

From: LUIS HERNANDEZ Jorge [<mailto:jorge.luis-hernandez@irsn.fr>]
Sent: September-26-18 11:11 AM
To: Consultation (CNSC/CCSN)
Subject: comment on the REGDOC-1.1.5

Dear Sir or Madam,

I thank you very much for the document and its comprehensiveness related to the requirements for the licensing process of potential SMR applications in Canada.

With regard to the chapter 2.2.4 safety analysis it is mentioned that:

When assessing the safety analysis SCA and the emphasis it should be given, the applicant should address the following considerations:

...

4. *The number of passive safety systems.*

...

9. *Probability of failure of structures, systems and components.*

There, the interdependencies among passive safety systems is not clearly required and in my perspective taking into account the small working forces driving those systems if there is any functional link among them (share of pipes, pipe connections, valves position, etc.) for safety systems used at different levels of the DiD, it should be clearly addressed as they can be considered even more important than for active systems. Then, I propose you to consider the interdependencies among passive safety systems:

4. The number of passive safety systems and their interdependencies.

Regarding the probability of failure of SSCs, and in particular for passive safety systems (mainly for type B according to IAEA categorization) in my opinion it should be also required the information regarding this probability as a function of dependent factors such as the specific plant conditions, the configuration, the time at which the intervention of the passive safety system during the accident sequence is required and the counter forces like pressure losses but also their interaction with active SSCs. Then, I propose you to consider as a requirement for the applicant the probability of failure for passive safety systems as a function of its depending factors:

9a. Probability of failure of structures, systems and components.

9b. Probability of failure of structures, systems and components forming part of passive safety systems as a function of its depending factors.

Could you explain why the aspects that I here before mentioned are not explicitly required to the applicant?

Are those aspects considered anywhere else in the SCA?

I thank you very much for your answers.

Best regards,

Jorge LUIS HERNANDEZ

Institut de Radioprotection et de Sûreté Nucléaire (IRSN) / Business Unit for International Commercial Development (BUDCI)

Tél.: +33 (0)1 58 35 85 18

Fax: +33 (0)1 58 35 91 52

Mail: jorge.luis-hernandez@irsn.fr