

February 2010 Electrical Safety Occurrences

There were 13 electrical safety occurrences for February 2010:

- 4 occurrences resulted in an electrical shock to a worker
- 7 occurrences involved inadequate lockout/tagout (LOTO)
- 4 occurrences involved electrical workers and 9 occurrences involved non-electrical workers
- 5 occurrences involved subcontractors
- 1 occurrence involved a vehicle intrusion during snow removal
- 1 occurrence involved inadvertent severing of an energized conductor
- 1 occurrence resulted from inadequate planning

Of the 13 electrical safety events reported in February, six were reported by alert employees that recognized a hazard and reported it. This is a positive indication that electrical safety awareness may be improving. Maintaining a questioning attitude, verifying rather than assuming, and stopping work when unsure are all behaviors that need to be reinforced. On the negative side, four non-electrical workers came in contact with energized conductors and received an electrical shock. This month's performance is an indication that there is still much work to do in protecting our non-electrical workers and subcontract employees. May is Electrical Safety Month and a good opportunity to focus on non-electrical worker safety, but daily vigilance is necessary to ensure continuous improvement. Hazardous energy control continues to be a concern. Although most of the LOTO incidents did not result in worker exposure to electrical hazards, the number of events is an indication that additional training, mentoring, or management observations may be needed to ensure all workers are aware of the lockout requirements and their responsibility to follow them.

In compiling the monthly totals, the search initially looked for occurrence discovery dates in this month (excluding Significance Category R reports), 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

Using the key words above, 14 events were identified. One event was excluded from the report as not meeting the criteria to be included in the trending data. Please continue to report all events and evaluate the events using the Electrical Severity Measurement Tool. During the month of February, nine events had Electrical Severity scores, which were equally divided between the Low, Medium, and High scores. The events with the highest Electrical Severity scores (2400 and 1650) each involved energized 277-volt sources.

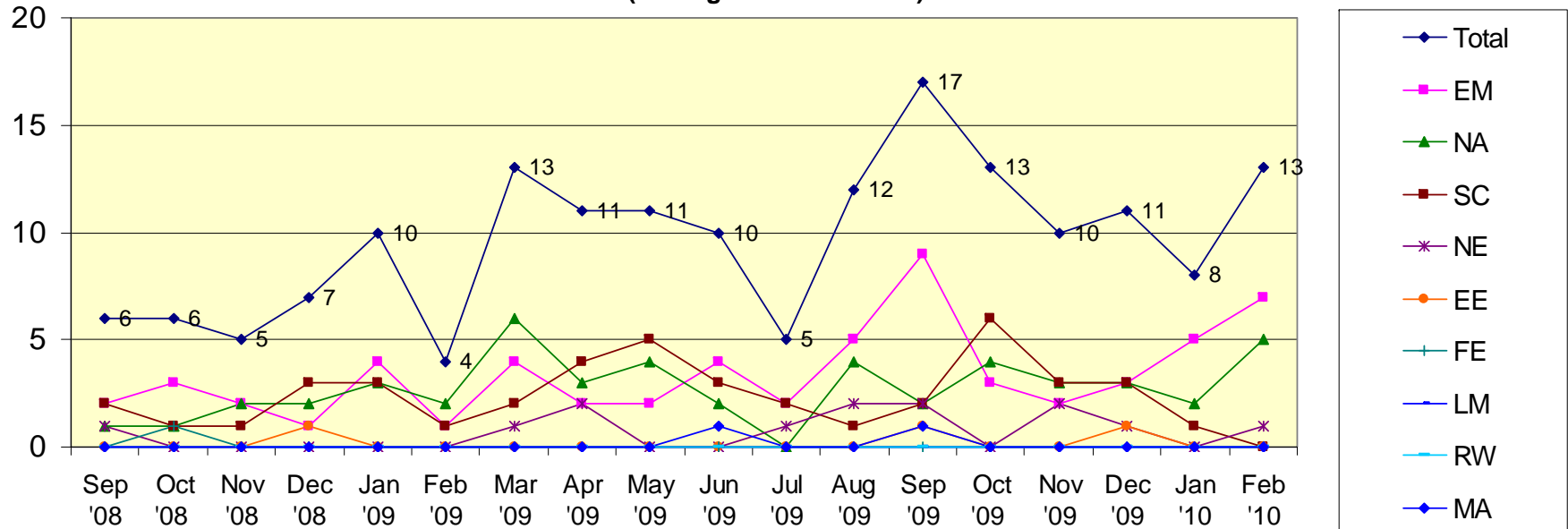
Below is the current summary of 2010 electrical safety occurrences:

Period	Electrical Safety Occurrences	Shocks	Burns	Fatalities
February-10	13	4	0	0
January-10	8	0	0	0
2010 total	21(avg. 10.5/month)	4	0	0
2009 total	128 (avg. 10.7/month)	25	3	0
2008 total	113 (avg. 9.4/month)	26	1	0
2007 total	140 (avg. 11.7/month)	25	2	0
2006 total	166 (avg. 13.8/month)	26	3	0
2005 total	165 (avg. 13.8/month)	39	5	0
2004 total	149 (avg. 12.4/month)	25	3	1

Thirteen events in February, 2010, results in 10.5 average events two months into the year. This represents a slight decrease from the average rate of electrical safety occurrences in 2009, which was 10.7 per month. Since January 2009, there have been only three months in which the number of electrical events has been below ten events per month. Effective job planning and reducing the number of hazardous energy control mistakes will go a long way to reducing the number of electrical safety events and maintaining that number as low as possible.

Electrical Occurrences by Month & Secretarial Office

(Rolling 18-Month Chart)



EE - Energy Efficiency and Renewable Energy, EM - Environmental Management, FE - Fossil Energy, LM - Legacy Management, MA - Management, NA - National Nuclear Security Administration, NE - Nuclear Energy, RW - Civilian Radioactive Waste Management, SC - Science

