

February 2007 Electrical Safety Occurrences

There were 11 electrical safety occurrences for February 2007:

- 3 involved shocks to workers
- 1 involved lockout/tagout
- 1 involved excavation.
- 7 involved electrical workers and 4 involved non-electrical workers.
- 4 involved subcontractors.

Of the three occurrences involving shocks, the one involving a worker's caulking gun contacting a hoist's buss bar appeared to present the largest potential electrical hazard (i.e., NA--KCSO-AS-KCP-2007-0001).

In compiling the monthly totals, the search initially looked for occurrence discovery dates in this month, and for the following ORPS "HQ keywords":

01K – Lockout/Tagout Electrical, 01M - Inadequate Job Planning (Electrical),

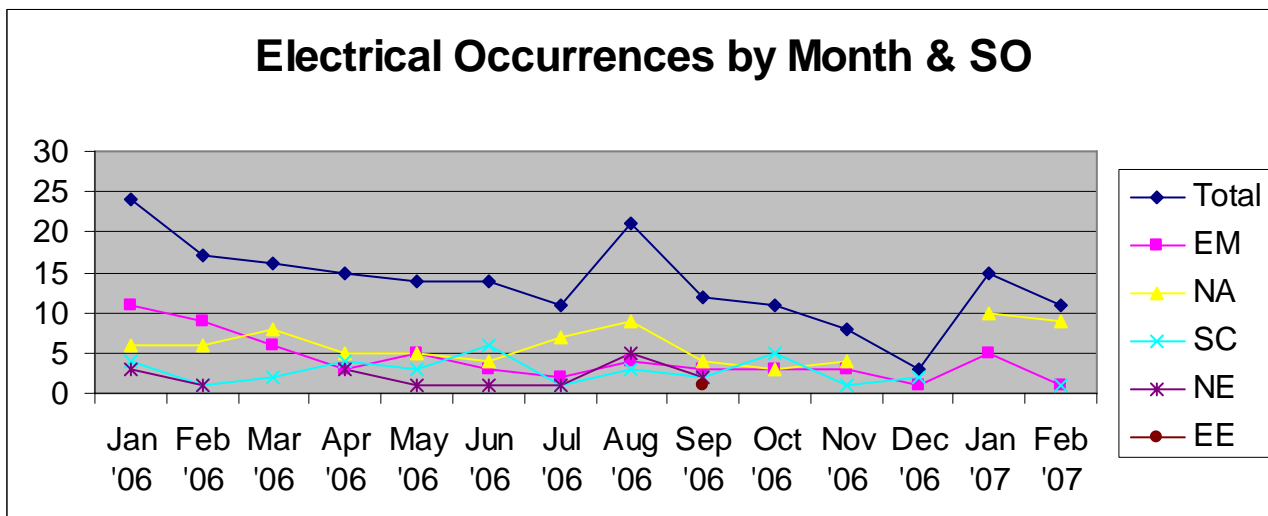
08A – Electrical Shock, 08J – Near Miss (Electrical), 12C – Electrical Safety

The initial search yielded 11 occurrences and none needed to be culled screened out. However, one occurrence (NA--LASO-LANL-TA55-2007-0007) involved connecting the wrong voltage to a lathe and might be perceived more as an equipment hazard than a worker safety hazard.

The rolling summary of 2007 electrical safety occurrences is now:

period	Elec. Safety Occurrences	Shocks	Burns	Fatalities
1/07	15	1	0	0
2/07	11	3	0	0
2007 total	26	4	0	0
2006 total	166	26	3	0
2005 total	165	39	5	0
2004 total	149	25	3	1

The rate of occurrences in 2007 is now 13 per month, which is less and the average rate of 14 per month experienced in 2006.



Electrical Safety Occurrences – February 2007

No	Report Number	Subject / Title	ew	n-ew	sub	shock	burn	arcf	loto	excav	cut/d	veh
1	EM-SR--WSRC-FSSBU-2007-0002	702-T Electrical Incident	x									
2	NA--KCSO-AS-KCP-2007-0001	Subcontractor Inadvertent Contact with Energized Electrical Bus Bar of Underhung Hoist		x	x	x						
3	NA--LASO-LANL-TA18-2007-0001	Discovery of live circuit after isolating power at CASA 2	x		x							
4	NA--LASO-LANL-TA55-2007-0006	Management Concern; Failure in Electrical Cord Plug Caused 120 Volt Energizing of Laser Metal Casing		x								
5	NA--LASO-LANL-TA55-2007-0007	Management Concern: 208 Volt Lathe Incorrectly Wired Into 480 Volt Service	x									
6	NA--NVSO-NST-LO-2007-0001	Electrical Shock to Worker	x			x						
7	NA--NVSO-NST-NTS-2007-0003	Electrical Near Miss	x									
8	NA--PS-BWXP-PANTEX-2007-0016	Subcontractor Failure to Follow Administrative Lockout/Tagout Procedure		x	x				x	x		
9	NA--SS-SNL-4000-2007-0001	UPS - Exposed Energized Connector in Bldg. 6585		x	x							
10	NA--SS-SNL-CASITE-2007-0001	Discovery of Unsafe Electrical Safety Condition B906	x									
11	SC--BSO-LBL-ENG-2007-0002	Building 88 Vault 115volt electrical shock	x			x						
	Total		7	4	4	3	0	0	1	1	0	0

Key

ew= electrical worker, n-ew = non-electrical worker, sub = subcontractor, arcf = significant arc flash, excav = excavation, cut/d = cutting or drilling, veh = vehicle event

ORPS Operating Experience Report

Production GUI - New ORPS

ORPS contains 53111 OR(s) with 56429 occurrences(s) as of 3/5/2007 12:45:20 PM

Query selected 11 OR(s) with 11 occurrences(s) as of 3/5/2007 12:47:55 PM

Download this report in Microsoft Word format. 

1)Report Number:	EM-SR--WSRC-FSSBU-2007-0002 After 2003 Redesign		
Secretarial Office:	Environmental Management		
Lab/Site/Org:	Savannah River Site		
Facility Name:	Facility Support Generic Reporting		
Subject/Title:	702-T Electrical Incident		
Date/Time Discovered:	02/06/2007 16:35 (ETZ)		
Date/Time Categorized:	02/08/2007 10:45 (ETZ)		
Report Type:	Notification		
Report Dates:	Notification	02/08/2007	16:21 (ETZ)
	Initial Update		
	Latest Update		
	Final		
Significance Category:	3		
Reporting Criteria:	2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.		
Cause Codes:			
ISM:			
Subcontractor Involved:	No		
Occurrence Description:	<p>Information Technology (IT) was in the process of performing routine building UPS test at 702-T Telecommunications Building. Prior to performing the UPS test IT Engineers needed to verify by inspection the network equipment AC power source(s). While tracing connections, the IT Engineers moved a gray wire that was tucked between two cabinets. As the gray wire was lifted by the Engineer, the energized center pin of the connector touched the electrically grounded rack frame, generating an electrical arc. The voltage on the conductor/connector was determined to be 60 Vac. While holding the insulated wire at a safe distance, the second Engineer determined that the wire was coming from a power supply that was plugged into an energized power strip 120 Vac., used to power a Cable Television amplifier that had been previously removed. The power supply was unplugged from the power strip. The Engineers verified that there were no other electrical connections entering or exiting this power supply. The CATV power supply connectors were wrapped with electrical tape and a Do Not Operate Tag (DNO) placed on equipment.</p>		

