1. The rfp require final design submittal due 4 weeks ARO. Please let us know if you meant 4 weeks after approval of preliminary design, or?

RESPONSE: 4 weeks after approval of preliminary design.

1. The rfp require that a concept animation be submitted at the time of the proposal. Would it be acceptable to submit a series of pictures from the 3D model along with picture clarifying descriptions instead of the concept animation?

RESPONSE: Yes, a series of pictures with adequate annotation to fully describe the function of the system is acceptable.

1. Please provide a drawing that shows the relationship between the interior dimensions of the hatch opening and the interior dimensions of the pool.

RESPONSE: See drawings 3-4 and 3-5 for locations of hatches (relative to reactor centerline). See drawing 7-2-2 for interior dimensions of pool.

1. Would NIST consider abrasive water jet cutting technologies. There are multiple advantages to this technique. But, the disadvantages include the generation of approximately 250 to 500 kg of abrasive media waste (generated during a cutting campaign - 100 fuel assemblies and 4 shim arms) that must be disposed.

RESPONSE: No. The concern is the difficulty to contain and filter and the amount of radiological waste produced.

1. What is the expected radiation level near the fuel when the fuel is loaded in the tool?
   1. If this information is not available, do you have a criteria that you use for purchasing equipment like the underwater camera?

RESPONSE: Below are dose rates both measured and calculated. 312 days is earliest amount of time before we would cut the element. With water shielding, the dose ranges from 5,100 R/hr at 1 ft, 372 R/hr at 2 ft, down to zero at 6 ft.

1. What is the expected radiation level at the saw when fuel is stored in its normal location?

RESPONSE: See response to question #1 above.

1. What is the max crane hook height above pool?

RESPONSE: 14’-0” min. see drawing 3-4

1. Are there seismic considerations that need to be considered?

RESPONSE: Will not fall over under .1g conditions.

1. Does NIST have a protocol for computerized systems, PLC code, etc. regarding cyber security?

RESPONSE: NIST prefers to keep the saw as simple as possible (no PLC). Cyber security is not an issue since it will not be connected to the internet and PLC code must fail in a safe mode.

1. Is there a reason for the tight tolerances (0.015 inches) on the fuel and shim cuts? It appears that there is room for tolerance on the waste side of each cut.

RESPONSE: There is room on the waste side of each cut but the fuel sections need to be 13.375 +/- .030” and cut correctly relative to where the fuel is located.