The Second Workshop on Good Practices in Heavy Water Reactor Operation

12-14 April 2011, Gyeongju, Republic of Korea

I. BACKGROUND

Heavy Water Reactors (HWRs) are the second most common type of nuclear reactor installations in the world, second only to Light Water Reactors (LWRs). At present 46 HWRs are operating in 7 countries and 4 HWRs are under construction.

The Technical Working Group on Advanced Technologies for Heavy Water Reactors (TWG-HWR), which is an advisory group to the IAEA Department of Nuclear Energy, proposed this workshop to share good practices in HWR operation. The first workshop was held successfully in September 2008 in Toronto, Canada. Korea Hydro and Nuclear Power Co., Ltd (KHNP) kindly offered to host the second workshop.

II. OBJECTIVES

Member States operating HWRs are interested in exchanging information with other experienced operators to improve the performance of their own reactors. The purpose of this workshop is to provide a platform for detailed presentations and technical discussions leading to exchange of experience and fostering world-wide collaboration between utilities and designers.

III. TOPICS TO BE COVERED

The workshop will be conducted in the form of presentations and roundtable discussions. Topics include the following areas:

1. Improvements in performance:
    a) Improvements in plant availability;
    b) Root cause of and solution to system/component unavailability;
    c) Increase in plant thermal efficiency;
    d) PSA based improvements.
2. Reduction in operation and maintenance costs:
    a) Improvements in D2O management/upkeep;
    b) Improvements in in-service inspection;
    c) Improvements in system/component reliability;
    d) Extension of allowed outage time or surveillance intervals;
    e) Reduction of overhaul period or extension of overhaul cycle;
    f) Application of new technologies on maintenance;
    g) Experience on fuel channel replacement;
    h) Role of maintenance training and JIT briefing.
3. Reduction in occupational dose:
    a) Improvements in the implementation of ALARA principles
    b) Improvements in procedures
    c) Installation of facilities to reduce radionuclide release
    d) Tritium removal technologies
    e) Dose control in high level waste handling/storage

IV. DEADLINE FOR SUMMARIES AND PARTICIPATION IN THE WORKSHOP

The workshop may be attended only upon official designation. Participants should complete the attached Form A and send it, together with a summary paper to the IAEA Scientific Secretary, Mr. Jong-Ho CHOI, not later than January 20, 2011, with copy to the TPC member of your country.

Authors will be notified about the acceptance of their presentation(s) on the basis of the summary submitted and the preliminary programme will be issued by February 15, 2011. Those authors whose summaries are accepted will be asked to submit the revised summary and Power Point presentation by March 15, 2010. All accepted summaries and presentations will be reproduced in unedited form in the CD, which will be distributed at the registration counter. Authors are not required to submit full paper for their presentations.

V. GUIDELINES FOR SUMMARIES

The length should be at least 600 words and no more than 900 words, excluding tables and figures (no more than three tables or figures). The summary should be prepared using Microsoft Word and include 1) title, 2) author name and affiliation, 3) introduction, 4) description of the good practices, and 5) results.

VI. VENUE AND ACCOMMODATION

The workshop, hosted by KHNP, will be held at a hotel in Gyeongju, Republic of Korea.
Participants should arrange for their own hotel accommodation directly with the hotels. A list of recommended options as well as the full name and address of the hotel hosting the workshop will be provided, in due course, on the Secretariat website:
http://www-pub.iaea.org/mtcd/meetings/Meetings2011.asp.

Further details regarding local travel arrangements and social events will also be made available under the above-mentioned link.

Designated participants who require a visa to enter Republic of Korea should submit the necessary application form in due time to the nearest diplomatic or consular representative of Republic of Korea in order to secure an entry visa in a timely manner, prior to departure.
A letter of invitation, if required, has to be requested from the representative of the local coordinator namely Mr Ki-Hyun Kang whose coordinates are provided below, under Section IX.

VII. EXPENDITURES

There is no registration fee. Participant's authorities are expected to bear the travel and other costs of designated participants in the Workshop. Limited funds are, however, available to help cover the cost of participants from Member States eligible to receive technical assistance under the IAEA Technical Cooperation Programme. Such assistance usually covers only part of the cost of attendance. The application for financial support should be made at the time of designation of the participant.

VIII. WORKING LANGUAGE

The working language of the workshop will be English. All communications, summaries, and presentations must be sent in English.

IX. ORGANIZATION

Technical Program Committee (TPC):

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