

EDUCATION, SCIENCE AND TRAINING

SENATE LEGISLATION COMMITTEE - QUESTIONS ON NOTICE 2005-2006 BUDGET ESTIMATES HEARING

Outcome: ANSTO

Output Group: ANSTO

DEST Question No. E256_06

Senator Carr provided in writing.

Question:

ANSTO: ARPANSA Quarterly Report, 1 October – 31 December 2004

10. Appendix A, A.35 and A.36 list 2 incidents involving the ANSTO HIFAR Reactor Operations License:

- Unintended partial draining of the primary coolant from the reactor due to operator error
- Failure of a shutdown pump

These appear to be quite major incidents. Are there any safety risks associated with these incidents? Was safety of employees and others compromised in these two incidents?

Answer:

Safety risks in relation to ANSTO HIFAR Reactor Operations License:

ANSTO has provided the following response:

The unintended partial draining of the primary coolant from the reactor constituted a defence-in-depth degradation beyond the normal operating regime, but there were no significant safety risks associated with the incident. There was no release of radioactive material, or any degradation to the cooling of the fuel in the reactor. Even with the unintended partial draining of the primary coolant from the reactor, the reactor tank level was still above the level where the Emergency Core Cooling System (described at pages 54-55 of the HIFAR Safety Evaluation Report, available on the ARPANSA web site) automatically activates. The draining was self limiting. The failure of the shutdown pump, which as indicated in the ARPANSA quarterly report was associated with the unintended partial draining of the primary coolant from the reactor, had no safety consequence, as another shutdown pump continued to function correctly. The consequences of the events were realised quickly. Rectification measures to restore the reactor to the normal operating regime were promptly implemented.