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The 14th FNCA Ministerial Level Meeting

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FNCA Workshop on
Nuclear Security and Safeguards Project
Beijing

The 14th FNCA Ministerial Level Meeting

- Date: December 19, 2013 (Thursday)
- Place: Tokyo, Japan
- Organized by: Cabinet Office, Government of Japan (CAO), Japan Atomic Energy Commission (JAEC)
- Chair : Mr. Ichita YAMAMOTO, Minister of State for Science and Technology Policy, CAO

- Participants: Australia, Bangladesh, China, Indonesia, Japan, Kazakhstan, Korea, Malaysia, Mongolia, The Philippines, Thailand, Vietnam, IAEA (observer)
- Agenda:
 - Country Reports
 - Reports of FNCA Activities
 - Current Status of Fukushima Daiichi Nuclear Power Station
 - Effective Implementation of Project Outcomes and Relationship-building with End-users
 - Nuclear Security Culture Development
 - Discussion on the Resolution and Summary of the Ministerial Level Meeting

◆ FNCA Projects

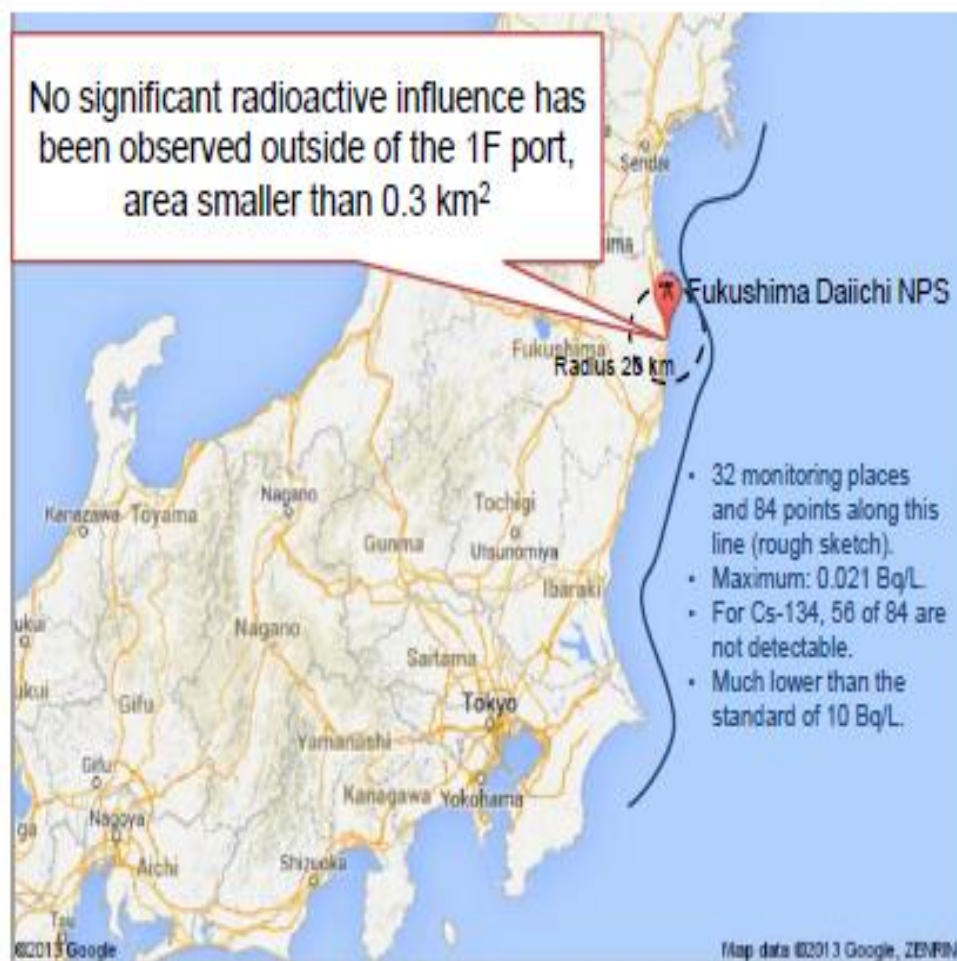
- (1) Neutron Activation Analysis (NAA)
- (2) Research Reactor Network (RRN)
- (3) Mutation Breeding
- (4) Biofertilizer
- (5) Radiation Oncology
- (6) Radiation Processing of Natural Polymers
- (7) Human Resources Development for Nuclear Science and Applications
- (8) Nuclear Safety Management System
- (9) Radiation Protection and Radioactive Waste Management
- (10) Nuclear Security and Safeguards