Electrical Safety Occurrences – February 2010

No	Report Number	Event Summary	SHOCK	BURN	ARCF ⁽¹⁾	LOTO ⁽²⁾	PLAN ⁽³⁾	EXCAV ⁽⁴⁾	CUT/D ⁽⁵⁾	VEH ⁽⁶⁾	SC ⁽⁷⁾	RC ⁽⁸⁾	ES ⁽⁹⁾
1	EM--BHSO-BNL-BNL-2010-0006	Worker receives 120 v. electrical shock when contacting the non-insulated terminals of an air sample pump.	X								2	2C(2)	110
2	EM--NVSO-NST-NTS-2010-0004	Workers noted a spark when removing temporary office petitions.									3	2C(2)	0
3	EM-ID--CWI-FUELRCTR-2010-0001	Worker receives 277 v. electrical shock from an energized metal switch cover.	X								2	10(3)	1650
4	EM-RL--CPRC-GENLAREAS-2010-0004	An employee discovered a damaged electrical cord and secured the hazard.				X					4	10(2)	0
5	EM-RP--BNRP-RPPWTP-2010-0003	Worker receives 277 v. electrical shock from damaged buried cable.	X								3	2C(2) 10(3)	2400
6	EM-SR--SRNS-FGEN-2010-0001	A worker discovers energized conductor thought to be isolated.				X					3	2C(2)	10
7	EM-SR--SRNS-HCAN-2010-0001	A worker discovers energized conductor thought to be isolated.				X					3	2C(2)	10
8	NA--LSO-LLNL-LLNL-2010-0006	Workers cut energized 120 v. conductor.				X	X		X		3	2C(2)	110
9	NA--NVSO-NST-NTS-2010-0005	Violation of Lockout procedure discovered during roofing.				X					3	2C(2)	10
10	NA--PS-BWP-PANTEX-2010-0014	Violation of Lockout procedure discovered during HVAC maintenance activities				X					3	2C(2)	50
11	NA--SS-SNL-NMFAC-2010-0001	Worker receives 120 v. shock from miss-wired metal shed.	X								2	2C(1)	480
12	NA--SS-SNL-NMFAC-2010-0002	Worker fails to apply locking device in accordance with Site Lockout procedure.				X					3	10(2)	0
13	NE-ID--BEA-MFC-2010-0001	Energized 120 v. conductor severed during snow removal.								X	3	10(2)	0
	TOTAL		4	0	0	7	1	0	1	1			

Key

(1) ARCF = significant arc flash, (2) LOTO = lockout/tagout, (3) PLAN = job planning, (4) EXCAV = excavation/penetration, (5) CUT/D = cutting or drilling, (6) VEH = vehicle event, (7) SC = ORPS significance category, (8) RC = ORPS reporting criteria, (9) ES = electrical severity

ES Scores: Extreme is >3301, High is 331-3300, Medium is 31-330, and Low is 1-30

Electrical Safety Occurrences – January 2010

No	Report Number	Event Summary	EW ⁽¹⁾	N-EW ⁽²⁾	SUB ⁽³⁾	HFW ⁽⁴⁾	WFH ⁽⁵⁾	PPE ⁽⁶⁾	70E ⁽⁷⁾	VOLT ⁽⁸⁾		C/I ⁽⁹⁾	NEUT ⁽¹⁰⁾	NM ⁽¹¹⁾
										H	L			
1	EM--BHSSO-BNL-BNL-2010-0006	Worker receives 120 v. electrical shock when contacting the non-insulated terminals of an air sample pump.		X	X	X					X			
2	EM--NVSSO-NST-NTS-2010-0004	Workers noted a spark when removing temporary office petitions.		X		X					X			X
3	EM-ID--CWI-FUELRCTR-2010-0001	Worker receives 277 v. electrical shock from an energized metal switch cover.		X		X					X			X
4	EM-RL--CPRC-GENLAREAS-2010-0004	An employee discovered a damaged electrical cord and secured the hazard.	X		X		X				X			
5	EM-RP--BNRP-RPPWTP-2010-0003	Worker receives 277 v. electrical shock from damaged buried cable.		X		X					X			X
6	EM-SR--SRNS-FGEN-2010-0001	A worker discovers energized conductor thought to be isolated.	X				X				X			
7	EM-SR--SRNS-HCAN-2010-0001	A worker discovers energized conductor thought to be isolated.	X				X				X			
8	NA--LSO-LLNL-LLNL-2010-0006	Workers cut energized 120 v. conductor.		X		X					X			
9	NA--NVSSO-NST-NTS-2010-0005	Violation of Lockout procedure discovered during roofing.		X	X		X				X			
10	NA--PS-BWP-PANTEX-2010-0014	Violation of Lockout procedure discovered during HVAC maintenance activities		X	X		X				X			
11	NA--SS-SNL-NMFAC-2010-0001	Worker receives 120 v. shock from miss-wired metal shed.		X		X					X			
12	NA--SS-SNL-NMFAC-2010-0002	Worker fails to apply locking device in accordance with Site Lockout procedure.	X		X		X				X			
13	NE-ID--BEA-MFC-2010-0001	Energized 120 v. conductor severed during snow removal.		X		X					X			X
	TOTAL		4	9	5	7	6	0	0	0	13	0	0	4

Key

(1) EW = electrical worker, (2) N-EW = non-electrical worker, (3) SUB = subcontractor, (4) HFW = hazard found the worker, (5) WFH = worker found the hazard, (6) PPE = inadequate or no PPE used, (7) 70E = NFPA 70E issues, (8) VOLT = H (>600) L(≤600), (9) C/I = Capacitance/Inductance, (10) NEUT = neutral circuit, (11) NM = near miss

ORPS Operating Experience Report

Production GUI - New ORPS

ORPS contains 54585 OR(s) with 57903 occurrences(s) as of 3/3/2010 8:34:07 AM

Query selected 13 OR(s) with 13 occurrences(s) as of 3/3/2010 12:18:54 PM

Download this report in Microsoft Word format. 

1)Report Number:	EM--BHSO-BNL-BNL-2010-0006 After 2003 Redesign		
Secretarial Office:	Environmental Management		
Lab/Site/Org:	Brookhaven National Laboratory		
Facility Name:	Brookhaven National Laboratory (BOP)		
Subject/Title:	Minor Shock from Air Sampling Motor Timer Wire		
Date/Time Discovered:	02/19/2010 13:30 (ETZ)		
Date/Time Categorized:	02/23/2010 09:00 (ETZ)		
Report Type:	Notification		
Report Dates:	Notification	02/23/2010	19:46 (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:	Yes RASI		
Occurrence Description:	<p>On February 19, 2010, at Brookhaven National Laboratory (BNL), during routine use of an AVS028A air sampler at building 701, a Radiological Control Technician received a minor shock when he inadvertently touched an exposed conductor (compromised insulation) located on the timer unit of the air sampler. The sampler is rated for 120V protected with an 8 amp fuse for the pump.</p> <p>The BNL Electrical Safety Officer calculated the electrical severity index for this dry hand, 120V electrical shock. The calculation was performed using the EFCOG/DOE Electrical Severity Measurement Tool Revision 1. The calculation yielded an Electrical Severity of 110, which is a medium</p>		

