



Message from the Minister of Science, Technology and Innovation

Building a More Effective, Competent and Independent Nuclear Regulatory Body

t is encouraging to note that the Ministry of Science, Technology and

Innovation (MOSTI) through Atomic Energy Licensing Board (AELB) has continued to reach out to its working partners, associates and industries as well as other interested parties by disseminating vital information on its activities and explaining various regulatory policies, regulations and technical documentations pertaining to nuclear and radiation technology. I am sure that such effort has helped ensure a better understanding of the roles of AELB and at the same time open the communication channel for more active discussions on matters related to nuclear energy and nuclear industry as well as its achievements, issues and concerns. That is why it gives me great pleasure to write this message in this issue of AELB's newsletter, Nuclear Regulatory, which is also a platform for me to reach out to the industry.

I am sure readers are aware that AELB is the regulatory body that ensures nuclear operators and promoters in Malaysia perform within the limits of systems and regulations. AELB is also sparing no effort to be a more effective, competent and independent regulatory body and it is also keeping track on the development of nuclear energy use worldwide. More countries are including nuclear energy as part of the diverse mix of electricity sources. Malaysia, too, is no exception. In future, if the Malaysian Government decides to build a Nuclear Power Plant, the country will be ready for it as the regulatory infrastructures and competency are already put in place.

Various measures have been taken in its mission to strengthen effectiveness and competency. Amongst them, AELB will appoint certified personnel such as certified nuclear inspectors to monitor and verify activities focused on the operational aspect of nuclear facilities. This certification programme will produce competent nuclear inspectors to comply with National Safety Regulations in order to ensure public and environment safety.

Furthermore, AELB will also increase the number of trained personnel in all branch offices; improve its emergency preparedness; develop intelligence capacity and capability, increase the frequencies of inspections, including spot checks; and further enhance regional/international co-operation.

In addition, efforts will be intensified to have new rules and better enforcement that will prevent the proliferation of nuclear and radioactive materials. Our enforcement efforts will continue to involve increased co-ordination between relevant national agencies, between exporter and importer States, and between international authorities via mutual recognition arrangements in particular within the region, such as between ASEAN countries.

AELB's other objectives include increasing the number of trained personnel in national agencies and enhancing their knowledge and skills in handling nuclear energy-related matters and in using radiation detection instruments and safely securing such materials. Finally, AELB aims to improve and expand access to the technology and acquire user-friendly instruments for the detection and identification of radioactive/nuclear materials as well as enhance coordination among relevant national agencies.

I would like to applaud the AELB for strengthening the country's nuclear and radioactive security control by putting the various measures in place, which reflects very well the competency of AELB itself. It is an important move made by AELB in line with the acknowledgement that nuclear energy plays an essential role in helping our nation achieve its economic and environmental goals.



AELB Chairman, Dato' Dr. Noramly bin Muslim presenting a memento to Y.B. Datuk Dr. Maximus Johnity Ongkili.

Minister of Science, Technology and Innovation visit to AELB

Date: April 15, 2008

Minister of Science, Technology and Innovation, Y.B. Datuk Dr. Maximus Johnity Ongkili, visited AELB headquarters on April 15, 2008, as part of his programme to acquaint himself with all departments under MOSTI. Also present during the visit were his Deputy Minister, Y.B. Tn. Haji Fadillah b. Haji Yusof and MOSTI Secretary General, Y. Bhg. Dato' Abdul Hanan Alang Endut. The minister's delegation was received by AELB Chairman, Prof. Dato' Dr. Noramly Muslim, AELB Director General, Y.M. Raja Dato' Abdul Aziz b. Raja Adnan and Board members, AELB Division Directors and Senior Officers.

The minister was briefed on the functions, roles and responsibilities of AELB as well as AELB' achievements, on-going activities and future plans. He commended the progress made by AELB, especially in the area of regulatory



Y.B. Datuk Dr. Maximus Johnity Ongkili delegations with AELB Board Members and AELB staff.

infrastructure, such as legal documentation, National Radiological Emergency Centre, Environmental Radiological Monitoring System (ERMS) and Portal Monitor for Illicit Trafficking of Radioactive and Nuclear material. On visiting these facilities, the minister obtained a better understanding of the work carried out by AELB. He expressed his wish and support for AELB to become more successful and effective in serving and facilitating the industry. He also expected AELB to carry out its tasks in a trusted and reliable manner through fair, efficient and competent supervision in order to safeguard the country's nuclear activities for peaceful means.

Malaysian Radiation Detection System (Illicit Trafficking and Border Control) and Environmental Radiation Monitoring System

ELB in collaboration with the Royal Malaysian Police, the Malaysian Port and Airport Authorities, the Malaysian Immigration Department and the National Security Council have developed a national monitoring system to track the movement of nuclear and radioactive materials.

The system will be placed at strategic locations such as borders, airports, sea ports and scrap metal factories to observe the movement of all radioactive materials and guard against illegal trafficking of nuclear materials within, coming into or out of the country.

The National Emergency Response Centre located at AELB headquarters will monitor the system and integrate information from agencies relevant to the system by using Environmental Radiation Monitoring System (ERMS Detector). Several national Points of Contact (POC) which will increase the system's effectiveness have been identified and they include The Royal Malaysian Police, The Malaysian Customs, The Malaysian Port and Airport Authorities, The Malaysia Immigration Department and the National Security Council.





The early warning system: Environmental Radiation Monitoring System (ERMS Detector).

Malaysian Radiation Detection System for illicit trafficking at border control.



Location of ERMS in Malaysia for environmental monitoring.

First and Second AELB Board Meetings for 2008



Chairman of AELB, Dato' Dr. Noramly Bin Muslim.