◆ Study Panel on Nuclear Power for Sustainable Development

1. Current Status of Fukushima Daiichi Nuclear Power Station

Current Radioactive Concentration of the Seawater

The results of sea water monitoring in Japan indicate that the water quality is constantly below the standard of 10 Bq/L (WHO's "Guidelines for drinking-water quality")

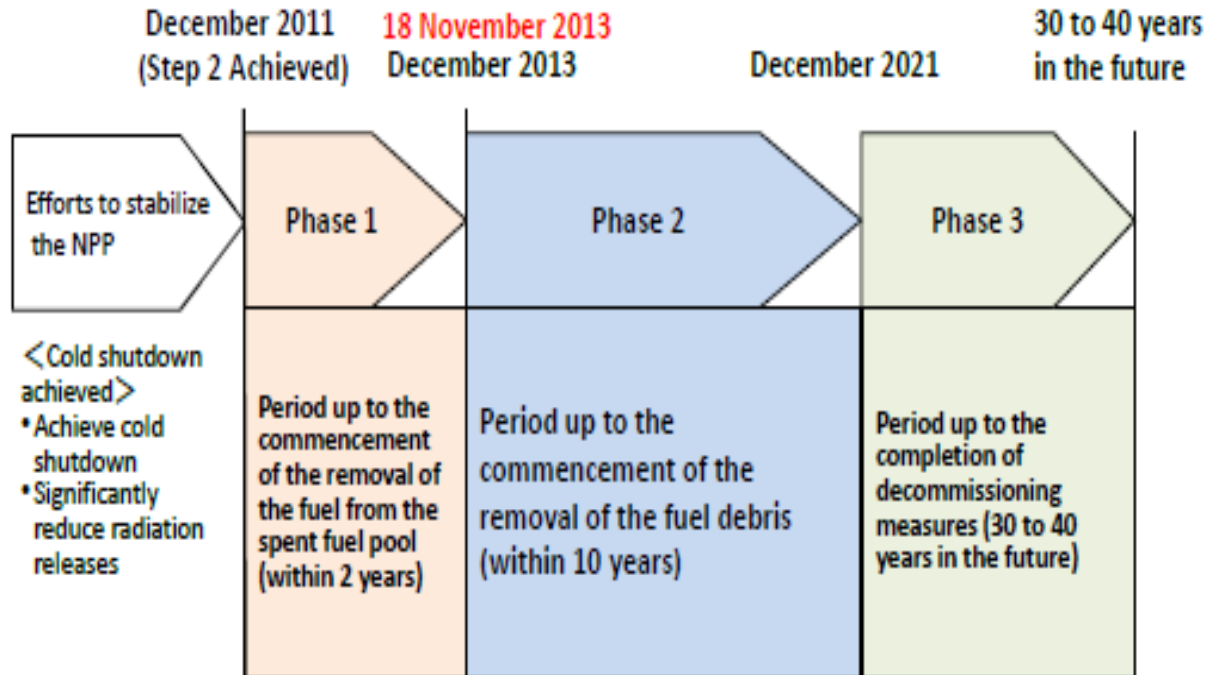


<Explanation note>

- Sea Area Monitoring at offshore of Miyagi, Fukushima, Ibaraki and Chiba Prefecture (sampling date: May 16 – Jun 2, 2013, published on August 7 by Nuclear Regulation Authority (NRA)) indicates 0.021 Bq/L or less for Cs-134 and Cs-137, most results are not detectable for Cs-134, much lower than the standard of 10 Bq/L.
- "Guidelines for drinking-water quality" released by WHO gives guidance levels of the water quality for drinking as follows:
 - Cs-134 :10 Bq/L
 - Cs-137 :10 Bq/L
- Not detectable indicates the case that the detected radioactivity concentration in seawater was lower than the minimum detectable activity 0.001Bq/L.