	<p>significance hazard.</p> <p>Note: On February 19, 2010, at 1440 hours, the event was initially categorized as a Significance Category (SC) 3 occurrence, "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)." On February 23, 2010, after further evaluation, the event was raised to a SC 2 occurrence per the reporting criteria shown above.</p>
Cause Description:	
Operating Conditions:	Normal Operations
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	<p>The unit was taken out of service and returned to the I&C Shop and an extent of condition was performed in ERP to identify if there were any additional units with this older style timer configuration. One unit was found. The wiring on this unit was in satisfactory condition.</p> <p>The Technician was sent to the on-site clinic for an EKG. The EKG was normal.</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:</p> <p>By When:</p>
Division or Project:	Environmental Restoration Division
Plant Area:	Building 701
System/Building/Equipment:	Air Sampling Motor
Facility Function:	Environmental Restoration Operations
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	<p>07D--Electrical Systems - Electrical Wiring</p> <p>08A--OSHA Reportable/Industrial Hygiene - Electrical Shock</p> <p>11G--Other - Subcontractor</p> <p>12C--EH Categories - Electrical Safety</p> <p>14L--Quality Assurance - No QA Deficiency</p>
HQ Summary:	On February 19, 2010, during routine use of an AVS028A air sampler at building 701, a radiological control technician received a minor shock

when he inadvertently touched an exposed conductor (compromised insulation) located on the timer unit of the air sampler. The sampler is rated for 120 volts protected with an 8 amp fuse for the pump. The technician was sent to the on-site clinic for an EKG, which was normal. The sampler was taken out of service and returned to the I&C Shop and an extent of condition was performed in the Environmental Restoration Project to identify if there were any additional samplers with this older style timer configuration. One other sampler was found, but the wiring was in satisfactory condition.

Similar OR Report Number:

Facility Manager:	Name	ARMITAGE, CHARLES
	Phone	(631) 344-5570
	Title	ENVIR. RESTORATION PROJECTS DIRECTOR

Originator:	Name	SIERRA, EDWARD A
	Phone	(631) 344-4080
	Title	LLL/ORPS COORDINATOR

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

Other Notifications:	Date	Time	Person Notified	Organization
	02/19/2010	13:45 (ETZ)	C. Gortakowski	BNL
	02/19/2010	13:45 (ETZ)	R. Deschamps	BNL
	02/19/2010	13:45 (ETZ)	F. Carlson	BNL
	02/19/2010	16:18 (ETZ)	A. Janczewski	BHSO/DOE

Authorized Classifier(AC):

2)Report Number: [EM--NVSO-NST-NTS-2010-0004](#) After 2003 Redesign

Secretarial Office: Environmental Management

Lab/Site/Org: Nevada Test Site

Facility Name: Nevada Test Site

Subject/Title: Removal of Partition Results in Arcing of Electrical Receptacle

Date/Time Discovered: 02/08/2010 10:00 (PTZ)

Date/Time Categorized: 02/08/2010 11:30 (PTZ)

Report Type: Update

Report Dates:	Notification	02/09/2010	15:45 (ETZ)
	Initial Update	02/09/2010	15:47 (ETZ)
	Latest Update	02/09/2010	15:47 (ETZ)

	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>On February 8, 2010, during routine equipment and material removal activities in a deactivated 1967 facility (CAU 114), the workers saw an arc in a 110-volt electrical receptacle. The crew was removing old office partitions that are elevated off ground, metal on the bottom, and glass on the top. The bolts that held the partitions to the floor were all rusted and are easily removed by hand. In the process, it went unnoticed that one of the partitions had an electrical conduit attached to it. When the partition was moved the conduit broke and the arc ensued. The associated breaker tripped and as a precaution personnel exited the facility.</p> <p>No injuries to personnel or damage to equipment.</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 paused and employees left the facility. Electricians isolated the circuit and placed the system in a safe configuration. Notifications made to NSTec and NNSA/Nevada Site Office line management. Critique scheduled.</p>		
FM Evaluation:			
DOE Facility Representative Input:			
DOE Program Manager Input:			
Further Evaluation is Required:	No		
Division or Project:	Environmental Restoration		
Plant Area:	NTS- Area 25		

System/Building/Equipment:	Engine Maintenance, Assembly & Disassembly Facility																			
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 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 12C--EH Categories - Electrical Safety 14L--Quality Assurance - No QA Deficiency																			
HQ Summary:	On February 8, 2010, during routine equipment and material removal in a deactivated 1967 facility (CAU 114), the workers saw an arc in a 110-volt electrical receptacle. The crew was removing old office partitions that are elevated off ground, metal on the bottom, and glass on the top. The bolts that held the partitions to the floor were all rusted and are easily removed by hand. In the process, the crew did not notice that one of the partitions had an electrical conduit attached to it. When the partition was moved, the conduit broke and the arc occurred. The associated circuit breaker tripped and as a precaution, personnel exited the facility. Electricians isolated the circuit and placed the system in a safe configuration. There were no injuries or equipment damage. A critique was scheduled.																			
Similar OR Report Number:	1. NA--NVSO-NST-NTS-2009-0007																			
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td colspan="3">Ricky Wagner</td> </tr> <tr> <td>Phone</td> <td colspan="3">(702) 295-3798</td> </tr> <tr> <td>Title</td> <td colspan="3">EM Operations Division Manager</td> </tr> </table>				Name	Ricky Wagner			Phone	(702) 295-3798			Title	EM Operations Division Manager						
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Phone	(702) 295-3798																			
Title	EM Operations Division Manager																			
Originator:	<table border="1"> <tr> <td>Name</td> <td colspan="3">GILE, ANDREA L</td> </tr> <tr> <td>Phone</td> <td colspan="3">(702) 295-7438</td> </tr> <tr> <td>Title</td> <td colspan="3">PROJECT OPERATIONS SPEC.</td> </tr> </table>				Name	GILE, ANDREA L			Phone	(702) 295-7438			Title	PROJECT OPERATIONS SPEC.						
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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								
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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>02/08/2010</td> <td>16:00 (PTZ)</td> <td>Brian Barbero</td> <td>NSTec</td> </tr> <tr> <td>02/08/2010</td> <td>16:30 (PTZ)</td> <td>James Mumma</td> <td>NSO/FR</td> </tr> <tr> <td>02/08/2010</td> <td>17:00 (PTZ)</td> <td>Duty Manager</td> <td>NTS</td> </tr> </tbody> </table>				Date	Time	Person Notified	Organization	02/08/2010	16:00 (PTZ)	Brian Barbero	NSTec	02/08/2010	16:30 (PTZ)	James Mumma	NSO/FR	02/08/2010	17:00 (PTZ)	Duty Manager	NTS
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02/08/2010	17:00 (PTZ)	Duty Manager	NTS																	
Authorized Classifier(AC):																				

3)Report Number:	EM-ID--CWI-FUELCSTR-2010-0001 After 2003 Redesign
Secretarial Office:	Environmental Management
Lab/Site/Org:	Idaho National Laboratory

