



Organisation for Economic Co-operation and Development Nuclear Energy Agency Committee on Nuclear Regulatory Activities Working Group on Inspection Practices

WGIP's 15th INRIW's Announcement

15th International Nuclear Regulatory Inspection Workshop on Inspection Challenges Related to Nuclear Power Plant Ageing Management, Graded Approach to Optimise the Inspection Process and the Effects of the COVID-19 Pandemic on Inspection Programmes and Practices

2 - 6 October 2022, Warsaw, Poland

Hosted by National Atomic Energy Agency - PAA

Registration deadline: 17 July 2022

General information - Registration information - Participants questionnaire

15TH INTERNATIONAL NUCLEAR REGULATORY INSPECTION WORKSHOP

GENERAL INFORMATION

The Nuclear Energy Agency (NEA) Committee on Nuclear Regulatory Activities (CNRA) Working Group on Inspection Practices (WGIP) will sponsor its fifteenth international workshop on 2-6 October 2022 in Warsaw, Poland, on inspection practices amongst its member countries.

The workshop will be hosted by the Polish National Atomic Energy Agency (PAA).

Objective

The conduct of inspections provides an essential and valuable source of information for a regulatory body's (RB) integrated assessment and comprehensive oversight safety process. Inspection gives a regulatory body the ability to verify that licensees, during all the phases of the performance of their activities, operate the facility safely, that their activities fully comply with all applicable regulations and that safety is given the highest priority. Inspection also provides a basis for regulatory enforcement.

In this framework, the main purpose of the workshop is to provide a forum for the exchange of information on regulatory inspection activities. Participants will have the opportunity to meet with their counterparts from other countries and organisations to discuss current and future issues on the selected topics.

They will develop conclusions and commendable practices regarding these issues and identify methods to help improve their own inspection practices.

Background

Considering the importance of inspections for regulatory bodies, the CNRA established a special working group to address inspection practices and to facilitate the exchange of information and experience related to regulatory safety inspections between its member countries.

This workshop, along with many other activities performed by WGIP, is directed towards this goal. The consensus from participants at previous workshops noted that the value of meeting with people from other inspection organisations was one of the most important achievements of this activity.

Topics

The workshop will address the following three topics concerning experience from inspection activities:

- Inspection challenges related to nuclear power plant (NPP) ageing management;
- Graded approach to optimise the inspection process; and
- The effects of the COVID-19 pandemic on inspection programmes and practices.

Overview

A brief overview of the concepts and issues for each of the topics is provided in the following paragraphs.

Actual issues to be discussed during the workshop will be generated by the organising committee members based on the responses submitted by participants with their registration forms. This will help ensure that issues considered most important by the workshop participants will be covered during the group discussions.

Inspection challenges related to nuclear power plant ageing management

Ageing management is relevant for many countries because of the long-term operation and/or lifetime extension of their nuclear power plants. Additionally, in many countries, a change of staff (licensee/vendor/RB) due to many retirements is ongoing.

This task builds on results of previous workshops on inspection practices:

- Czech Republic (1998): <u>Regulatory inspection activities related to older operating</u> <u>NPPs</u>. [NEA/CNRA/R(99)2]
- Switzerland (2012): Experience from inspection of ageing and equipment qualification, competency of operators. [NEA/CNRA/R(2012)6]

For more information, please see Questionnaire A: *Inspection challenges related to nuclear power plant ageing management*.

Graded approach to optimise the inspection process

The inspection process (conduct of inspection, evaluation of findings, requesting of corrective actions, enforcement actions, etc.) of a regulatory body has to cover all the functional areas (operation, maintenance, quality assurance etc.) of nuclear power plants. However, one method to improve the effectiveness of the inspection process and its associated activities is to grade the areas inspected in accordance with different criteria (e.g. safety importance, operating experience, age of systems, structures and components, plant specific features, deterministic and probabilistic safety analysis, etc.) with the purpose to focus on safety significant areas.

