



ISOE NEWS

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for ISOE Members

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ISOE Asian, European, North American and IAEA Technical Centres

www.isoe-network.net

ISOE NEWS IS A PROJECT OF JOINT NEA-IAEA SECRETARIAT

Report on Annual Steering Group Meeting

The 17th annual ISOE Steering Group meeting was held from 14-16 November 2007 at OECD Nuclear Energy Agency (NEA) headquarters in Paris, France. The meeting was chaired by Mr. W. Mizumachi (ISOE Chair, Japan), who noted that in the context of global changes in the energy market, the role of ISOE in reducing occupational radiation exposure and communicating good practice will become increasingly important.



Mr. T. Tanaka (NEA Deputy Director, Safety and Regulation) noted that ISOE is a global resource for occupational radiation protection, and that the contribution that ISOE experience has made to the radiation protection community worldwide has been appreciated by NEA. ISOE was thanked, in particular, for its feedback on occupational radiological protection issues, for its contribution to the NEA review process of the new ICRP general recommendations, and for its participation in the Expert Group on Occupational Exposure of the NEA Committee on Radiation Protection and Public Health. He congratulated ISOE for the success of the ISOE ALARA Symposia and ISOE Network as key elements in the exchange of ALARA information. Noting the current atmosphere of new build and the development of future reactors, Mr. Tanaka also encouraged ISOE to take advantage of its practical experience to contribute to better radiation protection implementation in new nuclear build.

Country Reports for 2007 given at SG Meeting

Reports on trends in occupational exposure for 2007 were provided by the countries participating in the Steering Group meeting (or by the corresponding technical centre in the case of Brazil and Canada). The following reports were presented: Brazil, Germany, Spain, Canada, Japan, Sweden, Czech Republic, Romania, United Kingdom, Finland, Slovak Republic, United States, France, and Slovenia. These will be made available to ISOE Participants through the ISOE Network (www.isoe-network.net)



Achievements of ISOE in 2007

Ms. C. Schieber (European Technical Centre) presented the ISOE achievements during 2007, highlighting work in the areas of ISOE data collection, expert group meetings, technical support and ISOE Symposia. During the

presentation, it was noted that currently, the ISOE Network is updated primarily with information from the technical centres. However, all ISOE participants that would like to post information may supply this directly to the ETC, indicating the topic and level of access (public, ISOE participants or utilities only), following which it will be posted in a suitable place on the website.

With respect to the ISOEDAT database migration to the ISOE Network, Ms. L. D'Ascenzo (ETC) presented the status of Phase II of this project. It was recalled that in 2006, the Steering Group had directed the development team to proceed with the development of ISOEDAT 1 data input modules based on its approved business plan. An online demonstration of the latest development version was presented to the group. Implementation on ISOE Network is planned for July 2008.



Review of Basic Safety Standards



In response to questions from Mr. P. Kapteinat (Germany) concerning a possible contribution of ISOE to the development of the international Basic Safety Standards (BSS), it was noted by the NEA Secretariat that ISOE could be invited to participate in the drafting process through the NEA, which is one of the BSS co-sponsoring organisations.

To support this, the Steering Group agreed to create a new ad-hoc ISOE group on the revision of the BSS. The ad-hoc group will meet in February 2008 to review the available draft BSS and provide comments into the revision process through the NEA.

Updating the ISOE Network

Ms. Schieber (ETC) presented a proposal for enhancements to the ISOE Network, including a modified website structure, library classification and new system-wide search engine developed by the Asian Technical Centre. The aim is to improve website function and usability. It is also proposed to a) create a downloadable template allowing users to upload, through the ETC, new ISOE 3 reports, and b) add a new function to allow users to submit other types of relevant information to the Network (other than "ISOE 3" type reports).

To take advantage of resources from other related programmes, Mr. R. Doty (USA) suggested that ISOE could improve information exchange with other programmes such as WANO or INPO, in so far as radiological protection issues are concerned. It was suggested that the North American Technical Centre provides a screening report for ISOE members in the future, based on daily reports of RP events. This might be realised at least for those ISOE members who are also members of WANO or INPO. The Steering Group requested the ISOE Secretariat to further investigate the options.