	There were no injuries/shock resulting from this event.						
	The corrective actions developed as a result of this occurrence will be tracked through closure in the WSRC Site Tracking Analysis and Reporting (STAR), record # 2007-CTS-001473.						
Cause Description:							
Operating Conditions:	Normal Conditions						
Activity Category:	Facility/System/Equipment Testing						
Immediate Action(s):	VERIFIED SOURCE OF ELECTRICAL CURRENT. CONTACTED MANAGEMENT AND PUT FACILITY IN A SAFE CONDITION. TAGGED POWER SOURCE WITH A DNO (DO NOT OPERATE) TAG.						
FM Evaluation:							
DOE Facility Representative Input:							
DOE Program Manager Input:							
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Carl Bradford By When: 02/28/2007						
Division or Project:	FSSBU/IT						
Plant Area:	T- Area						
System/Building/Equipment:	702-T						
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)						
Corrective Action:							
Lessons(s) Learned:							
HQ Keywords:	07D--Electrical Systems - Electrical Wiring 08H--OSHA Reportable/Industrial Hygiene - Safety Compliance 12C--EH Categories - Electrical Safety 14E--Quality Assurance - Work Process						
HQ Summary:	During a routine building uninterruptible power supply (UPS) test at the 702-T Telecommunications Building, an electrical arc occurred when movement of a wire caused an energized connector pin to touch the grounded rack frame. There were no personnel injuries. The 120-volt power supply feeding the connector wire was unplugged, and appropriate notifications were made.						
Similar OR Report Number:							
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>Andy Johnson</td> </tr> <tr> <td>Phone</td> <td>(803) 725-3008</td> </tr> <tr> <td>Title</td> <td>Manager</td> </tr> </table>	Name	Andy Johnson	Phone	(803) 725-3008	Title	Manager
Name	Andy Johnson						
Phone	(803) 725-3008						
Title	Manager						
Originator:	<table border="1"> <tr> <td>Name</td> <td>BRADFORD, CARL E</td> </tr> <tr> <td>Phone</td> <td>(803) 952-9802</td> </tr> <tr> <td>Title</td> <td>ISSUE COORDINATOR</td> </tr> </table>	Name	BRADFORD, CARL E	Phone	(803) 952-9802	Title	ISSUE COORDINATOR
Name	BRADFORD, CARL E						
Phone	(803) 952-9802						
Title	ISSUE COORDINATOR						

HQ OC Notification:	Date	Time	Person Notified	Organization
	NA	NA	NA	NA
Other Notifications:	Date	Time	Person Notified	Organization
	02/06/2007	16:55 (ETZ)	Andy Johnson	WSRC
	02/06/2007	17:15 (ETZ)	Denise Stephens	WSRC
	02/06/2007	17:15 (ETZ)	Tom Williams	DOE
	02/07/2007	09:30 (ETZ)	William Murphy	DOE
	02/07/2007	10:30 (ETZ)	Rod Hutto	WSRC
Authorized Classifier(AC):	Rod Hutto Date: 02/08/2007			

2)Report Number:	NA--KCSO-AS-KCP-2007-0001 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Kansas City Plant		
Facility Name:	Kansas City Plant		
Subject/Title:	Subcontractor Inadvertent Contact with Energized Electrical Bus Bar of Underhung Hoist		
Date/Time Discovered:	02/19/2007 11:25 (CTZ)		
Date/Time Categorized:	02/19/2007 13:53 (CTZ)		
Report Type:	Update		
Report Dates:	Notification	02/19/2007	17:59 (ETZ)
	Initial Update	02/19/2007	19:01 (ETZ)
	Latest Update	02/19/2007	19:37 (ETZ)
	Final		
Significance Category:	2		
Reporting Criteria:	2C(1) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or disturbance of a previously unknown or mislocated hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas) resulting in a person contacting (burn, shock, etc.) hazardous energy.		
Cause Codes:			
ISM:	2) Analyze the Hazards		
Subcontractor Involved:	Yes Allied Construction Services Company		
Occurrence Description:	While installing fire stop material as part of a Life Safety upgrade project, a subcontractor in proper fall protection equipment was returning to an elevated scissors- lift when a caulk gun in his left hand came in contact with the end of a bus bar to a 1961 P&H underhung hoist. The subcontractor felt a tingling sensation in his left hand, left arm, and left chest muscle. A small flash and popping sound occurred. The subcontractor dropped the caulk gun and stepped into the scissors-lift. Emergency notifications were immediately made. Emergency workers responded and secured the area. The subcontractor was not injured. An incident investigation was initiated. All elevated subcontractor work was suspended pending the outcome of this investigation.		

Cause Description:							
Operating Conditions:	Normal						
Activity Category:	Construction						
Immediate Action(s):	Honeywell FM&T ES&H notified FM&T emergency responders dispatched to the scene. Scene was secured. All elevated subcontractor work was suspended. An investigation was initiated.						
FM Evaluation:	All elevated subcontractor work was suspended pending an investigation. Investigation is expected to be completed by February 23, 2007. There is no impact to production.						
DOE Facility Representative Input:							
DOE Program Manager Input:							
Further Evaluation is Required:	Yes. Before Further Operation? Yes By Whom: FM&T ES&H. By When: 02/23/2007						
Division or Project:	Honeywell FM&T K.C						
Plant Area:	Main Building						
System/Building/Equipment:	Fire Stop Caulk, Underhung Hoist , Scissors-Lift						
Facility Function:	Balance-of-Plant - Machine shops						
Corrective Action:							
Lessons(s) Learned:							
HQ Keywords:	01N--Conduct of Operations - Inadequate Job Planning (Other) 08A--OSHA Reportable/Industrial Hygiene - Electrical Shock 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 11G--Other - Subcontractor 12K--EH Categories - Near Miss (Could have been a serious injury or fatality) 13E--Management Concerns - Facility Call Sheet 14E--Quality Assurance - Work Process						
HQ Summary:	A subcontractor installing fire stop material inadvertently touched an electric buss bar for a hoist with his caulking gun. He felt a tingling sensation in his hand, arm, and chest muscle, but was not injured. A small flash and popping sound occurred. Emergency workers responded and secured the area. An incident investigation was initiated and all elevated subcontractor work was suspended pending its outcome.						
Similar OR Report Number:							
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>HICKS, CLYDE E</td> </tr> <tr> <td>Phone</td> <td>(816) 997-2262</td> </tr> <tr> <td>Title</td> <td>EMERGENCY MGT SPECIALIST</td> </tr> </table>	Name	HICKS, CLYDE E	Phone	(816) 997-2262	Title	EMERGENCY MGT SPECIALIST
Name	HICKS, CLYDE E						
Phone	(816) 997-2262						
Title	EMERGENCY MGT SPECIALIST						
Originator:	<table border="1"> <tr> <td>Name</td> <td>TAYLOR, LINDA M</td> </tr> <tr> <td>Phone</td> <td>(816) 997-3747</td> </tr> <tr> <td>Title</td> <td>ES&H COORDINATOR</td> </tr> </table>	Name	TAYLOR, LINDA M	Phone	(816) 997-3747	Title	ES&H COORDINATOR
Name	TAYLOR, LINDA M						
Phone	(816) 997-3747						
Title	ES&H COORDINATOR						
HQ OC Notification:	<table border="1"> <tr> <td>Date</td> <td>Time</td> <td>Person Notified</td> <td>Organization</td> </tr> </table>	Date	Time	Person Notified	Organization		
Date	Time	Person Notified	Organization				

	NA	NA	NA	NA	
Other Notifications:	Date	Time	Person Notified	Organization	
	02/19/2007	12:00 (CTZ)	Greg Betzen	KCSO	
Authorized Classifier(AC):	Clyde E. Hicks		Date: 02/19/2007		

