

August 21, 2018

Mr. Derek Widmayer  
Advisory Committee on Reactor Safeguards  
US Nuclear Regulatory Commission  
Washington, DC 20555-0001

Subject: Kairos Power LLC Comments on Draft Proposed Rule, *Emergency Preparedness for Small Modular Reactors (SMRs) and Other New Technologies (ONTs)*

Kairos Power appreciates the opportunity to provide comments for consideration by the Advisory Committee on Reactor Safeguards (ACRS) in their review of the subject proposed rule. Kairos is developing an advanced reactor in support of our team's mission, which is to enable the world's transition to clean energy, with the ultimate goal of dramatically improving people's quality of life while protecting the environment. We seek to address energy poverty, reduce the impact of climate change, create real and lasting jobs, and reestablish American technology leadership. But doing that requires that we remove artificial impediments to deploying this safe technology.

Kairos is developing a solid, TRISO-fueled, molten salt-cooled, high-temperature reactor. We expect to demonstrate minimal public exposure during conservatively postulated events.

Kairos strongly supports the proposed rule. We know from the direct involvement of members of our team that this rule represents years of collaboration on an approach that recognizes enhancements in safety of advanced designs while still requiring applicants to demonstrate compliance with rigorous requirements before the new approach can be used. The proposed rule acknowledges safety enhancements such as reduced core inventories and source terms, reduced potential for accidents, longer progressions of events postulated to lead to releases, and increase in the use of passive safety. Further, as indicated in the proposed rule package, the rule would apply the same dose standard for predetermined protective actions as is required of the current operating large reactors. It results in no less protection of public health and safety as compared to existing requirements for the current operating fleet.

The real risk associated with many other industries is much higher than a reactor, yet our industry historically presupposes that a higher burden is necessary. The proposed rule is logical in that it removes barriers to deployment by establishing requirements commensurate with the risk of the technology.

Importantly, the lack of a pre-approved offsite emergency plan – which is an important aspect of the change being contemplated in this rule – does not imply a lack of emergency planning, but rather a level of emergency preparedness more aligned with other comparable risks.

Kairos is pleased to support this rulemaking and we hope the ACRS finds these comments to be useful.

Respectfully submitted,



Peter Hastings, PE  
Vice President, Regulatory Affairs & Quality