Facility Name:	ICPP Fuel Receipt & Storage Act.		
Subject/Title:	Worker Receives Electrical Shock when Passing Through Door		
Date/Time Discovered:	02/02/2010 20:08 (MTZ)		
Date/Time Categorized:	02/03/2010 06:25 (MTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/04/2010	19:08 (ETZ)
	Initial Update		
	Latest Update		
	Final		
Significance Category:	2		
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 2 occurrence)		
Cause Codes:			
ISM:	2) Analyze the Hazards 3) Develop and Implement Hazard Controls		
Subcontractor Involved:	No		
Occurrence Description:	<p>On February 2, 2010 at approximately 20:08 MTZ a worker reported that he felt a shock while passing through a steel door in the second floor mechanical area of CPP-666 room 213 at INTEC. The door was immediately roped off and posted pending electrical safety checks. The worker was taken to the Central Facilities Area (CFA) medical for evaluation and was released with instructions to return in the morning of February 3, 2010 for a follow-up examination. The follow-up evaluation released the worker with no restrictions.</p> <p>An electrical safety evaluation completed at 13:30 on February 3, 2010 found 277 VAC on the light switch cover next to the door. The source of energy is suspected to be a failed light fixture which could have energized the section of ungrounded conduit connected to the light switch. The light fixture leads were lifted and capped to isolate the energy. This was verified to have deenergized the conduit. The electrical circuits in CPP-666 use the conduit as the path for grounding. This met electrical code at the time of construction (circa 1979). A missing weld or bonding was found where the conduit should have been joined to the junction box. This condition electrically isolated that section from the ground. It allowed the potentially failed light fixture or other possible electrical fault to energize the conduit without tripping the circuit breaker. It appears that the worker contacted the light switch cover and the door at the same time while passing through</p>		

	<p>the door, thus completing the circuit and receiving a shock.</p> <p>A fact-finding was held on February 4, 2010 at 0900 in CPP-663 room 229.</p>
Cause Description:	
Operating Conditions:	Routine Facility Operations
Activity Category:	Inspection/Monitoring
Immediate Action(s):	<p>1. The area is posted and access through the door is restricted.</p> <p>2. The worker was immediately taken to CFA medical for evaluation (preliminary evaluation results revealed no injury) the worker was requested to return for re-evaluation February 3, 2010. The worker was subsequently released back to work with out restrictions.</p> <p>3. Facility Maintenance initiated testing all failed lights for energized conduit.</p> <p>4. Facility Engineering was tasked with determining the best method for sampling the building conduit for similar discontinuity.</p>
FM Evaluation:	<p>No lasting harmful effects were experienced by the affected employee. This event had no adverse impact to the facility / plant, or the environment.</p> <p>There was a delay in categorization to investigate and determine the source of the problem.</p> <p>The event was originally categorized as Group 2, Sub-Group C, Sequence (1) Hazardous Energy Control event. After completion of the fact finding the correct categorization was determined to be Near- Miss Significance Category 2. DOE-ID was notified and concurred with the re-categorization.</p> <p>An investigation is ongoing and the formal cause analysis will complete within the required time.</p>
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	<p>Yes.</p> <p>Before Further Operation? No</p> <p>By Whom:</p> <p>By When:</p>
Division or Project:	Fuel Support Facilites / Idaho Cleanup Project
Plant Area:	CPP-666 Room 213
System/Building/Equipment:	FDOR-FV-491 to room 213

Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)						
Corrective Action:							
Lessons(s) Learned:							
HQ Keywords:	01S--Inadequate Conduct of Operations - Incorrect/Inadequate Installation 07D--Electrical Systems - Electrical Wiring 08A--OSHA Reportable/Industrial Hygiene - Electrical Shock 08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 12K--EH Categories - Near Miss (Could have been a serious injury or fatality) 14E--Quality Assurance - Work Process Deficiency						
HQ Summary:	On February 2, 2010, a worker reported that he felt a shock while passing through a steel door in the second floor mechanical area of CPP-666 room 213 at INTEC. The door was immediately roped off and posted pending electrical safety checks. The worker was evaluated at the Central Facilities Area medical and released with no restrictions. An electrical safety evaluation on February 3, found 277 VAC on the light switch cover next to the door. The source of energy is suspected to be a failed light fixture which could have energized the section of ungrounded conduit connected to the light switch. The light fixture leads were lifted and capped to isolate the energy. This was verified to have de-energized the conduit. The electrical circuits in CPP-666 use the conduit as the path for grounding. This met electrical code at the time of construction (circa 1979). A missing weld or bonding was found where the conduit should have been joined to the junction box. This condition electrically isolated that section from the ground. It allowed the potentially failed light fixture or other possible electrical fault to energize the conduit without tripping the circuit breaker. It appears that the worker touched the light switch cover and the door at the same time while passing through the door, thus completing the circuit and receiving a shock.						
Similar OR Report Number:	1. EM-ID--BBWI-LANDLORD-2004-0018 2. NE-ID--BEA-STC-2006-0003 3. EM-ID--CWI-LANDLORD-2006-0014						
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>M. A. Stubblefield</td> </tr> <tr> <td>Phone</td> <td>(208) 521-9625</td> </tr> <tr> <td>Title</td> <td>Facility Manager</td> </tr> </table>	Name	M. A. Stubblefield	Phone	(208) 521-9625	Title	Facility Manager
Name	M. A. Stubblefield						
Phone	(208) 521-9625						
Title	Facility Manager						
Originator:	<table border="1"> <tr> <td>Name</td> <td>LYONS, SAPRENA L.</td> </tr> <tr> <td>Phone</td> <td>(208) 351-9075</td> </tr> <tr> <td>Title</td> <td>BUSINESS OPERATIONS SPECIALIST</td> </tr> </table>	Name	LYONS, SAPRENA L.	Phone	(208) 351-9075	Title	BUSINESS OPERATIONS SPECIALIST
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Phone	(208) 351-9075						
Title	BUSINESS OPERATIONS SPECIALIST						
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
	02/04/2010	10:17 (MTZ)	E. C. Larsen	DOE-ID
	02/03/2010	06:25 (MTZ)	E. C. Larsen	DOE-ID
Authorized Classifier(AC):	M. S. Casteel Date: 02/04/2010			

4)Report Number:	EM-RL--CPRC-GENLAREAS-2010-0004 After 2003 Redesign		
Secretarial Office:	Environmental Management		
Lab/Site/Org:	Hanford Site		
Facility Name:	Plateau Remediation General Facilities		
Subject/Title:	Discovery of equipment left in an unsafe configuration (ARRA)		
Date/Time Discovered:	02/24/2010 08:15 (PTZ)		
Date/Time Categorized:	02/24/2010 16:30 (PTZ)		
Report Type:	Notification/Final		
Report Dates:	Notification	02/26/2010	16:27 (ETZ)
	Initial Update	02/26/2010	16:27 (ETZ)
	Latest Update	02/26/2010	16:27 (ETZ)
	Final	02/26/2010	16:27 (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:	4) Perform Work Within Controls		
Subcontractor Involved:	Yes Northpointe Electric		
Occurrence Description:	On 2/24/10, at approximately 08:15 a subcontract electrician noticed that a portable generator located 100 K Cold Vacuum Drying Facility (CVD) had exposed conductors that appeared to be terminated to the generator. The generator was not in service, the conductors were not energized.		
	On February 17 the Construction Services Field Construction Manager directed George Grant Construction and their subcontractor, NorthPointe Electric to disconnect the generator from MO2219 This generator was to		

