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Publicações Oferecidas



IAEA Nuclear Energy Series



Étapes du Développement d'une Infrastructure Nationale pour l'Électronucléaire
(Milestones in the Development of a National Infrastructure for Nuclear Power)

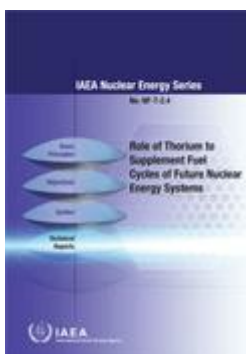
IAEA Nuclear Energy Series NG-G-3.1

Subject Classification: 0700-Nuclear power

STI/PUB/1305 (ISBN:978-92-0-204910-9) 92 pp.; 2 figures;

Language: French

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1305f_web.pdf



Role of Thorium to Supplement Fuel Cycles of Future Nuclear Energy Systems

IAEA Nuclear Energy Series NF-T-2.4

Subject Classification: 0802-Fuel fabrication and performance

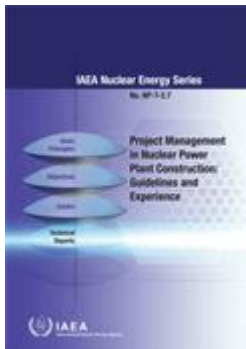
STI/PUB/1540 (ISBN:978-92-0-125910-3) 157 pp.; 103 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1540_web.pdf

DESCRIPTION

The investigation of the thorium fuel cycle (ThFC) is a collaborative INPRO (International Project on Innovative Nuclear Reactors and Fuel Cycles) activity within its main area on global vision on sustainable nuclear energy for the 21st century. The current publication reports on the sustainability of nuclear power by re-examining the potential of thorium-based fuel cycles to support future large scale deployment of nuclear energy systems by increasing the availability of nuclear material. Special

attention is paid to the thorium fuel cycle from the point of view of economics and proliferation resistance.



Project Management in Nuclear Power Plant Construction: Guidelines and Experience

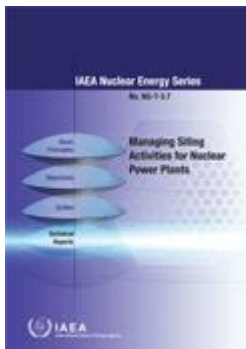
IAEA Nuclear Energy Series NP-T-2.7

Subject Classification: 0701-Nuclear power planning and economics
 STI/PUB/1537(ISBN:978-92-0-122210-7)124 pp.;37 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1537_web.pdf

DESCRIPTION

Project management is a leadership function primarily concerned with the organization, coordination and control of large undertakings, with the aim of achieving technical excellence, by working to quality standards, optimizing the schedule and the supply chain and minimizing costs. Competent project management can reduce costs through more efficient work sequences, higher productivity, shorter activity durations and the parallel reduction of accumulated interest during construction of nuclear power plants. Based on past proven practices in Member States, this publication provides advice and guidelines to project management from the preparatory phase to plant turnover to commissioning of nuclear power plants. The guidelines and experiences described will enable project managers to obtain better performance in nuclear power plant construction.



Managing Siting Activities for Nuclear Power Plants

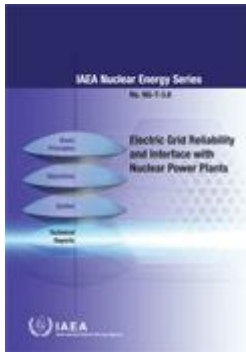
IAEA Nuclear Energy Series NG-T-3.7

Subject Classification: 0701-Nuclear power planning and economics
 STI/PUB/1565 (ISBN:978-92-0-131610-3) 59 pp.;8 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/P1565_web.pdf

DESCRIPTION

This publication has been developed to help States ensure that appropriate sites for a nuclear power plant are identified, assessed and licensed, in a well-planned and efficient manner, taking into account all relevant factors and lessons learned from recent events. It is applicable to countries with existing nuclear facilities as well as those introducing nuclear power in their energy mix for the first time. This Nuclear Energy Series publication gives guidance on the complex organizational, engineering, socio-economic, and environmental issues of siting, complements the IAEA safety guides related to site selection and integrates existing IAEA documentation on the subject into a more compact and user friendly guidebook.



