Working Group I

Job Description: Licensing Specialist of Nuclear Installations

Group members:

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Core Activities in Nuclear Safety Oversight & Competence Areas Needed

Core activities in Nuclear Safety oversight	Competence areas needed	Core activities in Radiation Safety oversight	Competence areas needed	Support activities of the regulator	Competence areas needed
▪ **Review and assessment;** ▪ **Authorization;** ▪ **Inspection;** ▪ **Enforcement;** ▪ **Development of regulations and guides.**	▪ **Legal, regulatory and organizational basis**: Legal basis, Regulatory Policies and Approach, Regulation and Regulatory Guides & Management System ▪ **Technical disciplines competences:** **Basic Science** (e.g: Physics, Nuclear Eng, Environmental Eng, hydrology etc) **App Science** (e.g: Nuc Reactor and Power Plant Tech) **Specialized Science** (e.g: Safety Assessment Methodology) ▪ **Competences related to a regulatory body's practices**: Review and Assessment, Authorization, Inspection, Enforcement & Development of Regulations and Guides ▪ **Personal & Behavioral competences:** Analytical thinking and problem solving, Communication & Team work, Safety Culture etc.	▪ **Review and assessment;** ▪ **Authorization;** ▪ **Inspection;** ▪ **Enforcement;** ▪ **Development of regulations and guides.**	▪ **Legal, regulatory and organizational basis**: Legal basis, Regulatory Policies and Approach, Regulation and Regulatory Guides & Management System ▪ **Technical disciplines competences:** **Basic Science** (e.g: Physics, Nuclear Science etc) **App Science** (e.g: Rad Physics, Med Physics) **Specialized Science** (e.g: Industrial Safety Dosimetry) ▪ **Competences related to a regulatory body's practices**: Review and Assessment, Authorization, Inspection, Enf & Dev of Reg & Guides ▪ **Personal & Behavioral competences:** Analytical thinking and problem solving, Communication & Team work, Safety Culture etc.	▪ **Emergency Preparedness and Response;** ▪ **Communication with the public and interested parties** ▪ **International Cooperation;** ▪ **Research and Development**	• Legal Basis • Regulatory policies and approaches • Regulation and Regulatory Guides • Management System • Basic Science and Technology • Applied Science and Technology • Specialized Science and Technology • Review and Assessment • Authorization • Inspection • Enforcement • Dev of Regulations and Guides • Analytical Thinking and Problem Solving • Personnel Effectiveness and Self Management • Communication • Team Work • Managerial Competence and Leadership

Simplified Job description – Licensing Specialist of Nuclear Installations

Role name:	**Licensing Specialist of Nuclear Installations**
Key responsibilities and main tasks: (general list)	Authorization process ▪ Perform review and assessment process ▪ Evaluate information provided in applicant's submission relevant to authorization ▪ Take the outcome of other regulatory process (such as review and assessment) into consideration in authorization process ▪ Identify restrictions or conditions that may be imposed in an authorization ▪ Make judgements on granting, modifying, suspending or withdrawing authorizations
Main success indicators: (on what basis is the performance evaluated?)	Issuance of license within timeline (client charter)
Co-operation and networking: (who are the main counterparts in own and external organizations?)	Internal: • Review assessment team • Inspection team • Enforcement team External: • Federal Gov. Agencies such as Dept of Environment, Energy, Public Health, Town Planning, etc • State and Local Government • NGO's
Decision making: (What kinds of decisions this role is involved with?)	• Approve/Not approve of submission documents • Granting a license/request for additional information/Not grant a license
Competence needs: e.g. (What competence areas are required from the incumbent of the position?)	• At least Bachelor in Nuclear Engineering or other equivalent Engineering field • Legal, regulatory and organizational basis (Legal basis, Regulatory Policies, Regulations and Guides related to nuclear safety) • Technical competences (Applied Science and Specialized Science related to nuclear technology and safety) • Regulatory body's practices (Review and Assessment skill, deep understanding on authorization) • Personal and Behavioral competences (Analytical thinking and problem solving, Communication,

Training Needed for Licensing Specialist of Nuclear Installation

Title of Training Module / Activity	Learning Objective (as per design document)	Duration of Module / Activity	Training method(s)	Type of training material / aids required	Type of training facilities required	Methods for evaluating initial effectiveness
Radiation Protection Officer	To understand a radiation protection and safety principle and its related legal system	10 days	Lectures, Lab & experiments	Teaching modules, PP presentation, equipment & procedures	Classroom, Lab, Technical equipment	Examination (objectives & essay) Practical exercises
Assessor & Inspector Course	To understand fundamental principles on assessment, licensing, inspection and enforcement tasks	10 days	Lectures, discussion & case study	Teaching modules, PP presentation, equipment & procedures	Classroom, Lab, technical equipment,	Examination (objectives & essay) Presentation delivery
Communication Skill	To understand important elements and skills in communication	3 days	Lectures & discussion	Teaching modules, PP presentation, video	Classroom, audio visual equipment	Presentation delivery, interview, report writing
Basic Professional Training Course	To understand principles and elements in nuclear safety	10 days	Lectures, discussion, Lab, simulation	Teaching modules, PP presentation, equipment & procedures	Classroom, Lab, technical equipment	Examination (objectives & essay) Presentation delivery
Advance Assessor & Inspector Course	To provide deep understand on advance assessment, licensing, inspection and enforcement tasks	3 days	Lectures, case study & discussion	Teaching modules, Technical & legal documents	Classroom	Presentation delivery, project works & interview
International Nuclear Law	To understand International law related to nuclear installation and safety	5 days	Lectures, discussion & case study	Teaching modules, PP presentation, legal documents	Classroom	Presentation delivery, project work
Project	To understand principles	3 days	Lectures,	Teaching modules PP	Classroom	Presentation delivery,

Stage 3: Training Program Plans and Schedules & Evaluation of Effectiveness

Quarter of Conduct	Title of Training	Competence area	Level of training	Type of training	Duration
[1/2023]	Radiation Protection Officer	Technical disciplines	advance	Classroom & Lab	10 days
[2/2023]	Communication skills	Personal & behavioral	advance	Classroom	3 days
[3/2023]	Basic Professional Training Course	Technical disciplines	basic	Class room & Lab	10 days
[4/2023]	Assessor & Inspector	Technical disciplines	basic	Classroom & Lab	5 days

Quarter of Conduct	Title of Training	Competence area	Level of training	Type of training	Duration
[1/2024]	Project Management skill	Personal & behavioral	advance	Classroom & Seminar	3 days
[22024]	Advance Assessor & Inspector	Technical disciplines	basic	Classroom	5 days
[3/2024]	International Nuclear Law	Legal, regulatory and organizational basis	Advance	Classroom & Seminar	5 days
[4/2024]	Leadership & Management	Personal & behavioral	Advance	Classroom	3 days

Stage 4: Assessment of the training program - SWOT-analysis

STRENGHTS • Well organize training provider • Courses provides are certified by national regulatory body & based on international standard • All lecturers are qualified and experience	**OPPORTUNITIES** • Collaboration with national and international counterparts • Explore more types of training method can be delivered
WEAKNESSES • Availability of experts/resources person • Training program depend on demand	**THREATS** • New technology appearances • New government policies and strategies