(Data source: NRA)

Targets of Decommissioning Roadmap



Now: Since 18 Nov, TEPCO has started fuel rods removal from Unit 4 SFP as target of Phase 1



2. Effective Implementation of Project Outcomes and Building Relationships with End-users

Examples completed with success

- Disease resistant banana; Philippines
- Insect resistant orchid; Malaysia
- Carrier of bio-fertilizer is sterilized by radiation to improve QA/QC and shelf-life of inoculants : commercial application in Indonesia, Malaysia, The Philippines, Japan
- Plant growth promoter (PGP), commercial: Vietnam, Japan
- Oligo-chitosan produced from waste crab/shrimp shell & carageenan by using radiation
- Super water absorbent polymers (SWA) for agriculture in semi-arid and arid areas



Baby corn in Thailand (yield increase: 43.5%)

3. Nuclear Security Culture Development

Discussion on Nuclear Security Culture (NSC)

- IAEA
 - IAEA role and activities on NSC
 - Importance of self-assessment of management systems and personnel behavior
- Indonesia
 - The self-assessment on NSC performed by BATAN at its three research reactors
 - In this process, the self-assessment teams (41 persons) surveyed 624 employees and interviewed 128 of them. They developed and analysed 87 histograms, and accumulated more than 500 pages of data
 - A proposal was made to establish a security culture assessment center in cooperation with IAEA to serve as a regional center of expertise and promotion of NSC
- The meeting exchanged experiences and practices of NSC in each countries.

Chair's Statement By Minister YAMAMOTO
on Nuclear Security Culture Development
(December 19, 2013)

- We recognize the all-too-real threat of possible terrorist attacks on nuclear facilities, and we also recognize that nuclear security is the government's responsibility; **therefore, we have reconfirmed the importance of government leadership in security culture development.** We discussed concrete activities, such as seminars and workshops, which are actively supported and encouraged through government leadership to raise the nuclear security consciousness of nuclear operators and nuclear facility employees.
- Japan has proposed the following three initiatives to build nuclear security culture:
 1. **A training course for participants from Asian countries in late 2014,** which will be conducted by the Integrated Support Center for Nuclear Nonproliferation and Nuclear Security (ISCN) of the Japan Atomic Energy Agency (JAEA), under the co-sponsorship of the IAEA.
 2. **Support to FNCA member countries for building nuclear security culture** through the activities of the ISCN.
 3. **Utilization of the FNCA website so that initiatives and best practices of nuclear security culture development can be shared** among FNCA member countries.

Resolution on Nuclear Security Culture

The Heads of Delegations of FNCA member countries decided to work continuously toward:

•**Encouraging each country's government and its nuclear stakeholders to build a nuclear security culture in line with international best practices as a response to nuclear concerns arising in the world.**

Resolution of the 14th FNCA Ministerial Level Meeting

- 1) Continue to share lessons learned from the Fukushima accident, especially by way of the FNCA Study Panel, and pursuing further cooperation toward nuclear infrastructure development among FNCA member countries, which includes studies on such ongoing themes as stakeholder involvement, EPR and its regional collaboration and nuclear safety related infrastructure enhancement, and new themes such as safety, economics and waste disposal issues with SMR.
- 2) Encourage a review of nuclear human resource development opportunities within each of the member countries through a workshop including senior officials involved with policy and planning human resources development, and budget allocations, to ensure the human resources development project can be carried out more effectively and beneficially.
- 3) Strive further to build a network with potential end users to accelerate the practical use and commercialization of FNCA achievements in the radiation utilization area and consequently contribute to socio-economic benefits, in particular, in the sub-topic areas of Radiation Processing on Natural Polymers, Biofertilizer and Mutation Breeding, which have developed technologies that can be put into practical use in sustainable agriculture.
- 4) Encourage each country to create a steering committee for each project and a meeting of Project Leaders to share information and enhance project activities, and to further pursue higher productivity of the projects and closer cooperation among different projects through that meeting.
- 5) Encourage each country's government and its nuclear stakeholders to build a nuclear security culture in line with international best practices as a response to nuclear security concerns arising in the world.

**THANK YOU
FOR
YOUR ATTENTION**