3)Report Number:	NA--LASO-LANL-TA18-2007-0001 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Los Alamos National Laboratory		
Facility Name:	Pajarito Laboratory		
Subject/Title:	Discovery of live circuit after isolating power at CASA 2		
Date/Time Discovered:	02/26/2007 16:00 (MTZ)		
Date/Time Categorized:	02/26/2007 17:45 (MTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/28/2007	18:19 (ETZ)
	Initial Update		
	Latest Update		
	Final		
Significance Category:	3		
Reporting Criteria:	2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.		
Cause Codes:			
ISM:			
Subcontractor Involved:	Yes KSL		
Occurrence Description:	<p>EVENT: On February 26, 2007, a KSL electrician discovered a live 120V circuit while removing conduit and wires that had powered the Flattop critical assembly machine in building 32 (CASA #2) at Tech Area 18. The work was being performed to remove abandoned electrical circuits and make safe the operating floor of the CASA. Operating under a valid work order and Integrated Work Document (both #287654-01) and using information provided by the TA-18 Facility Coordinator, KSL electricians had isolated power by locking and tagging out LP-1. The electricians verified zero energy at LP-1 (at CASA #2) and at the panels downstream from LP-1. During the work, one of the electricians was using a hand-operated insulated ratchet cutter to remove a bundle of wires from one of the interior panels served by LP-1. She was wearing safety glasses and leather work gloves over thin IWD-specified anti-C gloves. While she was making the cut, she noted a spark and immediately let go of the cutter and stopped work. The electricians informed the Facility Coordinator and together they isolated power to the entire building from the Control Room 2 electrical panel in building 30 (the administration building).</p>		

	<p>BACKGROUND: Critical Assembly and Storage Area (CASA) 2, built in the 1950s and designated as building 32 at TA-18, housed critical assembly machines Flattop and Comet before both machines were removed in 2006. Work Order #287654-01 directed KSL to perform minor D&D by removing the remaining conduit, conductors and wires associated with Flattop thus making the operating floor of the CASA electrically safe. In planning the work and determining the point at which to isolate power, the Facility Coordinator used existing facility drawings, existing panel labels, and the experience of programmatic personnel that had removed Flattop several months earlier. The panel where the energized wire was discovered was labeled as being served by LP-1, and neither the drawings nor the operating experience gave any indication that other circuits were fed through the panel. Investigation following the discovery revealed that one circuit in the otherwise dead bundle of wires was fed from the CASA 2 control room (Control Room 2 in building 30).</p>
Cause Description:	
Operating Conditions:	Does not apply.
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	<ul style="list-style-type: none"> - Personnel stopped work and secured all power to CASA 2 with a yellow lock and tag on the power panels in building 30 that feed power to CASA 2 through Control Room 2. The lockout/tagout of LP-1 in CASA 2 remained in place. - The Operations Manager will develop a recovery plan that will permit KSL to complete the cut on the bundle of wires, insulate the bare ends, and restore power to CASA 2. - The Operations Manager will modify the Facility Notes and the JHA tool to ensure work continues to be reviewed by both a cognizant system engineer and by programmatic personnel familiar with the operations housed (or formerly housed) in the building where work is to take place.
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	<p>Yes. Before Further Operation? No By Whom: TA55-18 and QA-OA By When:</p>
Division or Project:	TA55-18
Plant Area:	TA-18-32
System/Building/Equipment:	CASA 2 electrical service
Facility Function:	Category "B" Reactors
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	<p>01B--Conduct of Operations - Configuration Management/Control 01M--Conduct of Operations - Inadequate Job Planning (Electrical) 07D--Electrical Systems - Electrical Wiring 11G--Other - Subcontractor 12C--EH Categories - Electrical Safety</p>

	14D--Quality Assurance - Documents and Records 14E--Quality Assurance - Work Process								
HQ Summary:	While removing abandoned electrical circuits in Building 32 (Critical Assembly and Storage Area #2) at Tech Area 18, an electrician cut a bundle of wires from one of the interior panels with a hand-operated insulated ratchet cutter and created a spark. She immediately let go of the cutter and stopped work. The Facility Coordinator had used existing facility drawings, panel labels, and the experience of programmatic personnel to isolate power during this activity. However, the investigation following this incident found that one circuit in wire bundle was powered from a control room in Building 30 and had not been isolated. The Operations Manager will develop a recovery plan to complete the work and will modify the job hazard analysis tool to ensure work continues to be reviewed by both a cognizant system engineer and by programmatic personnel familiar with the former and current operations.								
Similar OR Report Number:									
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>Tom Beckman</td> </tr> <tr> <td>Phone</td> <td>(505) 665-2211</td> </tr> <tr> <td>Title</td> <td>TA-18 Operations Manager</td> </tr> </table>	Name	Tom Beckman	Phone	(505) 665-2211	Title	TA-18 Operations Manager		
Name	Tom Beckman								
Phone	(505) 665-2211								
Title	TA-18 Operations Manager								
Originator:	<table border="1"> <tr> <td>Name</td> <td>RICHARDSON, JOSEPH B</td> </tr> <tr> <td>Phone</td> <td>(505) 665-4844</td> </tr> <tr> <td>Title</td> <td>OCCURRENCE INVESTIGATOR</td> </tr> </table>	Name	RICHARDSON, JOSEPH B	Phone	(505) 665-4844	Title	OCCURRENCE INVESTIGATOR		
Name	RICHARDSON, JOSEPH B								
Phone	(505) 665-4844								
Title	OCCURRENCE INVESTIGATOR								
HQ OC Notification:	<table border="1"> <tr> <td>Date</td> <td>Time</td> <td>Person Notified</td> <td>Organization</td> </tr> <tr> <td>NA</td> <td>NA</td> <td>NA</td> <td>NA</td> </tr> </table>	Date	Time	Person Notified	Organization	NA	NA	NA	NA
Date	Time	Person Notified	Organization						
NA	NA	NA	NA						
Other Notifications:	<table border="1"> <tr> <td>Date</td> <td>Time</td> <td>Person Notified</td> <td>Organization</td> </tr> <tr> <td>02/26/2007</td> <td>17:00 (MTZ)</td> <td>Edwin Christie</td> <td>NNSA</td> </tr> </table>	Date	Time	Person Notified	Organization	02/26/2007	17:00 (MTZ)	Edwin Christie	NNSA
Date	Time	Person Notified	Organization						
02/26/2007	17:00 (MTZ)	Edwin Christie	NNSA						
Authorized Classifier(AC):	Patricia Vardaro-Charles Date: 02/28/2007								

4)Report Number:	NA--LASO-LANL-TA55-2007-0006 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Los Alamos National Laboratory		
Facility Name:	Plutonium Proc & Handling Fac		
Subject/Title:	Management Concern; Failure in Electrical Cord Plug Caused 120 Volt Energizing of Laser Metal Casing		
Date/Time Discovered:	02/05/2007 11:00 (MTZ)		
Date/Time Categorized:	02/05/2007 11:00 (MTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/06/2007	19:32 (ETZ)
	Initial Update		
	Latest Update		
	Final		
Significance Category:	3		
Reporting Criteria:	10(2) - An event, condition, or series of events that does not meet any of the		