	<p>be prepared for relocation near the 100K CVD, approximately 15 miles away. The actual moving was to be conducted by Sunbelt, the owner of the generator. The morning pre-job discussion included; use of LO/TO practices, and the JSA.</p> <p>In accordance the Hanford site Lock and Tag procedure, the electrician applied his Authorized Worker Lock (AWL) to the generator, disconnected the leads to the battery, and then disconnected the generator from MO2219. Once the disconnection was completed, the cable was rolled up and placed on the fender. The electrician then removed his lock.</p> <p>The rental agency owning the generator was then contacted and moved the generator to the 100K CVD location where it was left in the configuration noted</p>
Cause Description:	
Operating Conditions:	Normal
Activity Category:	Inspection/Monitoring
Immediate Action(s):	<ol style="list-style-type: none"> 1. Upon discovery, the electrician notified his supervisor, who notified the Construction supervision and management. 2. Area around generator was barricaded with tape and posted as electric hazard (10 feet) 3. A red QC hold tag was applied to the generator (product delivered in an unacceptable configuration). 4. An event investigation was initiated by Engineering Projects & Construction (EPC) Management
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	No
Division or Project:	Central Plateau Remediation Project, EPC
Plant Area:	100 K
System/Building/Equipment:	100 K CVD site / Portable Generator
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	<p>01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical)</p> <p>08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance</p> <p>11L--Other - Supplier</p>

	12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 13H--Management Concerns - American Recovery and Reinvestment Act (ARRA) 14E--Quality Assurance - Work Process Deficiency 14G--Quality Assurance - Procurement Deficiency																															
HQ Summary:	On February 24, 2010, a subcontract electrician noticed that a portable generator, located at the 100 K Cold Vacuum Drying Facility (CVD), had exposed conductors that appeared to be terminated to the generator. The generator was not in service and the conductors were not energized. On February 17, 2010, the Construction Services Field Construction Manager directed George Grant Construction and their subcontractor, NorthPointe Electric, to disconnect the generator in preparation to relocate it near the 100K CVD, approximately 15 miles away. An electrician applied their lock to the generator, disconnected the battery, and disconnected the generator cables from the load. The electrician then removed their lock and the rental agency owning the generator moved the generator to the 100K CVD location where it was left in the configuration noted. The generator was barricaded as an electrical hazard and a red QC hold tag was applied to the generator. An event investigation was initiated.																															
Similar OR Report Number:																																
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td colspan="3">TOLLEFSON, DAVID J</td> </tr> <tr> <td>Phone</td> <td colspan="3">(509) 372-2111</td> </tr> <tr> <td>Title</td> <td colspan="3">PROJECT MANAGER ARRA FACILITIES</td> </tr> </table>				Name	TOLLEFSON, DAVID J			Phone	(509) 372-2111			Title	PROJECT MANAGER ARRA FACILITIES																		
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Originator:	<table border="1"> <tr> <td>Name</td> <td colspan="3">TODD, MICHAEL J</td> </tr> <tr> <td>Phone</td> <td colspan="3">(509) 372-9341</td> </tr> <tr> <td>Title</td> <td colspan="3">AUTHORITATIVE SOURCE</td> </tr> </table>				Name	TODD, MICHAEL J			Phone	(509) 372-9341			Title	AUTHORITATIVE SOURCE																		
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Authorized Classifier(AC):																																

5)Report Number: [EM-RP--BNRP-RPPWTP-2010-0003](#) After 2003 Redesign

Secretarial Office:	Environmental Management		
Lab/Site/Org:	Hanford Site		
Facility Name:	RPP Waste Treatment Plant		
Subject/Title:	Potential shock from a buried 480v temporary power electrical cable		
Date/Time Discovered:	02/16/2010 14:30 (PTZ)		
Date/Time Categorized:	02/16/2010 15:25 (PTZ)		
Report Type:	Update		
Report Dates:	Notification	02/17/2010	18:26 (ETZ)
	Initial Update	02/18/2010	09:55 (ETZ)
	Latest Update	02/18/2010	11:46 (ETZ)
	Final		
Significance Category:	3		
Reporting Criteria:	<p>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.</p> <p>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)</p>		
Cause Codes:			
ISM:	<ol style="list-style-type: none"> 1) Define the Scope of Work 2) Analyze the Hazards 3) Develop and Implement Hazard Controls 4) Perform Work Within Controls 5) Provide Feedback and Continuous Improvement 		
Subcontractor Involved:	No		
Occurrence Description:	<p>On February 16, 2010 at approximately 1430 hours, a Waste Treatment Project Laborer reported feeling a suspected electrical tingle while performing backfill activities at the Balance of Facilities Plant Service Air Coatings site #4. The Laborer was verifying the required backfill depth by using a gloved hand to sweep away dirt from a spot above the cable when the incident occurred. The buried line was confirmed to be an energized temporary 480v power cable. An initial inspection of the isolated power cable revealed the outer jacket had been cut by a sharp object. An analysis will be conducted on the damaged cable to try and determine how long it had been in a damaged state.</p>		

	<p>The Notification Report for occurrence EM-RP-BNRP-RPPWTP-2010-0003 submitted on February 17, 2010 to the ORPS database reflected the incorrect Significance Category level 1. The report should have reflected a Significance Category level 3 as indicated in the initial notification to the Occurrence Notification Center (Hanford). This occurrence does not meet the criteria for a Significance Category level 1. The Notification Report has been updated to reflect the correct Significance Category.</p> <p>This explanation as to the nature of the correction will be included in the updated report.</p>
Cause Description:	
Operating Conditions:	Construction
Activity Category:	Construction
Immediate Action(s):	The Laborer was transported to Medical for observation and evaluation. The work area was secured and isolated. A request for a Lock-Out/Tag-Out and a work package to repair the cable was initiated. Management initiated an investigation and conducted a Fact Finding meeting to ascertain the circumstances of the event.
FM Evaluation:	TBD
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Tucker Campbell By When:
Division or Project:	Waste Treatment Project
Plant Area:	600
System/Building/Equipment:	BOF - Plant Air Service site #4
Facility Function:	Nuclear Waste Operations/Disposal
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	07D--Electrical Systems - Electrical Wiring 08A--OSHA Reportable/Industrial Hygiene - Electrical Shock 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 12K--EH Categories - Near Miss (Could have been a serious injury or fatality) 14L--Quality Assurance - No QA Deficiency
HQ Summary:	On February 16, 2010, a Waste Treatment Project laborer reported feeling a suspected electrical tingle while sweeping away dirt from a spot above a buried electrical cable with a gloved hand. The laborer was verifying the

	required backfill depth at the Balance of Facilities Plant Service Air Coatings site #4 when the incident occurred. The buried line was confirmed to be an energized temporary 480-volt power cable. An initial inspection of the isolated power cable revealed the outer jacket had been cut by a sharp object. An analysis will be conducted on the damaged cable to try and determine how long it had been in a damaged state. The laborer was transported to Medical for observation and evaluation. The work area was secured and isolated. A request for a lockout/tagout and a work package to repair the cable was initiated. Management initiated an investigation.																								
Similar OR Report Number:	1. EM-RP--BNRP-RPPWTP-2008-0009																								
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>OJEDA, MIGUEL</td> </tr> <tr> <td>Phone</td> <td>(509) 373-8629</td> </tr> <tr> <td>Title</td> <td>ISSUES MANAGEMENT COORDINATOR</td> </tr> </table>	Name	OJEDA, MIGUEL	Phone	(509) 373-8629	Title	ISSUES MANAGEMENT COORDINATOR																		
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Date	Time	Person Notified	Organization																						
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Authorized Classifier(AC):																									

