Sump Screen -- 3.2. Moderator Temperature Predictions -- 4. Conclusions -- Acknowledgments -- References -- Session II. Reduction In Occupational Dose Exposure.

Pickering B Nuclear Dose Reduction Through Innovative Shielding And Mock-Up Training -- 1. Reactor Face Dose Rate Challenge -- 2. The Employment of Radiation Protection Measures -- 2.1. Alara Oversight -- 2.2. Innovative Shielding -- 2.3. Timeline - Development and Implementation -- 2.4. Leadership Role of Radiation Protection and Ims Management -- 2.5. Mock-Up Training - Team Building -- 3. Success and Results -- 4. Empowered Future Performance -- Best Practices In Management Of Heavy Water And Tritium -- 1. Introduction -- 2. GE's Experience -- 3. Impact of Tritium for An Operational Phwr -- 4. Lower Vault Tritium Concentrations -- 5. Achieving Low Pht Heavy Water Tritium Concentrations -- 6. Conclusion -- References -- Reduction In Tritium Emissions And Worker Internal Uptakes Through Source Term Reduction, Dryer Performance And Online Tritium Monitoring -- 1. Identification of Problem -- 2. Action Plan -- 3. Success and Results -- Systematic Collective Dose Reduction -- 1. Introduction -- 2. Safety Review of Existing Nuclear Installations -- 3. Collective Dose Reduction Programme -- 4. Area Identification -- 5. Development of Corrective Actions -- 5.1. Administrative Measures -- 5.2. Work Practices -- 5.3. Design Modifications/Improvements -- 5.4. Improvements to Reduce Internal Doses -- 5.5. Upgrades in Radiological Monitoring/Protection -- 5.6. Reinforcement of Other Areas -- 6. Conclusion -- Downsizing Of The Pht Purification Filter Cartridge In Wolsong Unit 1 -- 1. Introduction -- 2. History of Changing the Pht Purification System Filter Cartridges -- 3. Evaluation of the Changing Filter -- 3.1. A Transition of the Crud1 Concentration in the Pht System -- 3.2. Analysis of Crud Constituents in the Pht System -- 3.3. Evaluation of Steam Generator Worker Dose Rates -- 4. Conclusions -- Portable Dryer Used At Candu Stations -- 1. Introduction.

2. Standard Desiccant Dehumidification Design -- 3. Powerpurge™ Desiccant Dehumidification Design -- 4. Portable Vapour Recovery Dryers (Vrds) -- 5. Minimize Ingress of H2O in the Reactor Building -- 6. Application of the Portable Dryers At Candu Stations -- 7. Conclusions -- Dose Reduction Initiatives At Darlington Nuclear -- 1. Introduction -- 2. Dose Reduction Initiatives -- 2.1. Installation of Submicron Filtration -- 2.2. Remote Monitoring -- 2.3. Shielding Applications -- 2.4. Decontamination -- 2.5. Characterization of Dose