	<p>other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern to other facilities or activities in the DOE complex. One of the four significance categories should be assigned to the occurrence, based on an evaluation of the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 3 occurrence)</p>
Cause Codes:	
ISM:	
Subcontractor Involved:	No
Occurrence Description:	<p>At some time in January 2007, at Technical Area 55, Building 4 (TA-55-4), Room 330, the ground wire in a 50 watt yttrium aluminum garnet (YAG) laser pulled loose, causing a 120 volt grounding to the metal case of the equipment. The laser is mounted on rubber wheels so there was no immediate path to ground and the circuit breaker did not trip. On Thursday, January 25, 2007, a pit manufacturing (WCM-1) employee (E1) removed a service panel on the laser to replace deionized water in the cooling system. The service panel is attached to the frame of the laser with two grounding straps. E1 stated the laser must be operating so the reservoir can be filled to the correct level. E1 had released the service panel and was performing maintenance on the laser when the service panel came in contact with a grounded piece of equipment and E1 observed an electric arc. E1 was not in contact with the service panel when it grounded. E1 immediately stopped work and notified the WCM-1 Electrical Safety Officer (ESO.) The incident was reported to the TA-55 facility operations director (FOD) on Friday, February 2, 2007. The event was originally categorized as non-ORPS reportable. A critique of the event was held on Monday, February 5, 2007. After the critique the event was re-categorized as a management concern, significance category 3. There was no impact to the health and safety of personnel or the environment.</p> <p>BACKGROUND: The exact date the YAG laser was placed in service is not known although it is believed to be approximately 1992. It requires 208 volt, 29 amperes electrical service for a 6 Kilo Volt-Ampere (KVA) load. It was received with an electric cord with a special plug for the laser on one side and no plug on the other. A plug was placed on the cord for a 208 volt wall socket. Nuclear Materials Science (MST-16) owns the laser. The MST-16 group leader stated the employee who attached the wall plug to the original cord had retired. It was not known if the cord was the original or a replacement.</p> <p>In the 1990s and early 2000s, Los Alamos National Laboratory (LANL) experienced several electrical incidents caused by unlisted equipment. In an effort to correct this problem Laboratory Implementation Requirements (LIR), Electrical Safety (LIR 402-600-01) was modified to require elimination or replacement of as much unlisted electrical equipment, including field modified, as possible. However, many pieces of unlisted electrical equipment were in use at LANL and not all could be eliminated or replaced. LIR 402-600-01.1, Section 7.6, "Approval of Unlisted Equipment" states, "Unlisted programmatic, facility, and utility equipment shall be "approved" prior to use." Section 7.6.1, the third bullet, states, "Unlisted equipment procured, designed, assembled, fabricated, or manufactured at the Laboratory prior to October 1, 1999, and in continuous use for at least 5 years prior to that date with no known accidents or incidents, shall be considered "approved," unless an ESO specifically requires an examination</p>

for safety or disapproves such equipment." The laser fell into this category as "approved." At the time of the LIR modification the laser was inspected and returned to service.

WCM-1 performs operations with the laser and does maintenance and troubleshooting on the laser for MST-16. In early January 2007 WCM-1 replaced two diodes in the laser without incident. It is assumed the ground wire had not disconnected at that time.

On Thursday, January 25, 2007, E1 removed a service panel on the laser to replace deionized water in the cooling system. The service panel is attached to the frame of the laser with two grounding straps. E1 stated the laser must be operating so the reservoir can be filled to the correct level. E1 removed one grounding strap to facilitate the work. The WCM-1 ESO and the TA-55 maintenance manager stated there was no danger in removing one strap and the process was acceptable. E1 had released the service panel and was performing maintenance on the laser when the service panel came in contact with a grounded piece of equipment and E1 observed an electric arc. E1 was not in contact with the service panel when it grounded. E1 immediately stopped work.

Cause Description:

Operating Conditions:

Refilling deionized water cooling system on YAG laser

Activity Category:

Normal Operations (other than Activities specifically listed in this Category)

Immediate Action(s):

E1 contacted the WCM-1 ESO on the day of the incident. The ESO went to TA-55-4, Room 330 to inspect the laser and found it was still plugged into the wall. The ESO unplugged the laser from the wall receptacle, then removed the cord from the laser. The ESO notified the WCM-1 group leader of the incident. The WCM-1 group leader requested that the site ESO be notified of the incident.

On Friday, January 26, 2007, the ESO disassembled the cord and found the wall plug was a household-use range/oven plug and not appropriate for laboratory use. The ESO also found the electric wire in the cord was 12 gauge wire, 8 gauge wire is recommended for 40 amp service. The ESO found the ground wire was cut the same length as the positive and negative when the wall socket was installed. The ground wire should have been longer than the positive and negative wires for strain relief. The ground wire had separated from the plug which created a 120 volt energization of the metal case of the laser.

On Thursday, February 1, 2007, the TA-55 Operations Manager (OM) received information of the event and asked for verification. On Friday, February 2, 2007, the OM received verification that the event had occurred and he notified the TA-55 FOD. The FOD originally categorized the event as non-ORPS reportable but scheduled a critique of the event for Monday, February 5, 2007. After the critique the event was re-categorized as a management concern, significance level 3.

On Monday, February 5, 2007, the FOD issued a notice, effective immediately that,
"Any plugged in electrical equipment that has a cord and field applied plug shall be placed out of service until inspected by electrical workers using guidance supplied by the FOD. An exception to this was equipment currently in service that, if taken out of service, could present an imminent hazard (i.e., operating

	continuous air monitors.) Exceptions to this shall be approved by the OM."															
FM Evaluation:																
DOE Facility Representative Input:																
DOE Program Manager Input:																
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: TA-55 FOD By When: 03/22/2007															
Division or Project:	WCM-1, MST-16															
Plant Area:	TA-55															
System/Building/Equipment:	TA-55-4, YAG laser															
Facility Function:	Plutonium Processing and Handling															
Corrective Action:																
Lessons(s) Learned:																
HQ Keywords:	01A--Conduct of Operations - Conduct of Operations (miscellaneous) 01Q--Conduct of Operations - Personnel error 07D--Electrical Systems - Electrical Wiring 08H--OSHA Reportable/Industrial Hygiene - Safety Compliance 12C--EH Categories - Electrical Safety 13E--Management Concerns - Facility Call Sheet 14E--Quality Assurance - Work Process 14H--Quality Assurance - Inspection and Acceptance Testing															
HQ Summary:	An employee observed an electric arc while replacing the deionized water in a laser cooling system. This task requires the laser to be energized to ensure the proper fill level. The laser is mounted on a rubber wheels and is not grounded. The arc occurred after the service panel was removed, when it came into contact with a grounded piece of equipment. The employee was not in contact with the service panel when the acr occurred. Work was stopped, notifications were made, and a critique was held. Inspection of similar plug and cord equipment was initiated.															
Similar OR Report Number:																
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td colspan="3">Stuart McKernan</td> </tr> <tr> <td>Phone</td> <td colspan="3">(505) 667-7501</td> </tr> <tr> <td>Title</td> <td colspan="3">Operations Manager</td> </tr> </table>				Name	Stuart McKernan			Phone	(505) 667-7501			Title	Operations Manager		
Name	Stuart McKernan															
Phone	(505) 667-7501															
Title	Operations Manager															
Originator:	<table border="1"> <tr> <td>Name</td> <td colspan="3">HUNSINGER, MARK W</td> </tr> <tr> <td>Phone</td> <td colspan="3">(505) 665-1496</td> </tr> <tr> <td>Title</td> <td colspan="3">OCCURRENCE INVESTIGATOR</td> </tr> </table>				Name	HUNSINGER, MARK W			Phone	(505) 665-1496			Title	OCCURRENCE INVESTIGATOR		
Name	HUNSINGER, MARK W															
Phone	(505) 665-1496															
Title	OCCURRENCE INVESTIGATOR															
HQ OC Notification:	<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Person Notified</th> <th>Organization</th> </tr> </thead> <tbody> <tr> <td>NA</td> <td>NA</td> <td>NA</td> <td>NA</td> </tr> </tbody> </table>				Date	Time	Person Notified	Organization	NA	NA	NA	NA				
Date	Time	Person Notified	Organization													
NA	NA	NA	NA													
Other Notifications:	<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Person Notified</th> <th>Organization</th> </tr> </thead> <tbody> <tr> <td>02/05/2007</td> <td>11:05 (MTZ)</td> <td>Dan Carter</td> <td>NNSALASO</td> </tr> </tbody> </table>				Date	Time	Person Notified	Organization	02/05/2007	11:05 (MTZ)	Dan Carter	NNSALASO				
Date	Time	Person Notified	Organization													
02/05/2007	11:05 (MTZ)	Dan Carter	NNSALASO													