For more information, please see Questionnaire B: Graded approach to optimise the inspection process.

The effects of the COVID-19 pandemic on inspection programmes and practices

During the COVID-19 Pandemic, the world faced an unprecedented global crisis. Regulatory bodies were challenged to develop comprehensive plans and actions to balance the importance of nuclear safety oversight while protecting public health, the health and safety of inspectors as well as nuclear power plant personnel.

For more information, please see Questionnaire C: *The effects of the COVID-19 pandemic on inspection programmes and practices.*

Format

The workshop will be sequenced into a plenary opening session, various workshop discussion sessions, a final topic group discussion, host country presentations and a plenary closing session.

Additionally, informal opportunities will be made available throughout the workshop, for participants to exchange information and communicate on other inspection topics.

Plenary opening session

This will include a welcome by the Polish regulatory body, representatives of the NEA and the WGIP chair.

The lead facilitator for each topic will then introduce the main issues to be addressed during the workshop. Their presentations will be based on the responses received to the participants' survey and WGIP discussions.

Workshop discussion sessions (three half-day sessions)

Participants will be divided into smaller groups to discuss **one** of three workshop topics. A facilitator and recorder will work with each group to stimulate and encourage discussions. Based on experience at previous workshops, each group will remain the same throughout these sessions, although facilitators may be rotated to enhance the exchanges of information.

Each group will be expected to develop a list of conclusions and commendable practices for the topics being discussed, in order to prepare for the workshop proceedings.

- Participants should indicate on the registration form; **the preferred topic** they would like to discuss during these sessions. Every attempt will be made to assign participants to the appropriate discussion group. Again, past experience has shown that groups having the most diverse (e.g. participants from different countries) groupings have been the most effective.
- Participants are also encouraged to list one or two specific issues that they would like to see addressed during the workshop discussion sessions.

As a result of previous workshops, most participants have commented that advance information is very valuable to the discussions. Therefore, it is requested (**and highly recommended**) that participants supply the following information:

• A short questionnaire for each topic is attached to this announcement (and also available on the WGIP working area of the NEA website). It is requested that each participating country provide the NEA with the answers to the questionnaires through its relevant WGIP member in order to better facilitate and co-ordinate the group discussion sessions. Additionally, participants, if they wish, can provide general information (short papers of 1 or 2 pages) on their countries' inspection practices for each topic.

The responses to the questionnaires must **be sent to Mr Christopher Joseph ("C.J.") FONG** (christopher.fong@oecd-nea.org), with a copy to Ms Carrie RICHARDSON (carrie.richardson@oecd-nea.org) by **1 August 2022**, so that the session leads will have time to review the responses.

Final topic group discussion

Prior to the host country's presentation, three separate open and informal discussions will be held simultaneously for each of the three topics.

Host county presentation

The Polish National Atomic Energy Agency (PAA) will present its oversight program for nuclear facilities, and how it works with the Office of Technical Inspection (UDT) to verify general and specific topics for inspection programme.

Plenary closing session

One facilitator from each topic will present the conclusions and proposed commendable practices that were developed by their respective groups. A panel discussion including all facilitators and recorders for the topic will answer questions from the audience. Following the presentations, there will be an open panel discussion on the results of the workshop.

Participants

The workshop is opened to persons from RBs, research organisations, technical support organisations (TSOs), and industry; from OECD/NEA member countries and non-member countries.

The NEA has invited the following organisations/groups to participate in the workshop: International Atomic Energy Agency (IAEA), Working Group on Human and Organizational Factors (WGHOF), Vendor Inspection Cooperation Working Group (VICWG), and the Regulator's Forum.

Language

All presentations, discussions and meeting documents will be in English.

Workshop proceedings

Proceedings from the workshop will be published and will include papers from the opening session, conclusions and recommendations from the discussion groups, a summary of panel discussions and information papers submitted by participants of the workshop.

Informal sessions

In order for participants to be able to communicate and exchange information on other topics of interest, informal sessions will be arranged during lunch periods and following daily sessions.