While the majority of information on the ISOE Network is in English, radiation protection managers and representatives of the regulatory bodies are encouraged to provide work practice reports in their own language with a short title/description in English. In this way, the work report (ALARA and experiences) data base can be substantially improved and tailored according to specific needs of the national users – utilities or regulatory bodies. These reports will be made available through the Network to the members according to the level of access as indicated by the provider of the information.

Finally, the Steering Group approved a proposal for the creation of time-limited "demonstration accounts". The intent of this is to allow potential new ISOE participants (i.e. non-participating utilities) to have controlled access

to the website as a form of interactive advertisement and to promote the benefits of ISOE membership. Such individuals would be first identified and then followed up by the technical centres and/or national coordinators (for example through national ALARA groups).

New ISOE Terms and Conditions

The Steering Group approved the new ISOE Terms and Conditions for the period 2008-2011. National Coordinators have been asked to facilitate, within a 3-month time period, the written feedback of all current participating utilities and authorities concerning their continued participation in ISOE according to the new Terms and Conditions. The Terms and Conditions become effective 1 January 2008 for a 4-year period.

Review of ISOE News

In order to enhance to the value of the ISOE News to the ISOE membership, the Steering Group approved a development cycle that will involve using the mid- and end-of-year ISOE Bureau meetings to present the topics for inclusion in the News. Following these meetings, the News will be drafted and approved by the ISOE Bureau and Technical Centres under the lead of the ISOE News editor, Mr. B. Breznik (Slovenia). This would result in two issues per year of the News, published approximately each six months. Mr. Breznik noted that the News should be aimed at RP managers and ISOE members of regulatory authorities. All the ISOE members are invited to participate with their articles. Ms. Schieber noted that the News could also be used to share information on how members have used ISOE in their own ALARA programmes. It was suggested that a set of standard topics could be included in each issue, for example "What's New on the Network", "How ISOE is Used", "ISOE Events", "Meetings", articles in other languages, etc.

ISOE Network (www.isoe-network.net) – A Resource for ISOE Members

The ISOE Network website (www.isoe-network.net) is an international information exchange website on dose reduction and ALARA resources for ISOE members, providing rapid and integrated access to ISOE resources through a simple web browser interface.

The ISOE Network provides ISOE members with access to a broad and growing range of ALARA resources for radiation protection professionals at participating utilities and national regulatory authorities, including:

- ISOE publications, reports and symposia proceedings
- web forums for real-time communications amongst participants
- members address books, and
- online access to the ISOE occupational exposure database.

A new website search engine has recently been implemented to assist the user in locating information of relevance to their specific issue or problem.

Access to the ISOE Network

While some of these resources are open to the public, such as ISOE official publications, access to most resources is restricted to *registered ISOE members*. There are currently over 500 registered users from ISOE participating utilities, national authorities and international organisations.

If you do not yet have an ISOE Network account, please contact your ISOE National Co-ordinator and the NEA Secretariat (brian.ahier@oecd.org) to receive a user account and gain access to the ISOE Network resources.

Planning the Replacement of Steam Generators at Angra, Brasil

Nuclear Power Plant Angra 1 (Westinghouse PWR, 2 loops, 657 MWe) is preparing to replace the steam generators in the near future. The replacement will be done in October 2008. During 2007 and in the beginning of 2008, the team for steam generator replacement will complete the Radiation Protection Plan, ALARA Plan, Shielding Plan, the lay-down area and the waste management strategy for the steam generator replacement (SGR).



Mr. Magno Oliveira, Monitoring Manager of the Angra site (Angra 1&2 NPPs) and his team are taking advantage of ISOE information exchange related to SGR.

The opinion of Mr. Magno Oliveira is the following: “As these issues are complex, it is important to receive first-hand experience from other plants. We are especially interested in the reports from the twin plant such as Krško (Slovenia). I found the paper “Steam Generator Replacement from ALARA Aspects”, on the 3rd ISOE European Workshop (Portoroz, 2002), really important and useful and will use it for SGR at Angra 1 NPP.”