5)Report Number:	NA--LASO-LANL-TA55-2007-0007 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Los Alamos National Laboratory		
Facility Name:	Plutonium Proc & Handling Fac		
Subject/Title:	Management Concern: 208 Volt Lathe Incorrectly Wired Into 480 Volt Service		
Date/Time Discovered:	02/07/2007 15:00 (MTZ)		
Date/Time Categorized:	02/07/2007 15:00 (MTZ)		
Report Type:	Notification/Final		
Report Dates:	Notification	02/08/2007	20:08 (ETZ)
	Initial Update	02/08/2007	20:08 (ETZ)
	Latest Update	02/08/2007	20:08 (ETZ)
	Final	02/08/2007	20:08 (ETZ)
Significance Category:	4		
Reporting Criteria:	10(2) - An event, condition, or series of events that does not meet any of the other reporting criteria, but is determined by the Facility Manager or line management to be of safety significance or of concern to other facilities or activities in the DOE complex. One of the four significance categories should be assigned to the occurrence, based on an evaluation of the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 4 occurrence)		
Cause Codes:			
ISM:	1) Define the Scope of Work		
Subcontractor Involved:	No		
Occurrence Description:	<p>MANAGEMENT SYNOPSIS: On Tuesday, February 6, 2007, at approximately 1430, at Technical Area 55, Building 3 (TA-55-3) Room 172, during startup tests of a newly installed Southwestern Industries model TRAK 16303A lathe, the lathe spindle motor shorted and tripped the breakers in the lathe and in the electrical panel which provided power to the lathe. The circuit breaker was locked and tagged out and an inspection of the system revealed the lathe motor was 208 volts, 26 amps, 3 phase, and was wired to a 480 volt service. The control panel for the lathe is 120 volts and supplied by a different circuit which was wired correctly. The new lathe was purchased and installed by pit manufacturing (WCM-1.) Review of the incident by TA-55 Facility Operations (MSS-TA55-FO) and a Los Alamos National Laboratory (LANL) electrical safety officer (ESO) indicated there had been no electrical hazard to the WCM-1 employees and manufacturer's representative who were conducting the startup tests. The incident was originally categorized as non-reportable and a critique was scheduled for Wednesday, February 7, 2007. After the critique the TA-55 Facility Operations Director (FOD) re-categorized the event as a management concern, significance level 4, because of weaknesses identified in the work review and approval process. There was no impact to the health and safety of personnel, the environment, or the program.</p> <p>BACKGROUND: In 2005 WCM-1 (then NMT-5) purchased two lathes and a band-saw to replace existing units in TA-55-3, Room 172. The work was</p>		

delayed because of difficulty in scheduling workers to install a new 100 pound per square inch (psi) air line for the equipment. In March 2006 a document action request was generated by WCM-1 to remove two existing lathes and band-saw. The lathes to be replaced were 480 volts. The WCM-1 employees stated in the critique that approximately 90% of the equipment of this type is 480 volt. The new lathes were not to be placed in the same location as the old lathes and wiring new electrical service was included in the work package. A configuration management screen was performed and an integrated work document (IWD) and work instructions were developed. A Pre-Job briefing checklist was developed and pre-job safety meetings were held before work. The lathe involved in this incident was unpacked and inspected. The name plate with the voltage rating could not be found. The lathe can run on 120, 220, or 480 volts depending on the electric motor installed to power the spindle. The wiring diagrams included with the lathe were generic and did not indicate a specific voltage. A WCM-1 employee contacted the manufacturer and, after several telephone conversations, came to the conclusion the lathe spindle motor was 480 volts.

Review of the work documents did not indicate they had been reviewed by an electrical engineer. The name plate was eventually found packed with tooling for the lathe and was installed on the outside of the lathe. The voltage discrepancy was not discovered prior to the incident.

The lathe was installed with 120 volt electrical service for the control panel and 480 volt electrical service to the spindle motor.

The manufacturer was notified of the completion of the installation and a sales and training representative was scheduled for the lathe startup. On Tuesday, February 6, 2007, at approximately 1430, the startup tests were initiated. Approximately 5 minutes into the process the spindle motor was activated from the control panel. A "pop" was heard and the lathe stopped.

Cause Description:

Operating Conditions:

Startup test of new lathe

Activity Category:

Normal Operations (other than Activities specifically listed in this Category)

Immediate Action(s):

One of the WCM-1 employees involved in the startup test (E1) went to the wall circuit and found the breaker to the lathe had tripped.

E1 turned off the breaker, locked and tagged it out, and notified his management of the incident. WCM-1 management notified the TA-55 FOD. The FOD initially categorized the event as non-ORPS reportable but scheduled a critique for the following day.

Later in the afternoon on the day of the incident the system was walked down by a TA-55 electrical engineer and the mistake in the electrical service to the spindle motor was identified. The system was re-wired to 208 volts and a replacement spindle, estimated cost of \$1,200, was ordered.

On Wednesday, February 7, 2007, the replacement spindle was received and installed. The system was walked down by the electrical engineer and no errors were identified. The lock and tag was removed and the system was successfully startup tested.

	<p>A critique of the event was held in the afternoon of Wednesday, February 7, 2007. After the critique the FOD re-categorized the event as a management concern, significance level 4, because of weaknesses identified in the work review and approval process.</p> <p>Two potential corrective actions were identified.</p> <ol style="list-style-type: none"> 1. The development of a procedure at TA-55 to require a system engineer review of any new equipment installation, equipment modification, or replacement. 2. Review of all scheduled equipment installation, modification, or modification to ensure an engineer review has been done. 															
FM Evaluation:																
DOE Facility Representative Input:																
DOE Program Manager Input:																
Further Evaluation is Required:	No															
Division or Project:	WCM-1															
Plant Area:	TA-55															
System/Building/Equipment:	TA-55, Building 3, Room 172 replacement lathe															
Facility Function:	Plutonium Processing and Handling															
Corrective Action:																
Lessons(s) Learned:																
HQ Keywords:	01M--Conduct of Operations - Inadequate Job Planning (Electrical) 07D--Electrical Systems - Electrical Wiring 07E--Electrical Systems - Electrical Equipment 12B--EH Categories - Conduct of Operations 14E--Quality Assurance - Work Process 14H--Quality Assurance - Inspection and Acceptance Testing															
HQ Summary:	After installation of a new lathe in TA-55, Building 3, the circuit breaker tripped and it was discovered that the lathe's 208-volt motor was incorrectly wired to 480-volt service. There were no personnel injuries. The circuit breaker was locked/tagged out. Subsequently, the system was re-wired to the correct 208 volts, a new motor was installed and successfully tested, and a critique was held.															
Similar OR Report Number:																
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td colspan="3">Stuart McKernan</td> </tr> <tr> <td>Phone</td> <td colspan="3">(505) 667-7501</td> </tr> <tr> <td>Title</td> <td colspan="3">Operations Manager</td> </tr> </table>				Name	Stuart McKernan			Phone	(505) 667-7501			Title	Operations Manager		
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	NA	NA	NA	NA
Other Notifications:	Date	Time	Person Notified	Organization
	02/07/2007	15:05 (MTZ)	Dan Carter	NNSALASO
Authorized Classifier(AC):	Tom McNaughton		Date: 02/08/2007	

