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NEA/CSNI/R(98)14
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Organisation de Coopération et de Développement Economiques
Organisation for Economic Co-operation and Development

NEA/CSNI/R(98)14

OLIS : 06-Mar-1998

Dist. : 09-Mar-1998

English text only

**NUCLEAR ENERGY AGENCY
COMMITTEE ON THE SAFETY OF NUCLEAR INSTALLATIONS**

**SEMINAR ON BEST ESTIMATE METHODS IN
THERMAL-HYDRAULIC SAFETY ANALYSIS**

**Ankara, Turkey
29 June - 1 July, 1998**

**Organised in collaboration with
Turkish Atomic Energy Authority**

62849

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1. Sponsorship

The OECD Seminar on Best Estimate Methods in Thermal-Hydraulic Safety Analysis, to be held from 29 June to 1 July, 1998, in Ankara, Turkey, is sponsored by the Committee on the Safety of Nuclear Installations (CSNI) of the OECD Nuclear Energy Agency (NEA). It is organised in collaboration with Turkish Atomic Energy Authority (TAEA).

2. Background and Objectives of the Workshop

In the spring of 1992 an OECD Specialist Meeting on Transient Two-Phase Flow (“Current issue in system thermal-hydraulics”, April 6-8, 1992) was held in Aix-en-Provence, France. Next, there was an OECD Workshop on Transient Thermal-Hydraulic and Neutronic Codes Requirements (Annapolis, USA, November 5-8, 1996). The issues raised during the meetings indicated strongly a need for well established best estimate methodology for the use in plant safety analysis. A number of other CSNI activities addressed status of codes validation and related issues of codes uncertainties.

Discussions within the CSNI have led to the conclusion that the time is ripe to organise an international seminar to review the insights from, and the status of utilisation of the Best Estimate methods in plant safety analysis.

The scope of this Seminar is limited to safety analysis needed in support of licensing process. Therefore, the workshop will not specifically address issues related to code development and physical models.

The objectives of the meeting are:

- to exchange information on the Member countries’ methodologies used and/or required in the licensing process, and
- to discuss the licensing issues associated with uncertainties and evaluation of T/H safety margins in conservative and BE approaches.

3. Scope and Technical Content of the Workshop

The Technical Content of the meeting includes:

Topic 1: DBA requirements and BDBA considerations

- “classic” conservative approach - adequate protection
- new trends in regulations - enhanced safety

Topic 2: Analytical (TH) tools used in licensing process

- existing conservative models
- current BE methodologies

Topic 3: Evaluation of T/H Safety Margins:

- differences in conservative and BE approaches
- status of uncertainty methods

In general terms, the meeting attempts to give answers to questions in the following areas:

- What are the TH safety margins in the current DBA analysis?
- What is the role of the BDBA evaluation in the licensing process?
- Is there an upper (lower?) limit of required safety margins?
- How “mature” and/or useful are existing uncertainty methodologies?
- How conservative the BDBA analysis can (or should) be?
- What are the additional needs for:
 - conservative and/or BE in DBA analysis?
 - BE in BDBA?

4. Program Committee of the Seminar

A Program Committee has been nominated by the CSNI to evaluate the abstracts of proposed papers, to select the papers for presentation, to organise the Sessions and to develop the final program of the workshop, appoint Session Chairmen, etc. Its members are:

- Dr. Emin OZBAS, General Chairman of the Meeting, TAEA, Turkey
- Dr. Nusret AKSAN, PSI, Switzerland, (Chairman),
- Mr. Yilmaz BEKTUR, TAEA, Turkey
- Mr. N.A.J. (Nick) Butt, Nuclear Electric , UK
- Dr. Farouk ELTAWILA, NRC, USA
- Dr. V.S. (Krish) KRISHNAN, AECL, Canada
- Dr. Michel REOCREUX, IPSN, France
- Dr. Victor TESCHENDORFF, GRS, Germany
- Mr. Andre DROZD, NEA (secretary)

5. Abstracts and Papers for the Seminar

One page abstracts (200-300 words) should be sent by e-mail (preferably) and/or by fax to both the workshop Chairman, Dr. Nusret Aksan (e-mail: aksan@psi.ch, fax: +41.56.310.4481) and the PWG-2 secretary, Mr. Andre Drozd, (e-mail: drozd@nea.fr, fax: +33.1.45.24.11.10). Deadline for abstracts is 15th April, 1998.

The abstracts should not simply list the material presented in the paper but should contain a concise statement regarding gained experience, encountered problems and principal conclusions of the paper. Authors should indicate primary and one alternate topics to which their papers are most closely related, based on the Seminar technical content outlined in the scope section of this announcement.

The primary authors will be notified by 15th May, 1998, whether the proposed paper is accepted as described in the abstract, or with certain modifications. At this time, the primary authors of accepted abstracts will receive requirements regarding paper format, slides, films and video tapes.

Final papers of the accepted abstracts should be submitted to the PC Chairman on the first day of the Seminar (29th June, 1998). The presenters are expected to bring sufficient number of copies of their presentation for distribution. Authors are requested to bring to the Seminar 100 copies of their paper for distribution to the participants at the beginning of the meeting.

6. Registration

There are no registration fees. The registration forms (attached) should be sent to both the TAEA representative and the NEA Secretary.

7. Final Program of the Seminar

The final program will be distributed to the registered participants as soon as possible.

8. Language of the Seminar

The official language of the meeting will be English.

9. Summary Report and Material presented at the Seminar

After the Seminar, the Program Committee will decide if and in what form the presented materials shall be published. If published, the materials presented at the Seminar will then be distributed, as soon as possible, free of charge to the participants of the Seminar and to the delegates to the CSNI, CNRA, PWG2, and TG-THA.

The Program Committee and Session Chairmen will prepare a Summary Report for presentation to the PWG2 and CSNI.

10. Local Arrangements

The Seminar will be held in Ankara, Turkey, and will be hosted by the Turkish Atomic Energy Authority. Additional information regarding local arrangements (e.g., local hotels and transportation) will be announced with the final program of the workshop.

A block of hotel rooms in Ankara will be reserved in advance. In order to estimate the number rooms needed, please **indicate your intention to attend** the Seminar by sending a short message to Mr. Yilmaz Bektur, TAEA, and to Mr. Andre Drozd, NEA, **by 31 March, 1998**. The message should also indicate a number of days and the type of room wanted.

11. Program Committee Members Addresses

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OECD NUCLEAR ENERGY AGENCY
COMMITTEE ON THE SAFETY OF NUCLEAR INSTALLATIONS

OECD/CSNI SEMINAR ON
BEST ESTIMATE METHODS IN THERMAL HYDRAULIC SAFETY ANALYSIS

29 June - 1 July, 1998

Hosted by
Turkish Atomic Energy Authority

PARTICIPANT REGISTRATION FORM

to be sent as soon as possible, and in any case before 31st May, 1998, to

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(please indicate whether Prof., Dr., Mr., Mrs., Miss, Ms.)

Title or Function:

Institution, Organisation or Company (full address):

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Telephone No: Fax No:

E-mail address:

Title of the paper to be presented (if any):

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