Contribution ID: **46** Type: **ORAL**

The Safety Design Criteria Development and Summary of Its Update for the Generation-IV SFR Systems (USA/Japan/GIF)

Monday, 26 June 2017 17:35 (10 minutes)

The Generation-IV International Forum (GIF) Task Force completed development of Safety Design Criteria (SDC) for the Generation-IV SFR systems in May, 2013. SDC reflects high level GIF safety and reliability goals (excellence in operational safety and reliability, and reduced likelihood and degree of core damage) and follows GIF basic safety approach (application of defense-in-depth and emphasis on inherent and passive safety features so that safety is built-in to the design, not added-on). The SDC report aimed to establish reference criteria for safety design of structures, systems and components and achieve harmonization of safety approaches among GIF member states. Following its public release, SDC report was distributed to international organizations and national regulatory bodies for review and feedback. Based on comments received during the following two year period, SDC report underwent a revision reflecting important feedback received from IAEA, NRC (USA), IRSN (France), and NNSA (China). This paper will provide an overview of SDC development effort, and summarize the comments/suggestions received from its international review along with their resolutions by the GIF Task Force.

Country/Int. Organization

U.S.A./Argonne National Laboratory

Primary author: Mr SOFU, Tanju (Argonne National Laboratory)

Co-author: ASHURKO, Iurii (IPPE)

Presenter: Dr OKANO, Yasushi (Japan Atomic Energy Agency)

Session Classification: Panel 1: Development and Standardization of Safety Design Criteria (SDC) and Guidelines (SDG) for Sodium Cooled Fast Reactors

Track Classification: Panel 1: Development and standardization of Safety Design Criteria and Guidelines for Sodium Cooled Fast Reactors