6)Report Number:	NA--NVSO-NST-LO-2007-0001 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Bechtel Nevada, Livermore Operations		
Facility Name:	Livermore Operations		
Subject/Title:	Electrical Shock to Worker		
Date/Time Discovered:	02/21/2007 11:55 (PTZ)		
Date/Time Categorized:	02/21/2007 12:45 (PTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/22/2007	18:36 (ETZ)
	Initial Update		
	Latest Update		
	Final		
Significance Category:	2		
Reporting Criteria:	2C(1) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or disturbance of a previously unknown or mislocated hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas) resulting in a person contacting (burn, shock, etc.) hazardous energy.		
Cause Codes:			
ISM:			
Subcontractor Involved:	No		
Occurrence Description:	<p>A National Security Technologies, LLC (NSTec) Livermore Operations Installation and Assembly supervisor and a diagnostics technician were working on the Manson Radiation Generating Device cart when the supervisor experienced a tingling electrical shock to his forearm.</p> <p>Prior to receiving the electrical shock, the supervisor had installed a BOC Edwards mechanical vacuum pump at the base of the Manson cart. The pump is located in the bottom rear right side of the cart (perspective of facing the front of the cart). The pump is plugged into the rear of the electrical interlock box and operates at 60 Hz 110/115V. Other possible sources of electrical current on the cart in the area are a power tap at 110V, an electrical fan, and the Manson cart itself that plugs into a 30-208V outlet. The supervisor was kneeling at the right rear of the Manson cart. The vacuum pump was not functioning and was believed to be plugged into the wrong outlet on the rear of the electrical interlock box. The plug was switched to a different outlet on the rear of the interlock box and the vacuum pump still did not function. The supervisor then closed the circuit breaker on the Manson cart. The pump still did not function. The supervisor started to reach inside the Manson cart to switch the plug into the original outlet when his forearm came in contact with the case of the vacuum</p>		

	<p>pump. His left hand was in contact with a power tap and his knee was in contact with the metal plate that contains a fan.</p> <p>Employee was initially evaluated on-site by responding Livermore Pleasanton Fire Department paramedics and then transported by privately owned vehicle to Pleasanton Urgent Care for further medical evaluation. He was released for duty but will be re-evaluated 2/22/07.</p> <p>The NSTec Electrical Authority Having Jurisdiction using the EFCOG severity evaluation tool evaluated the incident as to a severity of 110, group 2, significance level 4.</p>
Cause Description:	
Operating Conditions:	Does Not Apply
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	<p>The electrical sources were deenergized and incident scene was secured.</p> <p>The employee was initially evaluated by responding Livermore Pleasanton Fire Department paramedics. He was then transported by privately owned vehicle to Pleasanton Urgent Care for further medical evaluation. The Pleasanton Urgent Care Doctor provided an evaluation and released the employee for full duty. The employee will be re-evaluated on 2/22/07.</p> <p>Notifications made to NSTec and NNSA/Nevada Site Office line management.</p> <p>A safety investigation initiated. A Critique and causal analysis is scheduled.</p>
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	<p>Yes.</p> <p>Before Further Operation? No</p> <p>By Whom: NSTec LO</p> <p>By When: 04/05/2007</p>
Division or Project:	NSTec Livermore Operations
Plant Area:	Livermore Operations
System/Building/Equipment:	Room 196, X-ray Lab
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	<p>07D--Electrical Systems - Electrical Wiring</p> <p>08A--OSHA Reportable/Industrial Hygiene - Electrical Shock</p> <p>12C--EH Categories - Electrical Safety</p> <p>14E--Quality Assurance - Work Process</p>
HQ Summary:	A supervisor and a diagnostics technician were troubleshooting a newly installed vacuum pump on the Manson Radiation Generating Device cart when the supervisor experienced a tingling electrical shock to his forearm. The pump

connects to a 110 V circuit and the Manson cart itself connects to a 3-phase 208 V circuit. The employee was initially evaluated on-site by the responding paramedics and then transported in a privately owned vehicle to an offsite facility for further medical evaluation. He was subsequently released for full duty. The electrical sources were de-energized and incident scene was secured. Notifications were made, a safety investigation was initiated and a critique was held.

Similar OR Report Number: 1. DP-NVOO--BN-LO-2001-0001

Facility Manager:	Name	Kenneth Cooke
	Phone	(925) 960-2525
	Title	Manager, Livermore Operations

Originator:	Name	GILE, ANDREA L
	Phone	(702) 295-7438
	Title	PROJECT OPERATIONS SPEC.

HQ OC Notification:	Date	Time	Person Notified	Organization
	NA	NA	NA	NA

Other Notifications:	Date	Time	Person Notified	Organization
	02/21/2007	12:59 (PTZ)	Duty Manager	SOC
	02/21/2007	13:00 (PTZ)	Dennis Armstrong	NSO/FR

Authorized Classifier(AC):

7)Report Number: [NA--NVSO-NST-NTS-2007-0003](#) After 2003 Redesign

Secretarial Office: National Nuclear Security Administration

Lab/Site/Org: Nevada Test Site

Facility Name: Nevada Test Site

Subject/Title: Electrical Near Miss

Date/Time Discovered: 02/07/2007 10:00 (PTZ)

Date/Time Categorized: 02/07/2007 12:00 (PTZ)

Report Type: Notification

Report Dates:	Notification	02/08/2007	15:31 (ETZ)
	Initial Update		
	Latest Update		
	Final		

Significance Category: 3

Reporting Criteria: 10(3) - A near miss, where no barrier or only one barrier prevented an event from having a reportable consequence. One of the four significance categories should be assigned to the near miss, based on an evaluation of the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 3 occurrence)

Cause Codes:

ISM:

Subcontractor Involved:	No
Occurrence Description:	<p>A National Security Technologies (NSTec) construction wireman was trouble shooting an electrical control panel to a down hole submersible pump at the RNM #2S well site. The wireman was using a 1000 volt Fluke voltmeter to check the voltage inside the control panel. Upon touching the connections the meter failed (smoke emanated from the meter) and the wireman's gloves had minor smoke damage. Initial investigation revealed that the circuit was energized at 2400 volts nominal rather than 480 volts as assumed by the wireman.</p> <p>There were no injuries and operations at RNM #2S have been suspended pending incident investigation. The NSTec Electrical Authority Having Jurisdiction using the EFCOG severity evaluation tool evaluated to a severity of 2100.</p>
Cause Description:	
Operating Conditions:	Does Not Apply
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	<p>Work stopped the RNM #2S well site pending further investigation.</p> <p>Notification to NSTec and NNSA/Nevada Site Office line management.</p> <p>Critique scheduled.</p>
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	<p>Yes.</p> <p>Before Further Operation? No</p> <p>By Whom: NSTec Construction</p> <p>By When: 03/23/2007</p>
Division or Project:	UGTA
Plant Area:	NTS - A5 RNM #2S
System/Building/Equipment:	Electrical Control Panel #713142
Facility Function:	Balance-of-Plant - Site/outside utilities
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	<p>01M--Conduct of Operations - Inadequate Job Planning (Electrical)</p> <p>03C--Fire Protection and Explosives Safety - Fire/Explosion</p> <p>08H--OSHA Reportable/Industrial Hygiene - Safety Compliance</p> <p>08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical)</p> <p>12K--EH Categories - Near Miss (Could have been a serious injury or fatality)</p> <p>13E--Management Concerns - Facility Call Sheet</p> <p>14E--Quality Assurance - Work Process</p>
HQ Summary:	During trouble-shooting of an electrical control panel to a down-hole submersible pump at the RNM #2S well site, an employee was using a 1000-volt Fluke voltmeter to check the voltage inside the control panel when the

voltmeter unexpectedly failed (smoke began emanating from the meter) and his wireman's gloves received minor smoke damage. There were no personnel injuries. Initial indications are that the circuit was energized at 2,400 volts nominal rather than the expected 480 volts assumed by the employee. Work at the well site was suspended, pending an investigation.

Similar OR Report Number:

Facility Manager:

Name	Paul K. Ortego
Phone	(702) 295-0643
Title	UGTA Project Manager

Originator:

Name	GILE, ANDREA L
Phone	(702) 295-7438
Title	PROJECT OPERATIONS SPEC.

