



U.S. DEPARTMENT OF
ENERGY

Nuclear Energy

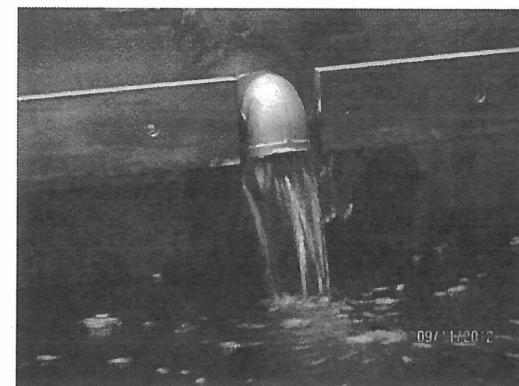
**Advanced Test Reactor
Post-Fukushima
Modifications/Upgrades**

October 30, 2012



ATR Post-Fukushima Modifications/Upgrades

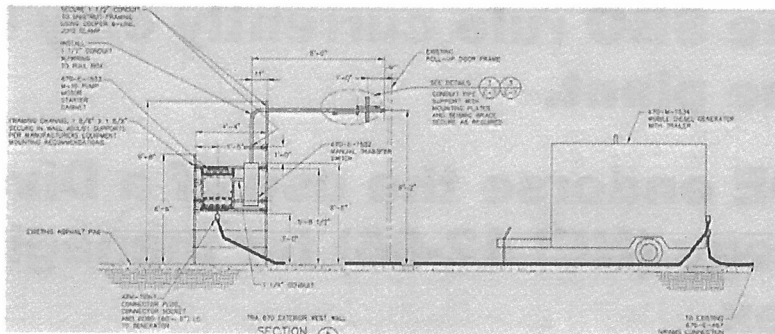
- **DOE and ATR management have continued to stay current on NRC and industry guidance and Orders related to the Japan earthquake**
- **BEA has completed an assessment against the NRC Orders Recommendations in EA-12-049 and EA-12-051 at DOE direction**
- **As a result of walk-downs and assessments, ATR personnel have initiated several plant enhancements, which include:**
 - Installation of a new ATR canal auxiliary fill system that can be accessed from outside the reactor building



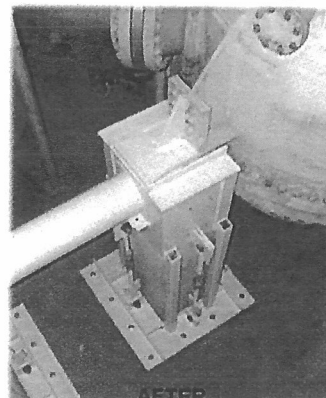


ATR Post-Fukushima Modifications/Upgrades

- Installation of the capability to supply power to the M-10 emergency coolant pump by a remote diesel (Station Blackout equipment)



- Completed installation of heat exchanger seismic supports and PCS piping supports which increased the PRA margin for Core Damage Frequency (CDF)



Primary Heat
Exchanger
Support Mods



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ATR Post-Fukushima Modifications/Upgrades

- **ATR has Station Blackout path for 72 hours without plant modification has been established. The commercial fleet under the SBO rule currently only has 4-8 hours depending on the plant.**
- **ATR management and DOE endorse the use of a Diverse and Flexible Coping Strategy (NEI 12-06) for managing BDBEs at the ATR Complex.**