

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

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For Official Use

Working Group on the Analysis and Management of Accidents

NOTIFICATION OF MEETING

**ENLARGED MEETING OF EXPERTS ON A RUSSIAN PROPOSAL FOR AN OECD PROGRAMME
TO VALIDATE THERMAL-HYDRAULIC CODES FOR VVER-1000 SAFETY ASSESSMENT ON THE
BASIS OF PSB-VVER-1000 EXPERIMENTS**

**To be held from 16 to 18 October 2001 at the Electrogorsk Research and Engineering Center (EREC) of
Nuclear Power Plant Safety, Electrogorsk, Russian Federation**

JTT1212328

I. The International Nuclear Safety Center of Russian Minatom (RMINSC) and the Electrogorsk Research and Engineering Center (EREC) of Nuclear Power Plant Safety have proposed the setting up of an international programme, under the auspices of the OECD, to validate thermal-hydraulic codes for VVER-1000 safety assessment by solving a set of "Standard Problems" on the basis of experiments to be carried out in the PSB-VVER-1000 facility. An informal exploratory meeting of experts held in March 2001 found that the proposal had merits, although a number of points remained to be clarified, and recommended the organisation of an enlarged meeting of experts to discuss the details of the proposal.

II. The Enlarged Meeting of Experts will be held at the **Electrogorsk Research and Engineering Center (EREC) of Nuclear Power Plant Safety**, Bezmyannaya 6, Electrogorsk, Moscow Region, Russian Federation **from 16 to 18 October 2001**. It will start at 09.00 a.m. on the first day.

III. The following agenda is proposed:

1. Welcome. Opening remarks. Background of the meeting.

2. Election of Chairman.

3. Purpose and objectives of the meeting.

4. Brief general description of the OECD Joint Programme proposed by RMINSC and EREC (a detailed discussion will take place under Item III.7 of the agenda):

- Rationale of the proposal
- Subject of the proposal
- Objectives of the proposed Joint Programme
- Technical content of the proposed Joint Programme
- Expected products
- Main characteristics of the PSB-VVER facility
- PSB-VVER instrumentation
- Data acquisition system

5. Description of past and current co-operation between the United States International Nuclear Safety Center (USINSC) and the International Nuclear Safety Center of Russian Minatom (RMINSC) in the area of computer code validation for transient analysis of VVER reactors (Joint Project 6).

6. Description of Phase 4 – "PSB-VVER Validation Prioritization, Experiment Guideline, and Standard Problem INSCSP-PSBV1 for VVER Code Validation Project" - of USINSC/RMINSC Joint Project 6, intended to be a Demonstration Phase supporting the establishment of an OECD Programme in the area of thermal-hydraulic code validation for VVER-1000 safety assessment. Status of work in progress. Opportunities for other countries to contribute to this work (including products and schedules).

7. Detailed discussion of the proposal for an OECD Joint Programme, including following points:
 - Scope of work.
 - Task 1: Development of prioritized List of PSB-VVER experiments
 - Validation matrix (justification of tests)
 - PSB-VVER-1000 capabilities
 - Data completeness
 - Task 2: Experiment guideline (procedure for test preparation, performance and analysis, data quality control and assurance, etc.)
 - Task 3: Standard and advanced instrumentation certification
 - Task 4: PSB-VVER Standard Problems
 - Task 4.1: Experiment planning
 - Task 4.2: Experiment performance
 - Task 4.3: Standard Problem definition report
 - Task 4.4: Code validation analysis and assessment
 - Task 4.4.1: Input model development
 - Task 4.4.2: Input model independent review
 - Task 4.4.3: Code analysis and assessment
 - Comparison of calculated results among themselves and with experimental data
 - Assessment of code capabilities
 - Comparison between PSB-VVER and ISB-VVER tests (where applicable)
 - Post-test calculations (preliminary discussion)
 - Task 4.4.4: Documentation
 - Task 5: Database support
 - Schedule and milestones

8. OECD Joint Programme organisation:

- Programme organisation
- Standard Problem management and co-ordination
- EREC team, EREC responsibilities
- RMINSC role and responsibilities
- Participants' responsibilities
- OECD/NEA role and responsibilities

9. Needed resources: cost, manpower.

10. Expected participants. Preliminary indications of interest.

11. Possible next steps.

12. Conclusions. Recommendations to the Committee on the Safety of Nuclear Installations.

13. Any other business.

14. Close of the meeting.

IV. A visit to the PSB-VVER-1000 facility will be organised during the meeting.

V. If this has not already been done, it would be helpful if the names and addresses of the designated participants would be communicated to the Secretariat (Attn: Mr. J. Royen) **as soon as possible, and in any case before 15 September 2001.**

VI. Participants are advised to apply for a visa to enter the Russian Federation well in advance of the meeting. Attention is drawn to the fact that delays in obtaining visas can be very long.

VII. Information regarding practical arrangements (transportation from Moscow Airport to Electrogorsk, accommodation in the Electrogorsk area, etc.) will be distributed to the designated participants in due course.