

ACRS

Future Plant Designs and

Regulatory Policies and Practices Subcommittees

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My name is Farshid Shahrokhi - I am the director of the high temperature gas-cooled reactor (HTGR) technology at Framatome Inc.

Framatome's steam cycle HTGR relies on the performance and radionuclides retention characteristics of TRISO particle fuel currently undergoing irradiation testing for qualification at Idaho National Laboratory.

Interim results from multi-year irradiation and testing campaign indicate better than expected results. Framatome's steam cycle HTGR is designed to deliver process heat and electricity at the highest level of reactor safety utilizing intrinsic and passive safety design features.

The combined radionuclides retention capabilities of TRISO particle fuel, intrinsic, and passive safety of our design concept limits the accident dose to less than 1.0 Rem (EPA PAG dose limit) in any two hour time interval during and following any design bases accident at the plant site boundary of 400 meter.

In other words the SC-HTGR is designed to not interfere with the environment beyond the plant's site boundary.

We expect the plant owner/operator to develop a robust off-site emergency plan, not as a condition of the NRC license but in co-operation with the state and local authorities similar to the emergency plans of any other large industrial complex in the U.S.A.

Existing regulations on emergency planning (EP) do not allow the owner/operator to benefit from the added safety and security of the advanced reactors limiting incentives for deployments of these safer designs.

We therefore applaud and strongly support the NRC's proposed EP rulemaking.