Date: March 4, 2008 and June 3, 2008

he first and second AELB Board meetings for 2008 took place on March 4 and June 3 at AELB Headquarters. The meeting, which was also the 60th and 61st AELB Board Meeting, was chaired by Dato' Dr. Noramly Bin Muslim.

Present at the meeting were AELB board members, including Datuk Dr. Daud Bin Hj. Mohamad, Dato' Ir. Pian bin Sukro, Dato' Dr. Noorimi Binti Hj. Morad, Prof. Dato' Dr. Mohammed Noor Embi and Y.M. Raja Dato' Abdul Aziz Raja Adnan who served as Executive Secretary. Also in attendance were MOSTI legal advisors, Ministry of Health officers and AELB Division Directors and officers.

Various issues were discussed, including suggestions for a new name for Radiation Protection Regulation (Basic Safety Standards), recognition of AELB officers as the operators of TRIGA Mk. II Research Reactor, the creation of the post of Radiation Protection Advisor, Reinforcement of AELB's Organisation Structure and Act 304.



AELB board members and senior officers during the meeting.



AELB board members (from left): Datuk Dr. Daud Bin Hj. Mohamad, Dato' Ir. Pian Bin Sukro, Dato' Dr. Noorimi Binti Hj. Morad and Prof. Dato' Dr. Mohammed Noor Embi.

Malaysia's Compliance to Safeguards Agreement

Date: March 13, 2008

ELB receives IAEA Safeguards Inspectors annually in compliance to the safeguards agreement between Malaysia and IAEA. Following the annual inspection, IAEA Safeguards Inspectors Mr. Adel Tolba and Mr. Ryszard Zarucki visited the AELB on March 13, 2008. The objective of the visit was to discuss issues related to safeguards system and possible co-operation between Malaysia and IAEA to further enhance the system. Participating in the discussions with the safeguard inspectors were the AELB, Malaysian Nuclear Agency, Royal Malaysian Police and the Ministry of Foreign Affairs.



Physical Inventory Taking (PIT) activities during inspection.

Implementation of Standard for Certification & Re-certification of Research Reactor Operator

Date: April 21 - 25, 2008

ELB successfully carried out an expert mission on the implementation of the AELB Standard for Certification & Re-certification of Research Reactor Operator. The mission was assisted by Mr. Amgad M. Shokr from Research Reactors Safety Section, Division of Nuclear Installation Safety, IAEA and Dr. M. A. Gaheen, Reactor Manager of ETRR-2, Egypt.

In fulfilling the objectives of the mission, sets of questions used to evaluate Research Reactor Operators were developed. The questions were

used in examinations which consisted of written, walkthrough and operation sections. Apart from that, the mission served as a practical guide for IAEA Safety Standards, performing regulatory inspections and also as part of a training and retraining programme for research reactor operators.



AELB Director General Y.M. Raja Dato' Abdul Aziz Raja Adnan at the closing ceremony.



Discussion on Walkthrough and Operating examination questions at PUSPATI TRIGA Mk. II Research Reactor (RTP), Malaysian Nuclear Agency.



Participants from AELB and Malaysian Nuclear Agency with IAEA Experts; Mr. Amgad M. Shokr and Dr. M. A. Gaheen.

Development of Research Reactor Inspector Certification Programme and IAEA Expert Mission

Date: May 20 - 23, 2008

ELB has collaborated with two experts from the International Atomic Energy Agency (IAEA) and Korean Institute of Nuclear Safety (KINS) to develop a standard for Research Reactor Inspector Certification Programme.

The proceedings took place at the AELB headquarters from May 20 - 23, 2008. Initially, a discussion on the certification and qualification requirements for nuclear reactor inspector training was held. Dr. Lingguan Guo from IAEA gave guidance on IAEA Safety Standards, while Mr. Dae Shoo Shin from KINS shared his expertise on Korean practices in regulations and certifications.

The certification programme drafted by AELB was successfully reviewed by both experts and will serve as a tool for training and certifying Research Reactor Inspectors. The three main references used in the programme were IAEA TECDOC 1254, "Training the staff of the Regulatory Body for nuclear facilities: Competency Framework", IAEA GS-G-1.3 "Regulatory Inspection of Nuclear Facilities and Enforcement by Regulatory Body" and IAEA GS-G-1.1, "Organization and Staffing of the Regulatory Body for Nuclear Facilities".

The objective of the certification programme is to have a pool of competent nuclear facilities inspectors.



Participants from AELB and Agency Nuclear Malaysia (ANM) during the Expert Mission.



Participants and the Director General with IAEA and KINS expert at AELB headquarters.

Recent & Upcoming Events

June 1 – 6, 2008, Langkawi

7th Meeting of AELB's Nuclear Safety Committee.

June 3 – 4, 2008, Bangkok, Thailand

EC Regional Workshop on Nuclear Energy Safety and Security in South-East Asia.

June 10 – 13, 2008, Port Dickson, Negeri Sembilan AELB's Safety Standing Committee Meeting.

June 16 – 17, 2008, Bangkok, Thailand ASEAN +3 Forum on Nuclear Energy Safety.

June 30, 2008, AELB Headquarters

National Radioactive Source Security Awareness Seminar.

July 15, 2008, AELB Headquarters

National Safety Awareness on Operational of Industrial Radiography Seminar.

August 7, 2008, Bangkok, Thailand 26th ASEAN Ministers on Energy Meeting (AMEM).

October 20 – 23, 2008, PICC, Putrajaya 8th Asian Nuclear Safety Network (ANSN) Steering Committee Meeting & ANSN Caravan.

Quarter 4, 2008, Kuala Lumpur IAEA Regional Training Course on Radiation Protection for Public Exposure Control.



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