Preliminary schedule of workshop activities

The following schedule has been developed for the workshop. Participants should note that the schedule is preliminary in nature and **subject to change** based on the planning and arrangements currently being prepared by PAA.

As noted in the table, PAA will be hosting a meet and greet on Sunday evening, a workshop dinner on Wednesday evening, and coffee breaks and lunches during the workshop.

Programme			
Day		Event	
Sunday	15:00	Workshop pre-meeting for discussion group leads	
2 October	18:00	Pre-registration meet and greet	
Monday 3 October	08:30	Registration and coffee	
	09:00	Plenary opening session	
		Welcome	
		- PAA: Dr Łukasz Młynarkiewicz	
		- NEA: Mr Christopher ("C.J.") FONG, Deputy Head	
		of NEA's Nuclear Safety Technology and	
		Regulation Division	
		- WGIP: Mr Alex LEBLANC, WGIP Chair	
		Presentations of workshop topics by WGIP topic leads	
	12:30	Lunch	
	13:30	Workshop discussion session: Part 1	
	17:00	End	
	Free evening to explore Warsaw		
Tuesday 4 October	Workshop discussion sessions: Parts 2 and 3		
	09:00	Resume workshop discussion sessions: Part 2	
	12:30	Lunch	
	13:30	Workshop discussion sessions: Part 3	
	17:00	End	
	Free evening to explore Warsaw		
Wednesday 5 October	09:00	Final topic group discussions	
	11:00	Host country presentations – about PAA and its approach of supervision of nuclear facilities	
	12:00	Lunch	
	13:00	Host country presentations ^{1} – about UDT and its approach to verify general and specific topics for inspection programme	
	14:30	Plenary closing session: workshop discussion results	
	17:00	Closing	
	18:00	Closing workshop dinner	
Thursday	08:00	Meet for the site visit to National Center for Nuclear Research at Otwock- Świerk	
6 October	16:00	End	

¹ Plus, Zwentendorf NPP presentation from the IAEA

WORKSHOP VENUE, REGISTRATION AND PAYMENT

Workshop venue

The workshop will be held at the **NOVOTEL Warszawa Centrum Hotel** in Warsaw, Poland.

NOVOTEL Warszawa Centrum Hotel ul Marszałkowska 94/98 00-510 Warsaw Poland Telephone: +48 22 596 00 00 E-mail: H3383@accor.com



Hotel room reservation

The workshop registration fee does not include the hotel room.

A block of rooms has been set aside at the NOVOTEL Warszawa Centrum Hotel at a rate of 405,90 PLN (single room) and 442,80 PLN (double room) per night, including taxes. This rate does not include breakfast. The workshop hotel rate and availability is only guaranteed for reservations made before 29 September 2022.

Participants are requested to make their own hotel reservation by contacting the hotel directly through e-mail: <u>H3383@accor.com</u>. If you have any food allergies or dietary restrictions, please inform the hotel.

Workshop fee

The fee for the workshop is PLN 1303,80 and includes:

- the welcome meet and greet on Sunday, 2 October 2022;
- support for the venue, documentation, lunches and refreshments from 2-5 October 2022; and
- the workshop official dinner on Wednesday, 5 October 2022.

Please note: The fee does not include the hotel room reservation.

PAA is covering the cost of transportation to and from the technical visit.

Registration

Registration for the workshop is handled by the NEA. For registration issues, contact via e-mail is preferred. Please send email to Ms. Carrie RICHARDSON at <u>carrie.richardson@oecd-nea.org</u>. Please can register with the following information.

