

Summary Report of Occurrences Reviewed From October 12 – 16, 2009

Summary: 23 occurrences at 14 sites reviewed during this period.

Occurrences of Significant Interest (4)

Injury – 1 occurrence at 1 site

- **SC – Brookhaven National Laboratory (Significance Category 3).** On October 9, while walking outside of Building 1005H past liquid nitrogen tanks, a rigger was startled by a loud noise as nitrogen gas suddenly vented from high on the building during routine gas purifier regeneration. As he ran from the gas cloud, he fell in an area that contained small rocks and injured both of his knees. BNL Fire/Rescue responded and transported the individual to Peconic Bay Hospital. On October 12, 2009, it was reported that the injured rigger had surgery on both knees and is in the hospital. The rigger broke both kneecaps during the fall.

Near Miss – 1 occurrence at 1 site

- **NA – Sandia National Laboratories (Significance Category 3).** On October 8, 2009, a technologist was in the process of filling a 240-liter liquid nitrogen dewar at an outside fill station located by the southwest corner of building 701 when the six-foot metal fill hose blew off and away from the dewar causing it to whip around. The technologist did not feel safe trying to turn off the liquid nitrogen fill valve so the technologist got assistance from a second technologist. The technologists attempted to restrain the whipping fill hose with heavy rubber pads but this failed. They then used a broom to restrain the hose to approach close enough to the fill unit to shut the valve and turn off the liquid nitrogen. No injuries occurred during this event. The filling activity was halted, the ES&H coordinator reviewed the scene, and the damaged hardware was removed and replaced. The ES&H coordinator recommended that a whip arrester be used during filling operations.

Electrical Safety – 1 occurrence at 1 site

- **SC – Oak Ridge National Laboratory (Significance Category 3).** On October 5, 2009, while pipefitters were installing a compressed gas cylinder bracket onto a 7-inch deep, metal stud wall located in Building 1060 (Room 111), a 4-inch, self-tapping, screw entered the back of a recessed 120/208-volt 3-phase electrical panel and hit the energized copper buss, causing the circuit breaker to trip. The pipefitters were using a cordless drill but failed to inspect the other side of the wall before drilling. The work was authorized under a Grade 4 work package and did not require a penetration permit. The pipefitters were wearing the required personnel protective equipment, which included safety glasses and did not require gloves. When the circuit breaker tripped, the lights in the immediate and adjacent laboratory went out and a loss of power indicator light for a local area fire alarm panel was noted. The pipefitters stopped work, placed the work area in a safe condition and notified their craft supervision. A critique was performed.

Conduct of Operations – 1 occurrence at 1 site

- **NE – Idaho National Laboratory (Significance Category 4).** On October 8, 2009, an experiment operator placed the Loop Operating Control Station for loop 2B-SE in the simulator mode to insert a loop conductivity parameter, which caused a zero net positive

suction head (NPSH) signal that caused Pump M-2 in loop 2B-SE to trip. When the pump tripped, the motor circuit breaker undervoltage condition automatically scrambled the Advanced Test Reactor. There was no operational reason for entering the simulator mode and the operator was acting without the use of an approved procedure and without supervisor knowledge. The operator was unaware that when the conductivity parameter was inserted there were other associated fields in this simulator mode which default to zero. As a result, the actual 2B-SE pressurizer pressure signal went to zero causing the NPSH signal to momentarily go to zero, which tripped the M-2 pump motor circuit breaker. The reactor was verified to be in safe shutdown condition and a critique was conducted.

Other Occurrences (19). See Table (Note: The Table includes the occurrences listed above).

Occurrence Category	Number of Occurrences				Number of Sites
	E&E	NNSA	SC	DOE Total	
Injury - Industrial Hygiene/Occupational Safety	0	0	1	1	1
Near Miss	1	1	0	2	2
Authorization Basis	4	0	0	4	2
Radiological Concerns	3	2	0	5	5
Environmental	0	1	1	2	2
Fire Safety	0	0	0	0	0
Shipping/Quality Assurance	0	0	0	0	0
Criticality Concerns	1	1	0	2	2
Industrial Operations	2	0	0	2	1
Conduct of Operations	1	1	0	2	2
Electrical Safety	0	0	1	1	1
Vehicle Accident	0	0	0	0	0
Equipment Failures	0	1	0	1	1
Safeguards and Security	0	0	0	0	0
Suspect & Counterfeit Parts	0	1	0	1	1
Other	0	0	0	0	0
Total	12	8	3	23	

ORPS Significance Categories	OE	SC1	SC2	SC3	SC4	R
Totals for the Week:	0	0	2	11	10	0

Secretarial Office Summary

National Nuclear Security Administration	8 occurrences	(5 sites)
Office of Environmental Management	10 occurrences	(5 sites)
Office of Nuclear Energy	2 occurrences	(1 site)
Office of Science	3 occurrences	(3 sites)