

5th Joint IAEA-GIF Technical Meeting/Workshop on

Safety of Sodium-Cooled Fast Reactors

23-24 June 2015

Vienna, Austria

OPENING SPEECH

Mikhail Chudakov

Deputy Director General

Head of the Department of Nuclear Energy



IAEA

International Atomic Energy Agency

Ladies and gentlemen,

Dear Colleagues,

Welcome to Vienna and welcome to this *joint IAEA-GIF Workshop on Safety of Sodium-cooled Fast Reactors*. This is the 5th meeting in a series that were initiated in 2010. We are especially happy to welcome representatives from almost all the design organizations and member states committed to the development of GENIV SFR demonstration plants and prototypes.

Let me first congratulate the work performed so far by the GIF task force on safety design criteria for Generation IV Sodium-cooled Fast Reactors. I am glad that a colleague from the IAEA Department of Nuclear Safety and Security has also been participating in that work.

As you well know, the task force has been collecting and integrating comments from regulators of GIF countries and from international organizations since July 2013,,, and has developed the Phase I report of the safety design criteria for Generation IV Sodium-cooled Fast Reactors. This meeting will have a dedicated session on the status of the international review of this report,,, and on the constructive comments received from national regulators and TSOs. This discussion is of paramount importance for finalizing the Phase I report.

Last year, the task force also launched a new activity to quantify the high level of safety expected for the innovative SFR systems, and to develop safety design guidelines on “safety approach and design conditions” and “key structures, systems and components”. We are eager to hear about the progress in these areas and the status of the Phase II report.

I understand that a major outcome of the last Workshop was that various designers presented the implementation of some specific safety design criteria, such as *practical elimination of accident situations, design extension conditions or sodium void reactivity effect* in their particular SFR concept.

It is very important to gather such feedback from the design organizations of innovative SFR prototypes expected to be built within the next decade. That is why, in this year’s meeting, we have devoted two sessions to the implementation of safety design criteria by designers: one on *reactor core and fuel design featuring fuel material characteristics*, and another on *coolant system and containment design featuring SFR characteristics*.

We are well aware of the need for complete independence between regulators and TSOs on one side,, and reactor designers and potential vendors on the other... But we also think that - at this early stage of the GEN-IV concepts development - a dialogue between the two is necessary in order to achieve a common understanding on the general safety approach to be adopted for these innovative nuclear systems. From this point of view, the Workshop remains a unique opportunity to create such a forum at the international level.

Finally, let me underline two things from the IAEA’s perspective: We welcome the timely GIF initiative and the substantial contributions from the different stakeholders to the on-going discussion. At the same time, we confirm our commitment to support and contribute to any activity aimed at developing safety design criteria and guidelines for innovative SFRs, and harmonizing them, to the maximum extent, at the international level. We hope to see these

criteria and guidelines as part of IAEA recommendations within the set of safety requirements for innovative SFRs.

Needless to say, let me conclude by thanking the GIF Team and the IAEA Secretariat for organizing this workshop. I wish you all a successful meeting and a pleasant stay in Vienna.