- 1. Name, email address and telephone number
- 2. Position
- 3. Organisation
- 4. Nationality
- 5. Which topic would you like to participate in? (A, B or C)
 - A. Inspection challenges related to nuclear power plant ageing management;
 - B. Graded approach to optimise the inspection process;
 - C. The effects of the COVID-19 pandemic on inspection programmes and practices.
- 6. Would you like to attend site visit? Yes/No

7. If Yes: Please send an up to date copy of your ID or Passport for the visit.

Workshop payment and invoice

Immediately after registering, please make the workshop fee payment to the organiser PRO COMPLEX Grupa on their account:

PRO COMPLEX Grupa Dominik Skiba PL **23 1140 2004 0000 3802 7432 1183** SWIFT code: **BREXPLPWMBK**

This payment is separate from the hotel payment. After making the workshop payment you will receive confirmation via email. An invoice and/or receipt is available upon request to the organiser (electronically or at the workshop).

Hotel payment should be done according to the instructions received from the hotel during the registration procedure.

Registration to OECD for the workshop	17 July 2022
Guaranteed for room reservations	29 September 2022
Reception of the payment for the workshop	20 July 2022
Reception of ID or Passport copy for site visit	29 July 2022
Workshop and site visit	2-6 October 2022

Important deadlines

Disclaimer

All best endeavours will be made to present the programme as presented. However, the workshop committee of WGIP reserves the right to alter or cancel, without prior notice, any of the arrangements, timetables, plans or other items relating directly or indirectly to the conference, for any cause beyond their reasonable control.

The workshop committee is not liable for any loss or inconvenience caused as a result of such alterations.

PRACTICAL INFORMATION

Visas

Please visit the website <u>https://www.msz.gov.pl/en/travel_to_poland</u> to verify visa requirements. If you require more information, please contact Mr Marek Jastrzębski at <u>jastrzebski@paa.gov.pl</u>.

Covid-19

Please visit the website <u>https://www.gov.pl/web/coronavirus/travel</u> to verify travel requirements. If you require more information, please contact Mr Marek Jastrzębski at jastrzebski@paa.gov.pl.

Travel to and within Warsaw

From the airport:

The workshop venue at the NOVOTEL Warszawa Centrum Hotel is accessible from the Warsaw Frederic Chopin International Airport (WAW) by public transport <u>https://www.wtp.waw.pl/en/</u> or taxi.

By car:

To arrive directly in the parking lot of the workshop venue at the NOVOTEL Warszawa Centrum Hotel, enter "Nowogrodzka 24 Warszawa" into your navigation device. Parking space at the hotel **must** be reserved in advance.

Official workshop contacts

NEA contacts:

Mr Christopher Joseph ("C.J.") FONG Deputy Head of the Division of Nuclear Safety Technology and Regulation Nuclear Energy Agency 46, Quai Alphonse Le Gallo 92100 Boulogne Billancourt France

Tel.: +33 (0) 7 87 22 17 62 E-mail: <u>christopher.fong@oecd-nea.org</u> Host country contacts:

Mr Marek Jastrzębski Nuclear Safety and Security Department National Atomic Energy Agency PAA Bonifraterska 17 00-203 Warsaw Poland

> Tel.: +48 22 556 2891 Mobile: +48 602 737 910 E-mail: jastrzębski@paa.gov.pl

Ms Carrie RICHARDSON Assistant Division of Nuclear Safety Technology and Regulation Nuclear Energy Agency 46, Quai Alphonse Le Gallo 92100 Boulogne Billancourt France

Tel.: +33 (0) 1 73 21 29 16 E-mail: <u>carrie.richardson@oecd-nea.org</u> Mr Karol Dulny Nuclear Safety and Security Department National Atomic Energy Agency PAA Bonifraterska 17 00-203 Warsaw Poland

> Tel.: +48 22 556 2809 Mobile: +48 880 529 295 E-mail: <u>karol.dulny@paa.gov.pl</u>

QUESTIONNAIRE A:

INSPECTION CHALLENGES RELATED TO NUCLEAR POWER PLANT AGEING MANAGEMENT

COUNTRY:

NOTES

Only one response per country is required. If more than one person from your country is participating, please co-ordinate the responses accordingly.

Submittals should be sent by e-mail to <u>carrie.richardson@oecd-nea.org</u> by 5 November 2021.