Electric Grid Reliability and Interface with Nuclear Power Plants

IAEA Nuclear Energy Series NG-T-3.8

Subject Classification: 0701-Nuclear power planning and economics
 STI/PUB/1542(ISBN:978-92-0-126110-6)78 pp.;13 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1542_web.pdf

DESCRIPTION

This publication describes the characteristics of the electrical grid system that are required for the connection and successful operation of a nuclear power plant, as well as the characteristics of a nuclear power plant that are significant for the design and operation of the electrical grid system. It addresses the issues to be considered when a nuclear power plant is being planned and describes the information exchange necessary between the developer of a nuclear power plant and the organization responsible for the electrical grid. The particular issue of a large nuclear unit connected with a small system is also discussed. A new topic introduced in this publication is the need for cyber security of the grid system near the nuclear power plant. Several case studies of Member States' experience in developing new nuclear units and about grid events during operation are included.

IAEA Safety Standards Series



Sûreté des centrales nucléaires: conception French Edition

(Safety of Nuclear Power Plants: Design Specific Safety Requirements)

IAEA Safety Standards Series No. SSR-2/1

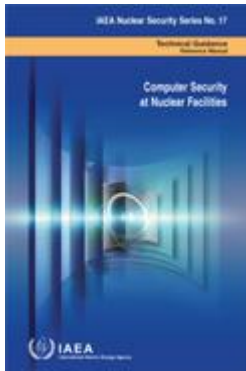
Subject Classification: 0603-Nuclear power plants
 STI/PUB/1534(ISBN:978-92-0-121510-9)

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1534f_web.pdf

DESCRIPTION

This publication is a revision of Safety Requirements No. NS-R-1, Safety of Nuclear Power Plants: Design. It establishes requirements applicable to the design of nuclear power plants and elaborates on the safety objective, safety principles and concepts that provide the basis for deriving the safety requirements that must be met for the design of a nuclear power plant. It will be useful for organizations involved in the design, manufacture, construction, modification, maintenance, operation and decommissioning of nuclear power plants, as well as for regulatory bodies. Contents: 1. Introduction; 2. Applying the safety principles and concepts; 3. Management of safety in design; 4. Principal technical requirements; 5. General plant design; 6. Design of specific plant systems.

IAEA Nuclear Security Series



Nuclear Security Systems and Measures for Major Public Events

IAEA Nuclear Security Series 18

Subject Classification: 0600-Nuclear and Radiological Safety

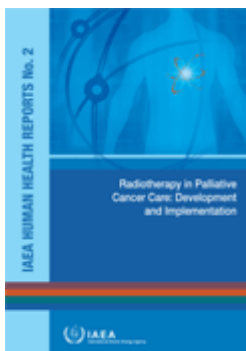
STI/PUB/1546 (ISBN:978-92-0-127010-8) 56 pp.;14 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1546_web.pdf

DESCRIPTION

This publication provides an overview, based on practical experiences and lessons learned, for establishing nuclear security systems and measures for major public events. It covers technical and administrative nuclear security measures for developing the necessary organizational structure; developing plans, strategies and concepts of operations; and making arrangements for implementing the developed plans, strategies and concepts.