6)Report Number:	EM-SR--SRNS-FGEN-2010-0001 After 2003 Redesign		
Secretarial Office:	Environmental Management		
Lab/Site/Org:	Savannah River Site		
Facility Name:	F-General		
Subject/Title:	Unexpected Voltage During Ballast Replacement (U)		
Date/Time Discovered:	02/08/2010 17:30 (ETZ)		
Date/Time Categorized:	02/08/2010 17:40 (ETZ)		
Report Type:	Notification		
Report Dates:	Notification	02/09/2010	15:25 (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>On Feb 5, 2010 a single point lockout was established to replace a light ballast in a fluorescent light fixture in 707-F. An Electrical and Instrumentation (E&I) mechanic performed an absence of voltage check on a black wire connected to the ballast for the circuit identified on the print and found zero voltage. While removing the wiring for the ballast, the mechanic demonstrated a questioning attitude when he noticed a bundle of wires that contained an additional wire that was hidden behind the ballast. The mechanic performed a voltage check on the hidden wire and discovered 120 volts-ac (vac). The hidden wire (which was later verified to be the power circuit to the emergency battery inside the fixture) was not shown accurately on the facility drawing and was being energized from a light fixture in an adjacent hallway. Because there were numerous wires hanging from the light fixture in a main hallway, the First Line Manager (FLM) believed this to be an emergency. The FLM then turned off the circuit breaker feeding the hidden wire and a mechanic removed the hanging wires and reinstalled a wire nut on the hidden wire. This circuit was de-energized, the absence of voltage was verified, and workers wore proper PPE, but no lockout was utilized while placing the circuit in a safe configuration. Personnel initiated a Timeout and notified line management. A fact finding meeting was held on Feb 8, 2010 to establish causes and develop corrective actions.</p> <p>The delay in reporting was caused by the discovery of additional information surrounding the placement of the circuits into a safe state without following proper hazardous energy controls.</p>		
Cause Description:			
Operating Conditions:	Normal Operations		
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)		
Immediate Action(s):	The Shift Operations Manager (SOM) was notified and the facility tagged		

	out all lighting panels in 707-F due to labeling and drawing discrepancies.
FM Evaluation:	<p>The SOM ensured that all electrical work that was being performed in 707-F was placed in safe condition. Issued a stop work on all electrical work in 707-F. Danger tagged all lighting panels in 707-F due to labeling and drawing discrepancies.</p> <p>The SRS Electrical Safety subject matter expert has calculated the electrical severity of this event using guidance developed by the EFCOG/DOE Electrical Safety Subgroup. The calculated severity for this event is 10 (Low Significance). This event scores as follows: Electrical Hazard: 10 (120v); Environment Factor: 0; Shock Proximity Factor: 0; Arc Flash: 0; Thermal Factor: 0; PPE mitigations for shock (Voltage rated gloves used during exposure), and Injury Factor: 1. Electrical Severity=$10(1+0+0+0+0)*1=10$.</p>
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	<p>Yes. Before Further Operation? No By Whom: Abshire, R. By When: 03/25/2010</p>
Division or Project:	SRNS/M&O/NMD/FAO
Plant Area:	F-Area
System/Building/Equipment:	707-F / Building Lighting System
Facility Function:	Plutonium Processing and Handling
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	<p>01B--Inadequate Conduct of Operations - Loss of Configuration Management/Control 01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14D--Quality Assurance - Documents and Records Deficiency 14E--Quality Assurance - Work Process Deficiency</p>
HQ Summary:	<p>On February 5, 2010, a single point lockout was established to replace a light ballast in a fluorescent light fixture in 707-F. An Electrical and Instrumentation (E&I) mechanic performed an absence of voltage check on a black wire connected to the ballast for the circuit identified on the print and found zero voltage. While removing the wiring for the ballast, the mechanic demonstrated a questioning attitude when he noticed a bundle of wires that contained an additional wire that was hidden behind the ballast. The mechanic performed a voltage check on the hidden wire and discovered 120 volts-AC. The hidden wire, which was later verified to</p>

be the power circuit to the emergency battery inside the fixture, was not accurately shown on the facility drawing and it was energized from a light fixture in an adjacent hallway. Because there were numerous wires hanging from the light fixture in a main hallway, the First Line Manager (FLM) believed this to be an emergency and turned off the circuit breaker feeding the hidden wire and a mechanic removed the hanging wires and reinstalled a wire nut on the hidden wire. This circuit was de-energized, the absence of voltage was verified, and workers wore proper PPE, but no lockout was used while placing the circuit in a safe configuration. Personnel initiated a Timeout and notified line management. A fact finding meeting was held. All lighting panels in 707-F were Danger tagged because of labeling and drawing discrepancies.

Similar OR Report Number:

Facility Manager:

Name	T. Boykin
Phone	(803) 952-4245
Title	F-Area Manager

Originator:

Name	ABSHIRE, ROBERT
Phone	(803) 208-3026
Title	OCCURRENCE INVESTIGATOR

HQ OC Notification:

Date	Time	Person Notified	Organization
NA	NA	NA	NA

Other Notifications:

Date	Time	Person Notified	Organization
02/08/2010	18:30 (ETZ)	D. Drake	Ops Mgr
02/08/2010	18:30 (ETZ)	T. Boykin	FM
02/08/2010	20:05 (ETZ)	J. Barnes	FR
02/08/2010	20:10 (ETZ)	D. Yates	FR
02/08/2010	20:30 (ETZ)	S. Williams	MaintMgr
02/08/2010	20:45 (ETZ)	M. Sautman	DNFSB
02/08/2010	20:50 (ETZ)	D. Burnfield	DNFSB
02/08/2010	21:00 (ETZ)	C. Loyal	TECHMGR

Authorized Classifier(AC):

Abshire, R. Date: 02/09/2010

7)Report Number:

[EM-SR--SRNS-HCAN-2010-0001](#) After 2003 Redesign

Secretarial Office:

Environmental Management

Lab/Site/Org:

Savannah River Site

Facility Name:

H-Canyon

Subject/Title:

Voltage Found During 902-1 Pump Work (U)

