

**From:** Amy Cabbage *NAL*  
**To:** Carlson, Donald *RES*  
**Date:** Mon, Aug 20, 2001 5:23 PM  
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**This is what I had drafted so far.**

### **AVR Operational Experience**

Operated for 21 years (1967-1989)

Water Ingress from Steam Generator Leak

Fuel Handling System Required Modification to Address Frequent Maintenance

Graphite Dust Accumulation due to Abrasion of Pebbles

{was working on conclusion about significance of events}

### **THTR Operational Experience**

Operated for four years (1985-1989)

Broken Pebble Fuel Elements (~17,000 pebbles) due to In-Core Control Rod Insertion

Initially Fuel Handling was Restricted to Weekends when Power was Reduced

Predicted Pebble Flow Profile was Significantly Underestimated

Core Helium coolant bypass flow was found to be 18% vs. the predicted 7%

Significant number of damaged bolts in the thermal insulation in the hot gas ducts

Offsite release of graphite dust due to Inadequate Filters

Reliability and Availability typical for prototype reactor, operational problems were viewed as "teething problems" and not as serious technical or safety issues

*2-20*

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