

Webinar on Corium Retention in Indian Nuclear Reactors during Postulated Severe Accidents

A webinar on “Corium Retention in Indian Nuclear Reactors during Postulated Severe Accident” was organized by SRI, AERB during January 21-22, 2021 to foster commitment for safety among all primary stakeholders. Corium retention during postulated severe accidents is of high contemporary importance for safety that demands coherent application of technical solutions with effective organizational participation. The coverage included phenomenology of core melt accidents, strategy/management of core melt retention and related experimental & analytical studies.

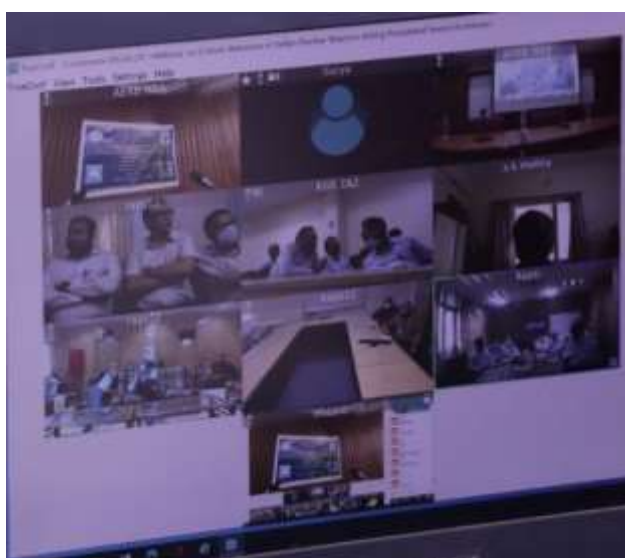
The webinar was inaugurated by Shri G. Nageswara Rao, Chairman AERB. In his inaugural address, Chairman stressed the paramount importance of safety in nuclear industry and emphasized on formulation of safety philosophies and design of safety systems to prevent any accident conditions. He underscored that real contribution for peaceful use of nuclear energy can only be achieved if nuclear accidents are prevented. The inaugural address was followed by addresses by Shri A. K. Balasubrahmanian, Director (T) NPCIL and Shri D. S Choudhury, Director (O) NPCIL, highlighting significance of dissemination and exchange of information on such an important topic towards making nuclear power more acceptable and competitive. Shri D. K. Shukla, Executive Director AERB delivered keynote address emphasizing design focus shifting from DBE to BDBE and highlighted that severe accident management studies should undergo in-depth review at various levels to consider them acceptable.

Around 100 delegates from AERB, NPCIL Headquarters, BARC, IGCAR, BHAVINI and all seven NPP sites participated in the Webinar. Eminent AERB advisory panel members also graced the occasion with their presence either in-person or through video conference. A total of nine talks were delivered by experts from BARC, AERB, NPCIL and IGCAR addressing nearly the whole spectrum of issues related to corium retention such as experimental and numerical studies in support of In-vessel or Ex-Vessel melt retention, structural integrity assessment of reactor vessel (Calandria Vessel or RPV), estimation of Critical Heat Flux (CHF), Implementation of SAMG in Indian reactors, Concept of core catcher and its design aspects in Indian reactors, etc.

The webinar concluded with a session on panel discussion acknowledging that it helped in sensitizing all the stake holders about the severe accident scenarios and its management in various reactor types, and brought out several recommendation and suggestions to carry forward the current level of R&D and other collaborative activities further in this area to gain insights and make reactors more safe.



Shri G. Nageswara Rao, Chairman AERB delivering the inaugural address in the Webinar



Participants during the Webinar through in-person and virtually through online platform



Panel members