Date/Time Discovered:	02/16/2010 17:00 (ETZ)		
Date/Time Categorized:	02/16/2010 17:30 (ETZ)		
Report Type:	Notification		
Report Dates:	Notification	02/17/2010	15:42 (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>During the performance of Work Order #998603 for megging the 902-1 pump, Electrical and Instrumentation (E&I) workers recognized that the pump was not labeled in the field and requested Outside Facilities Operations to label the pump. Operations labeled the 902 pumps with temporary labels per information obtained from the Component Location Identifier (CLI) database. E&I requested a Single Point Lockout/ Tagout (SPLT) for the motor control center (MCC) cubicle for 902-1 pump. The Shift Operations Manager (SOM) approved the SPLT based on prints for the electrical cubicles that identified disconnects for each pump (902-1 and 902-2). E&I installed the SPLT and performed voltage checks at the appropriate MCC cubicle before beginning work and found no voltage present. After lifting the leads in the MCC cubicle, the E&I workers proceeded to the field to lift the leads at the pump. After removing the cover on pump labeled 902-1, a voltage check was performed and voltage was found. A time out was called and the First Line Manager (FLM) was notified of the problem. Initial indications lead to the CLI database as being incorrect, but final cause and corrective actions will be identified during the scheduled fact finding meeting.</p>		
Cause Description:			
Operating Conditions:	Normal operations.		
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)		
Immediate Action(s):	All work associated with the 902-1 pump was suspended pending further investigation. Facility management placed a pause on all new electrical		

	<p>work requiring Hazardous Energy Controls, as outlined in 8Q-32, without approval from the Area Maintenance Manager and the Facility Operations Manager. Facility management placed on hold the installation of any new temporary labels, without approval from the Operations Manager.</p> <p>A Fact Finding Meeting was held 2/17/2010 at 0900 hours to identify issues and to determine appropriate path-forward / actions relative to the event.</p>
FM Evaluation:	<p>A time-out was taken when the problem was identified. Further, all work associated with the 902-1 pump has been suspended pending the investigation to identify issues and development of appropriate path-forward / actions to address concerns.</p> <p>The calculated electrical severity for this event will be provided at a later date using guidance developed by the EFCOG/DOE Electrical Safety Subgroup.</p>
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	<p>Yes. Before Further Operation? No By Whom: Stallings, G.L. By When: 04/02/2010</p>
Division or Project:	SRNS/M&O/NMD/HMD
Plant Area:	H-Area
System/Building/Equipment:	211-H / Segregated Solvent Recovery System
Facility Function:	Reprocessing
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	<p>01B--Inadequate Conduct of Operations - Loss of Configuration Management/Control 01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 04D--Instrumentation and Controls - Computer Software 12C--EH Categories - Electrical Safety 14D--Quality Assurance - Documents and Records Deficiency 14E--Quality Assurance - Work Process Deficiency</p>
HQ Summary:	<p>On February 16, 2010, during the performance of a work order to megger the 902-1 pump, Electrical and Instrumentation (E&I) workers recognized that the pump was not labeled in the field and requested Outside Facilities Operations to label the pump. Operations labeled the 902 pumps with temporary labels per the Component Location Identifier (CLI) database. The E&I workers installed a Single Point Lockout/Tagout on the motor</p>

control center (MCC) cubicle for 902-1 pump based on prints for the electrical cubicles that identified disconnects for each pump (902-1 and 902-2). They then performed voltage checks at the MCC cubicle before beginning work and found no voltage present. After lifting the leads in the MCC cubicle, the E&I workers proceeded to the field to lift the leads at the pump. After removing the cover on pump labeled 902-1, a voltage check was performed and voltage was found. A time out was called and the First Line Manager was notified of the problem. Initial indications lead to the CLI database as being incorrect, but final cause and corrective actions will be identified during the scheduled fact finding meeting.

Similar OR Report Number: 1. N/A

Facility Manager:	Name	Howell, S.J.
	Phone	(803) 208-8419
	Title	Facility Manager, H-Canyon

Originator:	Name	STALLINGS, GERALD L
	Phone	(803) 208-8459
	Title	OCCURRENCE INVESTIGATOR

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

Other Notifications:	Date	Time	Person Notified	Organization
	02/16/2010	17:00 (ETZ)	Howell, S.	FM
	02/16/2010	17:00 (ETZ)	Dukes, K.	PROCESSM
	02/16/2010	17:00 (ETZ)	Nickell, C.	NMD PM
	02/16/2010	17:00 (ETZ)	Williams, S.	MAINT FM
	02/16/2010	17:00 (ETZ)	Dohse, F.	NMO VP
	02/16/2010	18:00 (ETZ)	Frier, R.	DOE FR
	02/16/2010	18:00 (ETZ)	Sautman, M. (pager)	DNFSB
	02/16/2010	18:00 (ETZ)	Burnfield, D. (pager)	DNFSB
	02/16/2010	19:00 (ETZ)	Hudlow, M.	TECHM

Authorized Classifier(AC): Stallings, G.L. Date: 02/16/2010

8)Report Number:	NA--LSO-LLNL-LLNL-2010-0006 After 2003 Redesign
Secretarial Office:	National Nuclear Security Administration
Lab/Site/Org:	Lawrence Livermore National Lab.
Facility Name:	Lawrence Livermore Nat. Lab. (BOP)
Subject/Title:	Energized Electrical Conductor Cut Without Energy Isolation in Building 391

Date/Time Discovered:	02/19/2010 12:00 (PTZ)		
Date/Time Categorized:	02/19/2010 13:30 (PTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/22/2010	19:15 (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:	On February 19, 2010, at approximately 1200, a 110-volt energized electrical conductor was cut while removing wires from an electrical equipment chassis in Building 391. Workers believed that a complete de-energization had previously occurred. The worker appeared to be uninjured however the worker was taken to medical for precautionary evaluation. Work was stopped and an investigation initiated.		
Cause Description:			
Operating Conditions:	Does not apply		
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)		
Immediate Action(s):	The work was stopped and an investigation initiated.		
FM Evaluation:	The final report is due to the ORO by 4/2/2010.		
	The final report is due for entry into ORPS by 4/5/2010.		
DOE Facility Representative Input:			
DOE Program Manager Input:			
Further Evaluation is Required:	Yes. Before Further Operation? Yes By Whom: Valerie Roberts By When: 04/02/2010		
Division or Project:	NIF		