and Dose Rates -- 2.6. Internal Dose Reduction -- 3. Human Performance Improvement -- 3.1. Impact of Worker Practice -- 3.2. Coaching, Monitoring & Follow-Up -- 4. Future Challenges -- 5. Alara Achievements and Recognition -- Session III. Performance Improvements -- Use Of Human Performance Field Simulator At Pickering Ngs, Practising Event Prevention - Driving Culture Change -- 1. Background -- 2. Objective -- 3. Facility & Process -- 4. Programme -- 5. Summary -- Plgs Level 2 Psa -- 1. Introduction -- 2. Safety Goals -- 3. Overall Psa Results -- 4. Mitigating System Fault Tree Development -- 5. Linkage to Plant Processes -- 6. Use of Site-Specific Data -- 7. Fault Tree Multiple Top Approach -- 8. Model Integration -- 9. Plant Response Simulation -- 10. Treatment of Uncertainty (Error Factor) -- 11. Fire Psa - Cable Routing -- 12. Conclusions -- Improvement Of Power Measurement And Plant Efficiency At Atucha 1 Npp -- 1. Brief Description of Atucha I Npp -- 2. Atucha I Instrumentation and Control Technology -- 3. Using Process Characteristics to Improve Accuracy of Process Measurements and Maintenance Performance -- 3.1. Process Measurements -- 3.2. Example 1 - Pt100 Temperature Measurements -- 3.2. Example 2 - Feedwater Flow Measurements. 3.3. Example 3 - Main Coolant Pump Flows As a Method of Checking the Overall Reliability and Surveillance of Instrumentation Used to Calculate Reactor Power. -- 3.4. Example 4 - Turbine-Generator Output As a Method of Checking the Reliability of Reactor Output Measurement -- 4. Instrumentation Maintenance Improvements -- Evolution Of The Wolsong Npp F/M D2O Pressure Control System -- 1. Introduction. -- 2. System Description -- 3. Design and Limitations -- 3.1. D2O Supply Pressure Control -- 3.2. F/M Magazine and C-Ram Pressure Control System -- 4. Design Considerations -- 5. New Design/Development -- 5.1. D2O Supply Pressure Control System -- 5.2. F/M Magazine Pressure Control System -- 5.3. F/M C-Ram Pressure Control System -- 6. Summary -- Platon And Spv Programme - Means Of Improving Reliability Of Cernavoda Npps -- 1. Cernavoda Npp Plant Information System -- 2. Single Point of Vulnerability Project Cernavoda Npp -- 2.1. Spv Initiative Goals -- 2.2. Spv Initiative Summary of Main Steps -- 2.3. Spv Identification -- 2.4. Establish Necessary Pm Tasks for Spv -- 2.5. Determine the Gap and Required Actions -- 2.6. Perform Feedback Analysis and Establish Future Actions -- 3. Other Proposals to Improve the Spv Initiative -- 4. Conclusions -- Review Of Candu Plant Performance -- 1. Overall Fleet Performance -- 2. Causal Factor Analysis - Flr -- 3. Cog Initiatives on Key Focus Areas -- 3.1. Materials and Equipment Performance -- 3.2. Human Performance -- 4. Conclusions -- References -- Review Of The Performance And Best Practices Of The Wolsong Nuclear Power Stations -- 1. Introduction -- 2. Forced Outage Reduction Programmes -- 2.1. Human Factors Studies and Developments -- 2.2. Minimizing Equipment Failure Trips -- 3. Good Maintenance Practices and Maintenance Management -- 3.1. Operating Ranges. 3.2. Efficient Management of Maintenance Activities/Reduced Maintenance Backlogs -- 4. Lessons Learned and Opex -- 4.1. Management of Operating Experience -- 4.2. Feedforward of Opex -- 5. Research and Development -- 6. Summary and Conclusions -- References -- Session IV. Reduction In Operating And Maintenance Costs -- Cleanup And Recovery Of High Toc (Total Organic Carbon) D2O Atpickering Ngs -- 1. Summary -- 2. Background -- 3. Drum Control Process -- 4. Key Message -- Fuel Handling Benchmarking -- 1. Introduction -- 2. Project Description -- 3. Project Results -- 4. General Observations -- 5. Conclusions and Recommendations -- 6.

Path Forward -- 7. Lessons Learned -- Appendix. Candu Fh Best Practices -- Development Of Consolidated Spent Fuel Dry Storage System -- 1. Introduction -- 2. Configuration of Macstor/Kn-400 Module -- 3. Design Requirement of Macstor/Kn-400 Module -- 4. Design Description of Macstor/Kn-400 -- 5. Conclusions -- Rod-Based Guaranteed Shutdown States (Rbgss) Implementation At Pickering B -- 1. Technical Considerations -- 1.1. Safety Analysis -- 1.2. Common Mode Failure Analysis -- 2. Regulatory Perspective -- 3. Implementation -- 3.1. Rbgss Application -- 3.2. Maintain Rbgss -- 3.3. Exit From Rbgss -- 4. Conclusions -- Abbreviations -- List Of Participants.

Sommario/riassunto

This publication reports on the outcome of an IAEA workshop on heavy water reactor operation. It summarizes the material presented at the workshop and discusses a broad range of operational practices, including regulatory aspects, the reduction of occupational dose, performance improvements, and reduction of operating and maintenance costs.