They will also take advantage of the new ISOE Network search tool to find documents and information on the ISOE Network related to Steam Generator Replacement. The position of the Angra experts is: “We do not have other sources of information in addition to ISOE for that issue. We believe the information and experience of all ISOE members on specific radiological issues in the area of SGR coming through the North American Technical Centre (NATC) are important and useful, especially comparative analyses of data from reactors having similar characteristics, i.e. sister unit groups which carried out SGR in the near past. The SGR is a demanding and complex radiological work. Ten months prior to the start of the task, a lot of work has been done, but there is still a lot to be done. The Angra 1 managerial crew is striving hard towards radiation safety and dose reduction for workers. We are focused on completing the Radiation Protection Plan, ALARA Plan, Shielding Plan, lay-down area and waste management planning. Therefore, we would be grateful if ISOE members could share good practices and lessons learned from the SGR in order to apply them at Angra 1.”

2007 ISOE Asian ALARA Symposium



The ATC, in collaboration with the Korean Hydro & Nuclear Power Co., Ltd (KHNP) and Korea Institute of Nuclear Safety (KINS), organised the 2007 ISOE Asian Regional ALARA Symposium, which was held 12-13 September 2007 in Seoul, Korea, with attendance of about 40 individuals from 4 countries. A technical visit to Ulchin Nuclear Power Station was held on 14 September.

The presentation of Mr. Gui jong Lee (Yonggwang, NPP-KHNP) titled “CCTV System for Radiation Work Management” was recognized as a distinguished paper. Mr. Gui jong Lee was invited to present the paper at the 2008 ISOE International ALARA Symposium in Japan. A special award was given for the presentation “Good Practice Result Report – Sizewell B Benchmarking” presented by Jin hee Choi (Kori NPP-KHNP).

Mr. Gui jong Lee presented information on the use of CCTV systems to reduce dose. The CCTV system introduced in Yonggwang Units 5 and 6 are connected via LAN, and enable real-time monitoring of the work situation. The system uses fixed and movable cameras. Mr. Gui jong Lee showed examples of the implementation and noted clearly positive effects due to the introduction of the system. One of the cases was a

Thermal Sleeve (T/S) removal. Metal objects were discovered in the reactor bottom head of unit 5, which were identified as missing thermal sleeves from the safety injection nozzle. Then, a remaining thermal sleeve was planned to be removed. About 15 persons supervised the work through CCTV during the working period thus optimizing the working time. Moreover, an exposure reduction of 16% (25.6 man-mSv) was achieved by using the CCTV system. It was concluded that the CCTV system brings considerable benefit with small effort.

Ms. Jin hee Choi reported on the benchmarking of the Kori NPP (Korea) with Sizewell B in United Kingdom. The following good practices were applied at Kori NPP as a result of the benchmarking: (1) Personal protective equipment such as blue suits, LS clothes, clear caps and thin rubber gloves, (2) Assignment of laydown areas, (3) Safety helmet colour differentiation, (4) Wearing glasses inside goggles - enlargement, (5) Set up of medical treatment supplies and (6) foreign material exclusion. Ms. Jin hee Choi also noted the positive effects such as reduction of washing/drying time of clothes and reduction of waste and electric power consumption.

Upcoming ISOE Meetings and Symposia for 2008

ISOE Meetings:

Ad-hoc ISOE Group for the Revision of the BSS: 14-15 February, at OECD/NEA, Paris, France
Expert Group on Work Management: 18-9 February, at OECD/NEA, Paris, France
ISOE Bureau and Technical Center Coordination Meeting: 23 May, at OECD Headquarters, Paris
Expert Group on Work Management: 26-27 May, at OECD, Paris, France
WG for Data Analysis (WGDA): 15-17 September, at OECD Headquarters, Paris, France
Expert Group on Work Management: 18-19 September, at OECD Headquarters
2008 ISOE Annual Session: 18th ISOE Steering Group Meeting 10-12 November in Kyoto, Japan.

ISOE Symposia:

Regional North American ISOE Symposium: The next North American ISOE symposium, organised by the NATC and EPRI, will be held from 14 to 16 January 2008 in the USA.

Regional European ISOE Symposium: The next European ISOE symposium, organised by the ETC, will be held from 24 to 27 June 2008 in Turku, Finland. The call for papers is available on ISOE website by the end of December 2007.

International ISOE Symposium: The next International ISOE symposium, organised by the ATC, will be held from 13 to 14 November 2008 in Japan, following the 2008 ISOE Annual Session.