FOREWORD

Ageing management is relevant for many countries because of the long-term operation and/or lifetime extension of their nuclear power plants. Additionally, in many countries, a change of staff (licensee/vendor/RB) due to many retirements is ongoing.

This task builds on results of previous workshops on inspection practices:

- Czech Republic (1998): <u>Regulatory inspection activities related to older operating NPPs</u>. [NEA/CNRA/R(99)2]
- Switzerland (2012): Experience from inspection of ageing and equipment qualification, competency of operators. [NEA/CNRA/R(2012)6]

The objectives of the upcoming workshop's ageing management topic are some technical and nontechnical aspects, that were either briefly covered or not covered previously, and that are worth further consideration. These aspects include inspection challenges related to:

- newly discovered ageing effects,
- decreasing safety margins due to ageing SSCs that cannot be replaced,
- the ageing of civil structures and related components,
- concealed or inaccessible SSCs, and
- the obsolescence of knowledge.

It should also be mentioned that the European Nuclear Safety Regulator's Group (ENSREG) conducted a so-called Topical Peer Review in 2017 and 2018:

• ENSREG 1st Topical Peer Review Report "Ageing Management", October 2018 http://www.ensreg.eu/eu-topical-peer-review

This activity dealt mainly with the review of the licensee's ageing management provisions against international standards (in particular WENRA Safety Reference Levels, IAEA Safety Standards), whereas the upcoming workshop focuses on the inspection practices in the field of ageing management.

The following questionnaire aims at an understanding of the national inspection practices and the related more general settings.

QUESTIONNAIRE

Note: For the following set of questions, the term "systems, structures and components (SSCs)" always refers to items important to safety in the sense of the IAEA Safety Glossary (2018 Edition). The term "ageing" refers to physical ageing, i. e. the process in which the physical characteristics of SSCs gradually deteriorate with time or use owing to physical degradation or chemical or biological processes.

1. GENERAL ASPECTS OF AGEING MANAGEMENT INSPECTIONS

- 1.1 Please describe briefly your licensees' approach to manage the effects of ageing of SSCs (i. e. activities related to the understanding, prevention, detection, monitoring and mitigation of ageing effects on the SSCs). Do your licensees have an ageing management programme in place that systematically coordinates existing individual programmes such as engineering, maintenance, surveillance, equipment qualification, in-service inspection, safety analysis or other relevant plant programmes? If yes, please give a brief description.
- 1.2 Does your regulatory framework contain requirements, guidance or compliance criteria related to the RB's inspections of ageing management? If yes, please give a brief description.
- 1.3 How does your RB verify that the licensee's ageing management activities are in compliance with the regulatory requirements and license conditions (e. g. by on-site inspections, review of ageing management reports, approval of ageing management programmes, ...)? Please describe briefly the most relevant activities (e. g. frequency, scope and methods of on-site inspections, etc.), and if internal or external specialists are involved.
- 1.4 Does your RB verify that the licensee's ageing management procedures are systematically implemented in the licensee's management system? If yes, please give some details what is being checked (e. g. the organizational entity that is responsible/accountable for the ageing management programme, the allocation of resources, the organization of interdisciplinary cooperation within the management system, etc.) and the methods used for verifications (e. g. review of documents, interviews, etc.).
- 1.5 How does your RB verify the effectiveness of the licensee's ageing management programme (e. g. inspections, review of licensee's reports and performance indicators, by your RB's own safety evaluations/safety performance indicators, etc.)?

2. NEWLY DISCOVERED AGEING EFFECTS

- 2.1 If a new ageing effect is discovered (e. g. through feedback of operation experience or research), how is this taken into account by the licensee?
- 2.2 How does your RB learn about new ageing effects, and how does the RB verify that they are addressed adequately by the licensee?
- 2.3 How does your RB ensure that its inspectors do not overlook early signs of emerging new ageing effects or slowly evolving negative trends (e. g. specific training of inspectors, help from RB specialists, hiring of technical experts, etc.)?

