

**From:** [Magruder, Stewart](#)  
**To:** [Darrell Gardner](#); [Jim Tomkins](#)  
**Cc:** [Schmidt, Jeffrey](#); [Barrett, Antonio](#); [Van Wert, Christopher](#); [Corson, James](#); [Beasley, Benjamin](#); [Hayes, Michelle](#); [Rivera, Richard](#); [Cuadrado de Jesus, Samuel](#)  
**Subject:** Preliminary questions re Kairos Power Fuel Performance Methodology Topical Report  
**Date:** Thursday, May 21, 2020 2:03:00 PM

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Dear Mr. Gardner,

By letter dated December 18, 2019, Kairos Power LLC (Kairos Power) submitted for U.S. Nuclear Regulatory Commission staff review, "KP-FHR Fuel Performance Methodology Topical Report," (Agencywide Documents Access and Management System Accession No. ML19352G704). In this letter, Kairos requested NRC staff approval of the fuel performance methodology for the Kairos Power Fluoride Salt-Cooled, High Temperature Reactor (KP-FHR). On February 5, 2020, Kairos Power and the NRC staff met and Kairos Power agreed to submit a revision to the topical report.

By letter dated March 2, 2020, (ADAMS Accession No. ML20056F072), the NRC staff found that the material presented provides the technical information in sufficient detail to enable the staff to complete a detailed technical review. As previously agreed, by letter dated March 13, 2020, (ADAMS Accession No. ML20073M573) Kairos Power submitted "KP-FHR Fuel Performance Methodology Topical Report, KP-TR-010-P, Revision 1".

The NRC staff has completed its preliminary technical review and developed a set of clarifying questions and comments to improve the NRC staff's understanding of the information presented prior to the development of formal requests for additional information. The purpose of these questions and comments are to:

- Obtain clarification regarding material in the topical report
- Promptly identify areas where additional information may be needed
- Facilitate discussions and continue effective communication

These questions and comments are available in Box at [\[\[https://usnrc.app.box.com/file/668038276339\]\]](https://usnrc.app.box.com/file/668038276339) and will be discussed during a closed meeting on May 22, 2020. In some instances, preliminary questions may support future requests for additional information (RAIs) or a regulatory audit. Kairos Power will be advised of the need for RAIs or a regulatory audit by separate correspondence.

Thank you

**Stewart Magruder**

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