



International Nuclear Safety Center



**Presentation on
U.S. and Russian International Nuclear Safety Centers**

to

International Nuclear Safety Information Exchange

**A. E. Klickman
January 27, 1999**



International Nuclear Safety Center



HISTORY AND BACKGROUND

- The U.S. Secretary of Energy and the Russian Minister of Atomic Energy signed a Joint Statement on the establishment of International Nuclear Safety Centers in September 1995.
- The U.S. International Nuclear Safety Center was established at Argonne National Laboratory in October 1995. The director is Dr. David Hill
- The Russian International Nuclear Safety Center was established in July 1996. It is an independent organization under the Russian MINATOM. The director is Professor Sergei Bougaenko.



International Nuclear Safety Center



GOALS OF THE INSC

- Promote the open exchange of nuclear safety information.
- Cooperate in the development of technologies associated with nuclear safety in nuclear power engineering.
- To be international centers for the collection of information important for safety and technical improvements in nuclear power engineering.

STRATEGIC APPROACH

- Use the resources and the talents of the U.S. and Russian scientists to do *collaborative* research to improve the safety of Russian-designed nuclear reactors



International Nuclear Safety Center



SUCCESSSES OF THE INSC

- Ten joint nuclear safety research projects have been established.
- 28 technical working meetings have been held.
- Nine personnel exchanges (2 weeks to 3 months) have been made.
- A senior U.S. representative has been in Moscow half-time for the last two years as liaison for the collaborative activities.
- Both Centers now have Web sites, available to the public, for posting of nuclear safety information and posting of the results of the joint research projects.



LESSONS LEARNED

- There must be an awareness that cultural differences between countries can impact outcomes of collaborative projects unless they are addressed carefully.
- Significant on-site presence in Russia can prevent cultural differences from impacting collaborative activities unduly.
- Extensive use of the Internet for e-mail and inexpensive video-conferencing promotes familiarity between collaborators and helps to overcome language and cultural differences.



LIST OF USINSC/RINSC JOINT PROJECTS

Since January 1997, the two centers have initiated the following nine joint research projects:

- INSC Web Servers and Databases
- Material Properties Measurement and Assessment
- Coupled Codes: Neutronic, Thermal-Hydraulic, Mechanical, & Other
- Severe Accident Management for Soviet-designed Reactors
- Transient Management and Advanced Control
- Survey of Relevant Nuclear Safety Research Facilities in the Russian Federation
- Computer Code Validation for Transient Analysis of VVER and RBMK Reactors
- Advanced Structural Analysis
- Development of a Nuclear Safety Research and Development Plan for MINATOM

Международный Центр по ядерной безопасности
Минатома России (РМЦЯБ)
База данных по ядерной безопасности
<http://www.insc.ru>

- Данная база данных, основанная на технологии WWW Интернета, представляет собой всесторонний источник информации по атомным электрическим станциям (АЭС), исследовательским реакторам и установкам топливного цикла.
- Хотя представленная в этой базе данных информация охватывает весь мир, основное внимание уделяется реакторам спроектированным в США и в бывшем СССР. В настоящее время база данных содержит информацию о ядерных объектах во всем мире непосредственно и через ссылки.
- База данных содержит отчеты о результатах совместных работ по проектам, которые проводились в Международных центрах по ядерной безопасности США (АМЦЯБ) и Минатома России (РМЦЯБ).
- Она также содержит объемные данные по недавним исследованиям свойств материалов, которые весьма полезны для анализа ядерной безопасности.
- Базы данных АМЦЯБ и РМЦЯБ связаны между собой.



**International Nuclear Safety Center
of Russian Minatom**
S. E. Bougaenko, Director
Malaya Krasnoselskaya 2/8
Moscow, 107113 Russia
E-mail: bougaenko@insc.ru
Phone: (095) 263 7310
FAX: (095) 264 4910

**Российский Международный Центр
Ядерной Безопасности**
С. О. Бугаенко, Директор
107113, Российская Федерация
Москва, Малая Красносельская, 2/8



- This WWW-based database is a comprehensive resource for basic information about nuclear power plants, research reactors, and fuel cycle facilities. The database currently contains, directly and through links, information on nuclear facilities around the world.
- Although the scope of the database is worldwide, the current focus is on U.S. and Soviet-designed reactors.
- The database contains reports of results and calendars of activities of the collaborative research projects that are being conducted by the U.S. International Nuclear Safety Center and the Russian International Nuclear Safety Center.
- The database also contains extensive recent material properties data that are useful to nuclear safety analysts.
- There is a link between this database and a companion database that is maintained at the Russian International Nuclear Safety Center in Moscow.



International Nuclear Safety Center
D. J. Hill, Director
Argonne National Laboratory
9700 S. Cass Ave, Bldg 208
Argonne IL, 60439, USA

E-mail: inscmail@anl.gov
Phone: (630) 252 5167
FAX: (630) 252 6690