HQ OC Notification:

Date	Time	Person Notified	Organization
NA	NA	NA	NA

Other Notifications:

Date	Time	Person Notified	Organization
02/07/2007	12:18 (PTZ)	Duty Manager	SOC
02/07/2007	13:00 (PTZ)	Dennis Armstrong	NSO/FR

Authorized Classifier(AC):

8)Report Number:

[NA--PS-BWXP-PANTEX-2007-0016](#) After 2003 Redesign

Secretarial Office:

National Nuclear Security Administration

Lab/Site/Org:

Pantex Plant

Facility Name:

Pantex Plant

Subject/Title:

Subcontractor Failure to Follow Administrative Lockout/Tagout Procedure

Date/Time Discovered:

02/09/2007 09:50 (CTZ)

Date/Time Categorized:

02/09/2007 13:51 (CTZ)

Report Type:

Notification

Report Dates:

Notification	02/12/2007	13:38 (ETZ)
Initial Update		
Latest Update		
Final		

Significance Category:

3

Reporting Criteria:

2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.

Cause Codes:

ISM:

3) Develop and Implement Hazard Controls

Subcontractor Involved:	Yes AAA Electric
Occurrence Description:	<p>Road barriers near Buildings 12-17 and 12-63 were being replaced by a subcontractor (AAA Electric). Part of the installation involved installing a circuit to illuminate lights in a ramp to warn of pressing operations. The circuit installation required a lockout be conducted on three circuits. The lockout was established on 01/05/07 by BWXT Pantex personnel, the latest in a series of lockouts required for circuit connections and testing. Due to a change in contract scope, subsequent contract preparation, and weather delays the subcontractor did not arrive on site to perform work until 02/08/07 and was not present when the 01/05/07 lockout was established. A Project Sub-Contract Technical Representative (PSTR) met the subcontractor at the job site and the scope of work was discussed. The electrical lockout was verbally confirmed but discussions focused on a trenching operation and the congested infrastructure expected to be in the trench area. The subcontractor was involved with the trenching operation most of the day contending with muddy conditions, problems with the trench machine, and hand excavating. Following conduit installation and pulling of wires, the subcontractor accessed a remote control panel and confirmed by testing absence of energy on the circuits in question. The subcontractor did not re-visit the electrical panel where the lockout was installed and did not place his lock on the lock box or sign lockout documents.</p> <p>The subcontractor returned on 02/09/07 to complete circuit connection and test the light circuit. The subcontractor did not re-check the lockout source on 02/09/07. The PSTR arrived on the scene for a site visit and was told the job was complete and the lockout could be removed. The PSTR and subcontractor went to the lockout point and discovered the subcontractor's lock was not in place and the documents had not been signed. The subcontractor's failure to hang his lock was a failure to follow a prescribed hazardous energy control process. The scene was preserved and notifications made for an investigation.</p> <p>There were no injuries to personnel or damage to equipment or the environment.</p>
Cause Description:	
Operating Conditions:	Non-Operational
Activity Category:	Construction
Immediate Action(s):	<p>The scene was preserved by the PSTR.</p> <p>Subcontractor qualifications were revoked.</p> <p>A critique was conducted on 02/09/07, and the event was categorized as 2C(2) SC 3, Personnel Safety and Health, Hazardous Energy Control, Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout).</p>
FM Evaluation:	Corrective Actions will be tracked through the Issues Management System on PER-2007-0171.
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	No

Division or Project:	Maintenance Division								
Plant Area:	Zone 12 South								
System/Building/Equipment:	Zone 12 South Facility								
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)								
Corrective Action:									
Lessons(s) Learned:									
HQ Keywords:	01K--Conduct of Operations - Lockout/Tagout (Electrical) 11G--Other - Subcontractor 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14D--Quality Assurance - Documents and Records 14E--Quality Assurance - Work Process								
HQ Summary:	A subcontractor installing conduits for lights along a road barrier failed to place his lock on the control panel and did not sign lockout documents. There were no injuries and the scene was preserved upon discovery. A critique was made and the subcontractor's qualifications were revoked.								
Similar OR Report Number:									
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>Melvin Suttle</td> </tr> <tr> <td>Phone</td> <td>(806) 477-6632</td> </tr> <tr> <td>Title</td> <td>Work Management Department Manager</td> </tr> </table>	Name	Melvin Suttle	Phone	(806) 477-6632	Title	Work Management Department Manager		
Name	Melvin Suttle								
Phone	(806) 477-6632								
Title	Work Management Department Manager								
Originator:	<table border="1"> <tr> <td>Name</td> <td>HALL, BEVERLY J</td> </tr> <tr> <td>Phone</td> <td>(806) 477-3222</td> </tr> <tr> <td>Title</td> <td></td> </tr> </table>	Name	HALL, BEVERLY J	Phone	(806) 477-3222	Title			
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Phone	(806) 477-3222								
Title									
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Other Notifications:	<table border="1"> <thead> <tr> <th>Date</th> <th>Time</th> <th>Person Notified</th> <th>Organization</th> </tr> </thead> <tbody> <tr> <td>02/09/2007</td> <td>10:42 (CTZ)</td> <td>Grady Rose</td> <td>PXSO</td> </tr> </tbody> </table>	Date	Time	Person Notified	Organization	02/09/2007	10:42 (CTZ)	Grady Rose	PXSO
Date	Time	Person Notified	Organization						
02/09/2007	10:42 (CTZ)	Grady Rose	PXSO						
Authorized Classifier(AC):	Robert Barr Date: 02/12/2007								

9)Report Number:	NA--SS-SNL-4000-2007-0001 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Sandia National Laboratories - SS		
Facility Name:	SNL Division 4000		
Subject/Title:	UPS - Exposed Energized Connector in Bldg. 6585		
Date/Time Discovered:	02/27/2007 14:30 (MTZ)		
Date/Time Categorized:	02/27/2007 15:30 (MTZ)		
Report Type:	Notification/Final		
Report Dates:	Notification	03/01/2007	17:32 (ETZ)
	Initial Update	03/01/2007	17:32 (ETZ)
	Latest Update	03/01/2007	17:32 (ETZ)
	Final	03/01/2007	17:32 (ETZ)

Significance Category:	4
Reporting Criteria:	10(3) - A near miss, where no barrier or only one barrier prevented an event from having a reportable consequence. One of the four significance categories should be assigned to the near miss, based on an evaluation of the potential risks and the corrective actions taken. (1 of 4 criteria - This is a SC 4 occurrence)
Cause Codes:	
ISM:	2) Analyze the Hazards 3) Develop and Implement Hazard Controls
Subcontractor Involved:	Yes Hewlett Packard
Occurrence Description:	<p>On Monday, February 26th, two reapplication personnel were loading computer equipment onto a cart. As the equipment was loaded, there were two units that remained to be loaded. As the top unit was being lifted, a cord connector from the bottom unit contacted the casing, which caused sparking. There were no injuries to either of the reapplication personnel.</p> <p>The two units were identified as a Hewlett Packard Uninterruptible Power System (UPS) Power System Battery Box. The cable leads were immediately taped to prevent further contact with equipment and/or employees. The UPS units were located in a secured vault-type room.</p> <p>On Tuesday, February 27th, an electrical safety SME, ES&H Coordinator, and equipment user, inspected the two UPS units, and measured an output voltage of 65VDC on the male connector (at this point, it was noted that this incident may have met the Occurrence Reporting thresholds). It was also determined that these units were removed from the equipment racks through a contract with Hewlett Packard and were stacked on the floor in the noted condition.</p>
Cause Description:	
Operating Conditions:	Normal
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	The cable leads were immediately taped to prevent further contact with equipment and/or personnel. The units were located in a secured vault-type room.
FM Evaluation:	DOE/SSO Early Notification Date & Time: EOC - 2/26/07 - 17:00 FR - Joyce Arviso-Benally - 2/27/06 - 16:30
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	No
Division or Project:	4000/Infrastructure Computing
Plant Area:	Tech Area V
System/Building/Equipment:	Infrastructure Computing, Bldg. 6585, Rm. 2614
Facility Function:	Laboratory - Research & Development
Corrective Action:	