IAEA Human Health Reports



Radiotherapy in Palliative Cancer Care: Development and Implementation

IAEA Human Health Reports 2

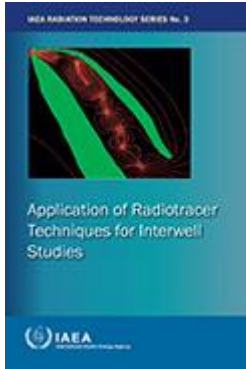
Subject Classification: 0100-Life Sciences

STI/PUB/1388 (ISBN:978-92-0-109009-6) 53 pp.;2 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1388_web.pdf

DESCRIPTION

Palliative care is increasingly recognized as an important component of quality care for cancer patients. Improving access to, and availability and quality of, comprehensive palliative care in cancer treatment is an important and ongoing global challenge. This publication focuses on radiotherapy as a major tool and gives summaries of current approaches in palliative radiotherapy and care. It describes the steps needed to enhance access to and quality of care, and to incorporate palliative radiotherapy and palliative care within an integrated multidisciplinary approach. It is hoped that this publication will be a resource for administrators, specialists and teachers working to improve the management of palliative care and radiotherapy for patients.

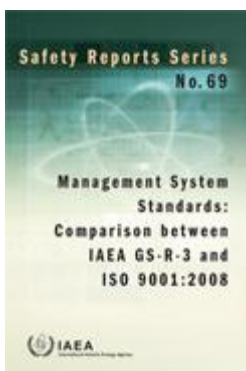
IAEA Radiation Technology Series**Application of Radiotracer Techniques for Interwell Studies***IAEA Radiation Technology Series 3*

Subject Classification: 0503-Tracers

STI/PUB/1539(ISBN:978-92-0-125610-2)231 pp.;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1539_web.pdf**DESCRIPTION**

The main purpose of interwell tracer tests in oil and geothermal reservoirs is to monitor qualitatively and quantitatively the injected fluid connections between injection and production wells and to provide important data for better understanding the reservoir geology in order to optimize the production strategy and thereby maximize the oil recovery or thermal energy production. Most of the information given by the radiotracer tests cannot be obtained by other means. Based on the key findings of an IAEA coordinated research project in this area, this publication describes the principles and the state-of-the-art of radiotracer techniques for interwell investigations, provides practical guidance on the design and implementation of tracer experiments as well as on the interpretation of the results.

Safety Reports Series**Management System Standards: Comparison between IAEA GS-R-3 and ISO 9001:2008***Safety Reports Series 69*

Subject Classification: 0600-Nuclear and Radiological Safety

STI/PUB/1529(ISBN:978-92-0-120710-4)55 pp.;1 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1511_web.pdf**DESCRIPTION**

This Safety Report compares the requirements of IAEA Safety Standards Series No. GS-R-3, The Management System for Facilities and Activities, and ISO 9001:2008, Quality Management Systems — Requirements, and identifies the main differences between the two standards. It provides information and guidance on adding safety specific management system requirements to the ISO 9001:2008 standard, to ensure that safety can be achieved. The publication is intended primarily for use by owners, operators and employees of nuclear facilities and installations, and by regulatory bodies, suppliers, and research and development organizations.



Management System Standards: Comparison between IAEA GS-R-3 and ASME NQA-1-2008 and NQA-1a-2009 Addenda

Safety Reports Series 70

Subject Classification: 0600-Nuclear and Radiological Safety
 STI/PUB/1530(ISBN:978-92-0-120810-1)61 pp.;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1530_web.pdf

DESCRIPTION

This Safety Report compares the requirements of IAEA Safety Standards Series No. GS-R-3, The Management System for Facilities and Activities, and the American Society of Mechanical Engineers (ASME) Quality Assurance Requirements for Nuclear Facility Applications (ASME NQA-1-2008, NQA-1a-2009). It identifies the similarities and differences between them and provides information and guidance to assist an organization in meeting the requirements of both standards.

IAEA Safety Standards Applications Series



Peer Review of Radioactive Waste Management Activities of COVRA, Netherlands

Provision for the Application of Safety Standards TransSAS-8

Subject Classification: 0611-Radioactive waste management

STI/PUB/1533(ISBN:978-92-0-121210-8)59 pp.;11 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1533_web.pdf

DESCRIPTION

This publication presents the outcome of a peer review undertaken of the overall waste management programme within the Netherlands, whose programme has been carefully formulated for the particular circumstances of a country with a limited nuclear power industry, albeit with prospects for some expansion. The Netherlands has opted for long term storage of spent fuel, and COVRA (Central Organization of Radioactive Waste) is the recognized collecting service for this activity. The review was carried out following the requirements set out in IAEA Safety Standards Series No. GSR-Part 5 on the Predisposal Management of Radioactive Waste and should be of considerable interest to the many countries contemplating national waste management and spent fuel policies, implementing strategies and evaluation of their safety.

