

Workshop on Atmospheric Dispersion Benchmark Problem Assessment and the 3rd Annual Meeting for ASEAN Network on Nuclear Power Safety Research

Contact Persons

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Rationale

The accident occurred at Fukushima Daiichi Nuclear Power Plant (1FNPP) in 2011 revealed the widespread consequences of a release of radioactive materials after a nuclear accident to people and the environment. The accident generated over 150,000 evacuees, nearly 1,000 km² severely contaminated land, and over five trillion yen economic loss.

On the other hand, nuclear power gains increasing attention from countries around the world, including ASEAN countries, thanks to its potential to contribute to low carbon society which support Sustainable Development Goals (SDGs) of the world. It can be observed that there are continuous activities in the field of nuclear power in ASEAN region, shifting from one country to another. Thailand plans to have at least two units of 1,000 MWe nuclear power reactors by 2036. Vietnam signed two contracts with Russia and Japan which would have introduced four 1,000 MWe nuclear power plants in Ninh Thuan by 2028. While Vietnam cancelled this nuclear power project in November 2016, Indonesia plans to introduce small modular reactors in rural areas, and will start with the 10 MWe Serpong Experimental Nuclear Power Reactor.

In order to ensure that the top priority will be given to safety in these nuclear power projects, and also to prepare for any emergency situations alike the accident in the 1FNPP, ASEAN Network on Nuclear Power Safety Research (ASEAN NPSR) was formulated to help facilitate information and knowledge sharing throughout the ASEAN region, and enable research cooperation among ASEAN countries. The Joint Communique of ASEAN NPSR was agreed upon by seven member states, including Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam, on March 9, 2017 at the Kick-Off Meeting of ASEAN Network on Nuclear Power Safety Research, Bangkok, Thailand. The Joint Communique of ASEAN NPSR was endorsed by the Sub-Committee of Sustainable Energy Research (SCSER) and approved by the ASEAN Committee of Science and Technology (ASEAN-COST) in October 2017 at the 73rd ASEAN-COST Meeting.

At the Kick-Off Meeting, the network agreed to perform a benchmark problem assessment on atmospheric dispersion of a radioactive release for a hypothetical accident in a virtual nuclear power plant within and around the ASEAN region. This activity was discussed in the 2nd Annual Meeting of ASEAN NPSR in Bangkok, Thailand on March 15 – 17, 2018, and carried on until now.

Thailand, as the present lead country of ASEAN NPSR, is going to organize the Workshop on Atmospheric Dispersion Benchmark Problem Assessment and the 3rd Annual Meeting for ASEAN Network on Nuclear Power Safety Research in Bangkok, Thailand on March 13 – 15, 2019. Member States will

present the progress on the benchmark problem assessment, receive comments from other Member States and discuss future activities of ASEAN NPSR.

Purposes

- To achieve research competency of ASEAN countries in nuclear power emergency preparedness and response (EPR)
- To ensure the continuity of activities in ASEAN NPSR, and to discuss future research and funding plans for the network.

Tentative Program/Agenda

March 14, 2019

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| 9:00 – 9:15 | Opening remarks |
| 9:15 – 9:30 | Overview of the atmospheric dispersion benchmark problem |
| 9:30 – 10:30 | Progress report of the benchmark problem assessment (Thailand) |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:00 | Progress report of the benchmark problem assessment (Singapore) |
| 12:00 – 13:30 | Lunch |
| 13:30 – 14:30 | Progress report of the benchmark problem assessment (Vietnam) |
| 14:30 – 15:30 | Discussion on field work for the benchmark problem assessment |
| 15:00 – 15:30 | Coffee break |
| 15:30 – 17:00 | Discussion on work plan for the benchmark problem assessment (cont'd) |

March 15, 2019

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| 9:00 – 9:15 | Summary of the previous day |
| 9:15 – 10:30 | Discussion on the content of the workshop for nuclear power EPR research capacity building |
| 10:30 – 11:00 | Coffee break |
| 11:00 – 12:00 | Discussion on the content of the workshop for nuclear power EPR research capacity building (cont'd) |
| 12:00 – 13:30 | Lunch |
| 13:30 – 14:00 | Selection of the 2019 lead and co-lead countries |
| 14:00 – 15:30 | Discussion on the 2019 work plan of ASEAN NPSR |
| 15:30 – 16:00 | Coffee break |
| 16:00 – 16:30 | Review and adoption of meeting minutes |
| 16:30 – 17:00 | Concluding remarks |
| 17:00 | Adjourn |

Country representatives and country presentation

Each ASEAN country can propose one representative whose expenses for the round trip ticket, the accommodation and the meals during the meeting will be covered by the lead country. The representative must have the authority to make decisions in participation in ASEAN NPSR activities. The lead country can provide financial support to one additional representative from each ASEAN country joining the atmospheric dispersion benchmark problem assessment.