Lessons(s) Learned:																																	
HQ Keywords:	08H--OSHA Reportable/Industrial Hygiene - Safety Compliance 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 11G--Other - Subcontractor 12K--EH Categories - Near Miss (Could have been a serious injury or fatality) 14E--Quality Assurance - Work Process																																
HQ Summary:	While two reapplication personnel were loading two pieces of computer equipment onto a cart, a cord connector from one unit contacted the casing, which caused sparking. There were no injuries to either of the reapplication personnel. Subsequently, the connector voltage to ground measured 65 volts. The two units were identified as Hewlett Packard Uninterruptible Power System (UPS) Power System Battery Boxes. The cable leads were immediately taped to prevent further contact with equipment and/or employees. The units were located in a secured vault-type room.																																
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Authorized Classifier(AC):	C. Douglas Brown Date: 02/28/2007																																

10)Report Number:	NA--SS-SNL-CASITE-2007-0001 After 2003 Redesign
Secretarial Office:	National Nuclear Security Administration
Lab/Site/Org:	Sandia National Laboratories - Livermore
Facility Name:	SNL California Site
Subject/Title:	Discovery of Unsafe Electrical Safety Condition B906
Date/Time Discovered:	02/09/2007 10:03 (PTZ)
Date/Time Categorized:	02/09/2007 11:45 (PTZ)
Report Type:	Notification

Report Dates:	Notification	02/13/2007	17:08 (ETZ)
	Initial Update		
	Latest Update		
	Final		
Significance Category:	3		
Reporting Criteria:	2C(2) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or a site condition that results in the unexpected discovery of an uncontrolled hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas). This criterion does not include discoveries made by zero-energy checks and other precautionary investigations made before work is authorized to begin.		
Cause Codes:			
ISM:	4) Perform Work Within Controls		
Subcontractor Involved:	No		
Occurrence Description:	<p>On Friday morning of February 9, 2007, an electrical safety concern was brought to the attention of SNL/CA Management. The concern was the observation of an unsafe condition by contract electricians working around B906 Lab 110-111. Electricians observed that one of the gas safety system solenoids valves outside the lab, had the stripped end of it's leads directly inserted into a 110VAC receptacle. The electrician who observed the unsafe condition conducted a voltage check and determined the bare wires were energized(110 VAC). The electricians reported the observation to their Electrical Safety Committee Representative.</p> <p>An investigation with the cooperation of line management is currently being conducted to determine the nature and causes of this event.</p>		
Cause Description:			
Operating Conditions:	Normal		
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)		
Immediate Action(s):	The work on the gas safety system has been completed, in proper working condition, and was reviewed by the Department Safety Officer on Friday February 9, 2007		
FM Evaluation:	EOC - 1103 2/9/2007 Event# 339 Jeff Irwin - FR 1030 - 2/9/2007 45 days 3/26/2007		
DOE Facility Representative Input:			
DOE Program Manager Input:			
Further Evaluation is Required:	No		
Division or Project:	8000		
Plant Area:	B906 in Calif		

System/Building/Equipment:	B906, Lab110-111																																											
Facility Function:	Laboratory - Research & Development																																											
Corrective Action:																																												
Lessons(s) Learned:																																												
HQ Keywords:	07D--Electrical Systems - Electrical Wiring 08H--OSHA Reportable/Industrial Hygiene - Safety Compliance 12C--EH Categories - Electrical Safety 14E--Quality Assurance - Work Process																																											
HQ Summary:	Electricians found a lead for a gas safety system solenoid valve to be stripped and inserted directly into a 110 VAC receptacle outside of B906 Lab 110-111. A voltage check determined the bare wires were energized. An investigation is being conducted to determine the nature and causes of this event.																																											
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Facility Manager:	<table border="1"> <tr> <td>Name</td> <td colspan="3">Len Napolitano</td> </tr> <tr> <td>Phone</td> <td colspan="3">(925) 294-3218</td> </tr> <tr> <td>Title</td> <td colspan="3">Director</td> </tr> </table>				Name	Len Napolitano			Phone	(925) 294-3218			Title	Director																														
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11)Report Number:	SC--BSO-LBL-ENG-2007-0002 After 2003 Redesign
Secretarial Office:	Science
Lab/Site/Org:	Lawrence Berkeley Laboratory
Facility Name:	Engineering Division
Subject/Title:	Building 88 Vault 115volt electrical shock
Date/Time Discovered:	02/22/2007 14:30 (PTZ)
Date/Time Categorized:	02/23/2007 14:15 (PTZ)

Report Type:	Notification		
Report Dates:	Notification	02/26/2007	20:10 (ETZ)
	Initial Update		
	Latest Update		
	Final		
Significance Category:	2		
Reporting Criteria:	2C(1) - Failure to follow a prescribed hazardous energy control process (e.g., lockout/tagout) or disturbance of a previously unknown or mislocated hazardous energy source (e.g., live electrical power circuit, steam line, pressurized gas) resulting in a person contacting (burn, shock, etc.) hazardous energy.		
Cause Codes:			
ISM:			
Subcontractor Involved:	No		
Occurrence Description:	On February 21, 2007, an employee received a minor shock while working on the Final Amplifier Cabinet in the building 88 Vault. His left forearm brushed up against an exposed wire while he was attempting to tighten hardware with an open-end box wrench. The electrical hazard was secured. The employee reported to Health Services immediately afterwards. The employee suffered no injuries from this event.		
Cause Description:			
Operating Conditions:	Indoor, dry, well lit		
Activity Category:	Maintenance		
Immediate Action(s):	Power disconnected via plug and LOTO applied to circuit breaker. Employee reported to Health Services then notified supervisor. Fact finding initiated.		
FM Evaluation:			
DOE Facility Representative Input:			
DOE Program Manager Input:			
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Engineering/EH&S/NSD By When:		
Division or Project:	NSD / 88 inch Cyclotron		
Plant Area:	Building 88 Vault		
System/Building/Equipment:	Final Amplifier Cabinet		
Facility Function:	Accelerators		
Corrective Action:			
Lessons(s) Learned:			
HQ Keywords:	07D--Electrical Systems - Electrical Wiring 08A--OSHA Reportable/Industrial Hygiene - Electrical Shock 08H--OSHA Reportable/Industrial Hygiene - Safety Compliance 12C--EH Categories - Electrical Safety 14E--Quality Assurance - Work Process		

HQ Summary:	An employee received a minor shock while working on the Final Amplifier Cabinet in the Building 88 Vault. His left forearm brushed up against an exposed wire while he was attempting to tighten hardware with an open-end box wrench. The employee reported to Health Services immediately afterwards and it was determined that the employee suffered no injuries. The electrical power to the wire was disconnected and a fact finding study was initiated.			
Similar OR Report Number:				
Facility Manager:	Name	Kem Robinson		
	Phone	(510) 486-6327		
	Title	Engineering Division Director		
Originator:	Name	Flynn, Michelle		
	Phone	(510) 486-7073		
	Title	ES&H ASSURANCE PROGRAM MANGER		
HQ OC Notification:	Date	Time	Person Notified	Organization
	NA	NA	NA	NA
Other Notifications:	Date	Time	Person Notified	Organization
	02/23/2007	15:50 (PTZ)	Mary Gross	DOE-BSO
Authorized Classifier(AC):				

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 Please include [detailed information](#) when reporting problems.