Proceedings Series - International Atomic Energy Agency



Sources and Measurements of Radon and Radon Progeny Applied to Climate and Air Quality Studies

Proceedings Series - International Atomic Energy Agency

Subject Classification: 1300-Environment

STI/PUB/1541(ISBN:978-92-0-123610-4)162 pp.;88 figures.

http://www-pub.iaea.org/MTCD/Publications/PDF/P1541_web.pdf

L-12257
RP-RA IAE.28

DESCRIPTION

The naturally occurring radionuclide radon (^{222}Rn), together with its radioactive progeny, has been widely used to study atmospheric processes and to test and validate comprehensive global chemical transport models. Being a noble gas, radon is not removed from the atmosphere by dry or wet deposition processes, nor does it become attached to aerosols, and so it is a good tracer for air mass movements. This publication summarizes the findings of a technical meeting jointly sponsored by the IAEA and the World Meteorological Organization, at which experts in the fields of radon exhalation from the ground, radon measurements in air, and atmospheric transport modelling came together to discuss the latest developments. A major focus of the meeting was on moving towards agreed approaches to estimating radon exhalation flux densities, and to improving quality assurance of measurements both of radon exhalation flux densities and of concentrations of radon and radon progeny in the atmosphere.



Fast Reactors and Related Fuel Cycles: Challenges and Opportunities (FR09)

Proceedings of an International Conference Held in Kyoto, Japan, 7–11 December 2009

Proceedings Series - International Atomic Energy Agency

Subject Classification: 0800-Nuclear fuel cycle and waste management

STI/PUB/1444(ISBN:978-92-0-102410-7)393 pp.;85 figures;

http://www-pub.iaea.org/MTCD/Publications/PDF/Pub1444_web.pdf

L-12255
EN-CCN IAE.32

DESCRIPTION

This is the proceedings of an international conference on fast reactors and related fuel cycles convened to exchange experience and innovative ideas in order to achieve progress in this field. Fast reactor programmes are currently on an accelerated growth path in many countries of the world, and the last international fast reactor conference was held almost twenty years ago. The scope of discussion included key scientific and technological areas, such as fuels and materials development, safety, advanced simulation, component and system design and coolant technology, in which innovation is pursued to ensure that the next generations of fast reactor fuel cycles will achieve their potential. The accompanying CD-ROM contains the contributed papers and posters, summaries of 150 oral presentations and the young generation event.



Uranium 2011: Resources, Production and Demand

OECD, International Atomic Energy Agency (IAEA). English, 488 pages.

Published by : OECD Publishing , Publication date: 01 Aug 2012.

NEA#07059, ISBN: 978-92-64-17803-8.

(Existe só em papel)

DESCRIPTION

In the wake of the Fukushima Daiichi nuclear power plant accident, questions are being raised about the future of the uranium market, including as regards the number of reactors expected to be built in the coming years, the amount of uranium required to meet forward demand, the adequacy of identified uranium resources to meet that demand and the ability of the sector to meet reactor requirements in a challenging investment climate. This 24th edition of the “Red Book”, a recognised world reference on uranium jointly prepared by the OECD Nuclear Energy Agency and the International Atomic Energy Agency, provides analyses and information from 42 producing and consuming countries in order to address these and other questions. It offers a comprehensive review of world uranium supply and demand as well as data on global uranium exploration, resources, production and reactor-related requirements. It also provides substantive new information on established uranium production centres around the world and in countries developing production centres for the first time. Projections of nuclear generating capacity and reactor-related requirements through 2035, incorporating policy changes following the Fukushima accident, are also featured, along with an analysis of long-term uranium supply and demand issues.