3. DECREASING SAFETY MARGINS DUE TO AGEING OF SSCs THAT CANNOT BE REPLACED

- 3.1 How does your RB address the issue of decreasing safety margins associated with SSCs that cannot be replaced in relation to continued operation?
- 3.2 What is the role of your RB inspectors in verifying that the safety margins of such SSCs are still sufficient?

4. AGEING OF CIVIL STRUCTURES AND RELATED COMPONENTS

- 4.1 Do the ageing management activities of the licensee and the inspection activities of the RB include the ageing of civil structures and related components important to safety (e. g. buildings, concrete structures, structural anchorages, fire barriers such as walls/doors/dampers, etc.)? If yes, please give a brief description.
- 4.2 How does your RB inspect the ageing management of civil structures and related components? Does you RB employ or hire internal or external specialists in this field?
- 4.3 Has your RB established acceptance criteria for the ageing of civil structures and related components? If yes, please give some examples and describe how your RB inspects this.
- 4.4 How does your RB consider the ageing of civil structures that are not classified as important to safety by the licensee, but that could have a negative impact on SSCs important to safety in case of failure (e. g. water leakage from the degradation of buildings onto electrical panels)? Please give examples, if applicable.

5. CONCEALED OR INACCESSIBLE SSCs

- 5.1 How does your RB verify that concealed or inaccessible SSCs (e. g. pipework, cables, concrete structures and related components) are adequately taken into account by the licensee's management programme (e. g. specific inspection/maintenance techniques, adequate sampling of SSCs that are hard to reach, consideration of specific environmental conditions)?
- 5.2 How does your RB verify that the licensee has an adequate understanding of the location and configuration of concealed or inaccessible SSCs (original drawings, original plant information, lifetime records, etc.)?

6. OBSOLESCENCE OF KNOWLEDGE

6.1 How does your RB verify/ensure that the competence and know-how of the personnel of the licensee/vendor/contractor or the RB itself is maintained and kept up to date, in particular in view of change in staff or in view of the evolution of requirements, codes and standards (e. g. knowledge management, human resources plan, etc.)?

7. Are there any other specific topics you would like to discuss at the workshop?

QUESTIONNAIRE B:

GRADED APPROACH TO OPTIMISE THE INSPECTION PROCESS

COUNTRY:

NOTES

Only one response per country is required. If more than one person from your country is participating, please co-ordinate the responses accordingly.

Submittals should be sent by e-mail to <u>carrie.richardson @oecd-nea.org</u> by 5 November 2021.

FOREWORD

The inspection process (conduct of inspection, evaluation of findings, requesting of corrective actions, enforcement actions, etc.) of a regulatory body (RB) has to cover all the functional areas (operation, maintenance, quality assurance etc.) of nuclear power plants (NPPs). However, one method to improve the effectiveness of the inspection process and its associated activities is to grade the areas inspected in accordance with different criteria (e.g. safety importance, operating experience, age of systems, structures and components, plant specific features, deterministic and probabilistic safety analysis, etc.) with the purpose to focus on safety significant areas.

The purpose of the workshop is to share information about methods, practices, organizational perspectives and criteria used to apply a graded approach (GA) to optimize the inspection process and to identify commendable practices which member states can use to improve the efficiency and/or effectiveness of their inspection process.

QUESTIONNAIRE

For the preparation of the workshop, participants are invited to supply their national inspection approaches used according to the following questionnaire:

- 1. Is a GA incorporated into legislative documents or regulations?
 - If yes, describe how.
- 2. Does your RB take into account a GA in its inspection programme for nuclear facilities? If yes, describe how by answering the following questions:
 - Is a GA used in the initial development of the inspection programme? If yes, what elements of a GA are applied (e.g. probabilistic/deterministic approach, operation experience, ageing, etc.)?
 - How is a GA taken into account when inspecting different nuclear facilities (NPPs, research reactors, spent fuel storage facilities, fuel fabrication facilities, etc.)?
 - Describe how a GA is used for defining specific inspection programmes in different stages of the NPP lifecycle that are inspected by your RB (i.e. siting, design, construction, commissioning, operation, and decommissioning)?
 - Describe how a GA is used to select inspection topics (systems, structures and components or activity to inspect), scopes, frequencies, types of inspections, etc.?

- 3. Does your RB have procedures to use a GA in different phases of the inspection process [e.g. planning (e.g. resources, scope, duration, methods, etc.), preparation, conduction, evaluation of findings, etc.]?
 - If yes, list the phases for which a GA is used and describe how.
- 4. Does your RB use a GA to conduct unplanned, unannounced and reactive inspections?
 If yes, describe how.
- 5. Does your RB use a GA for the following areas:
 - significance of inspection findings;
 - assessment of licensee corrective actions and
 - applying enforcement?
 - If yes, describe how.
- 6. Please describe other aspects of the inspection process not mentioned in the previous questions where your RB uses a GA.
- 7. Does your RB have a process in place to evaluate and optimise the existing inspection process and practices based on a GA?
 - If yes, describe this process.
 - Provide some examples.
- 8. Are there any other specific topics you would like to discuss at the workshop?

QUESTIONNAIRE C:

THE EFFECTS OF COVID-19 PANDEMIC ON INSPECTION PROGRAMMES AND PRACTICES

COUNTRY:

NOTES

Only one response per country is required. If more than one person from your country is participating, please co-ordinate the responses accordingly.

Submittals should be sent by e-mail to christopher.fong@oecd-nea.org with a copy to carrie.richardson@oecd-nea.org by 5 November 2021.

FOREWORD

During the COVID 19 Pandemic, the world faced an unprecedented global crisis. Regulatory Bodies were challenged to develop comprehensive plans and actions to balance the importance of nuclear safety oversight while protecting the public health, the health and safety of inspectors as well as nuclear power plant personnel.

The purpose of the workshop is to share information about methods, practices, organizational perspectives and criteria used to adapt the inspection processes during the COVID 19 Pandemic, and to identify commendable practices which member states can use to improve the efficiency and/or effectiveness of their inspection processes both in emergent² and routine practices in both a limited period of activity as well as long-term changes that might be made to Regulatory Body Inspection Programs.

QUESTIONNAIRE

For the preparation of the workshop, participants are invited to share their national inspection approaches used according to the following questionnaire:

1. If your RB performed remote inspections during the pandemic, please describe how your inspections were performed.

1.1 Please describe any lessons learned from how remote inspections were performed.

2. As a result of the Coronavirus pandemic, please describe how your regulatory body adopted new or innovative technology (e.g., increased remote oversight, improved access to licensee information, use of cameras, etc.).

3. Please describe any long-term changes to your inspection practices that your RB is considering, including changes for routine or emergent inspection activities.

 $^{^{2}}$ Emergent – an issue or event that is emerging or suddenly coming into existence, or unforeseen, and demands a response or a course of action. (such as occurred during the COVID19 pandemic)

4. How did your RB protect the health and safety of inspectors and licensee staff, such as control room operators, during the planning of inspections as well as when performing onsite inspection activities?

4.1 What criteria was used to assess whether the inspection could be deferred, modified, or canceled?

5. How did your RB inspection activities verify that the NPPs continued to be operated safely and in accordance with their licenses?

6. Describe any other changes you made to your inspection activities including inspection procedures as a result of the Coronavirus pandemic.

7. How is your RB planning to recover its inspection programme from the Coronavirus pandemic?

7.1 Please describe how you are managing any derogations or waivers granted to Licensees.

7.2 What actions has your RB taken in order to understand the long-term impact of the pandemic on licensees (e.g., long term impact of reduced staffing on-site, impact of not undertaking emergency training, etc.).

8. How has the training and qualification of your inspection staff been affected by the COVID-19 pandemic?

9. Is there anything else you'd like to discuss?