Plant Area:	Site 200																			
System/Building/Equipment:	Building 391																			
Facility Function:	Laboratory - Research & Development																			
Corrective Action:																				
Lessons(s) Learned:																				
HQ Keywords:	01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 01M--Inadequate Conduct of Operations - Inadequate Job Planning (Electrical) 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14E--Quality Assurance - Work Process Deficiency																			
HQ Summary:	On February 19, 2010, workers cut an energized a 110-volt electrical conductor while removing wires from an electrical equipment chassis in Building 391. The workers believed that the equipment had been completely de-energized. The worker appeared to be uninjured; however the worker was taken to medical for precautionary evaluation. Work was stopped and an investigation initiated.																			
Similar OR Report Number:																				
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td colspan="3">Valerie Roberts</td> </tr> <tr> <td>Phone</td> <td colspan="3">(925) 424-3662</td> </tr> <tr> <td>Title</td> <td colspan="3">NIF&PS Deputy Principal Associate Director, Ops</td> </tr> </table>				Name	Valerie Roberts			Phone	(925) 424-3662			Title	NIF&PS Deputy Principal Associate Director, Ops						
Name	Valerie Roberts																			
Phone	(925) 424-3662																			
Title	NIF&PS Deputy Principal Associate Director, Ops																			
Originator:	<table border="1"> <tr> <td>Name</td> <td colspan="3">FREEMAN, JEFFREY W</td> </tr> <tr> <td>Phone</td> <td colspan="3">(925) 424-6787</td> </tr> <tr> <td>Title</td> <td colspan="3">OCCURRENCE REPORTING</td> </tr> </table>				Name	FREEMAN, JEFFREY W			Phone	(925) 424-6787			Title	OCCURRENCE REPORTING						
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Phone	(925) 424-6787																			
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02/19/2010	13:55 (PTZ)	Robert Kong	NNSA/LSO																	
Authorized Classifier(AC):	Lydia Hunt Date: 02/22/2010																			

9)Report Number:	NA--NVSO-NST-NTS-2010-0005 After 2003 Redesign
Secretarial Office:	National Nuclear Security Administration
Lab/Site/Org:	Nevada Test Site
Facility Name:	Nevada Test Site
Subject/Title:	Lockout/Tagout Violation by the Subcontractor for the Nuclear Security Enterprise Roof Asset Management Program (RAMP)

Date/Time Discovered:	02/18/2010 13:00 (PTZ)		
Date/Time Categorized:	02/18/2010 14:45 (PTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/22/2010	18:56 (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:	Yes BTA/Schreiber/Canyon Electric		
Occurrence Description:	<p>This occurrence report is being submitted by National Security Technologies, LLC (NSTec) as the Nevada Test Site Management and Operating Contractor for the NTS and member of the Site Project Team. NSTec is the reporting entity in accordance with the Nuclear Security Enterprise (NSE) Roof Asset Management Program (RAMP) Program Execution Plan, dated December 2009. The Facilities and Infrastructure Recapitalization Program (FRIP) NSE RAMP Federal Program Manager is currently a representative from the Kansas City Site Office - KCSO.</p> <p>The RAMP subcontractor (Building Technology Associates, Inc. (BTA)/Schreiber/Canyon Electric) was working on the NSTec building 23-1010 roof. Late afternoon, the NSTec Power Dispatch Supervisor notified NSTec Safety and Line Management that there was a lockout/tag out (LOTO) issue in the building due to the RAMP project. Two roof mounted fans were left disconnected with the breakers in the off position and the panel door locked but without a LOTO in place. One of the fan cords was left with the leads exposed.</p> <p>Roofing work on the building was halted and NSTec installed appropriate LOTO. Additionally, all RAMP electrical work was halted until Canyon Electric takes control of the LOTO from NSTec. There was no exposure or injury due to the 110-volt energy source.</p> <p>NSTec determined the ECFOG Electrical Severity Tool ranking to be 10.</p>		

	(Electrical Severity (ES) = (Electrical Hazard Factor) * (1 + Environment Factor + Shock Proximity Factor + Arc Flash Proximity Factor + Thermal Proximity Factor) * (Injury Factor) ES=(10)*(1+0 +0 +0 + 0)*1= 10
Cause Description:	
Operating Conditions:	Does Not Apply
Activity Category:	Normal Operations (other than Activities specifically listed in this Category)
Immediate Action(s):	NSTec installed LOTO and safed the area. Notifications made to NSTec & NNSA/Nevada Site Office line management. Roofing work was halted of the facility and all RAMP associated electrical work was halted pending investigation. Critique was held.
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: RAMP Subcontractors By When: 04/08/2010
Division or Project:	Roof Asset Management Project (RAMP)
Plant Area:	NTS - 23-1010
System/Building/Equipment:	Building 1010
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 11G--Other - Subcontractor 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14E--Quality Assurance - Work Process Deficiency 14G--Quality Assurance - Procurement Deficiency
HQ Summary:	On February 18, 2010, the NSTec Power Dispatch Supervisor notified NSTec Safety and Line Management that there was a lockout/tag out (LOTO) issue in the building 23-1010 involving the Roof Asset Management Program (RAMP) subcontractor. Two roof mounted fans were left disconnected with the breakers in the off position and the panel door locked but without a LOTO in place. One of the fan cords was left with the leads exposed. Roofing work on the building was halted and NSTec installed appropriate LOTO. Additionally, all RAMP electrical

	work was halted until the subcontractor takes control of the LOTO from NSTec. There was no exposure or injury from the 110-volt energy source. A critique was held.			
Similar OR Report Number:	1. None			
Facility Manager:	Name	Susan Livenick		
	Phone	(702) 295-5197		
	Title	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
	02/18/2010	15:00 (PTZ)	Brian Barbero	NSTec
	02/18/2010	16:00 (PTZ)	James Mumma	NSO/FR
	02/18/2010	17:16 (PTZ)	Duty Manager	NTS
Authorized Classifier(AC):				

10)Report Number:	NA--PS-BWP-PANTEX-2010-0014 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Pantex Plant		
Facility Name:	Pantex Plant		
Subject/Title:	Discovery of Uncontrolled Electrical Energy Source		
Date/Time Discovered:	02/24/2010 11:00 (CTZ)		
Date/Time Categorized:	02/24/2010 12:53 (CTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/26/2010	14:15 (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:	Yes AAA Electric
Occurrence Description:	<p>On 02/24/10 a Refrigeration Mechanic notified his supervisor of exposed wiring in the Building 12-63A Equipment Room that appeared to be improperly locked/tagged out (LO/TO). The supervisor inspected the area and confirmed, with the help of Electricians, the wiring was energized (480 Volts). The supervisor instructed the Electricians to lock out the circuit involved and to verify absence of energy. The supervisor made proper notifications and preserved the scene for further investigation.</p> <p>There were no injuries to personnel or damage to equipment or the environment.</p>
Cause Description:	
Operating Conditions:	Does Not Apply - Equipment Room
Activity Category:	Maintenance
Immediate Action(s):	<p>Supervisor instructed Electricians to apply proper LO/TO.</p> <p>Supervisor preserved the scene for further investigation.</p> <p>All Craft Supervisors presented a briefing on LO/TO and the facts of this event to crafts personnel.</p> <p>Crafts Supervisors walked down open LO/TOs and verified correctness prior to allowing crafts personnel to resume performing LO/TOs.</p> <p>Event was categorized on 02/24/10 as 2C(2)SC3, 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).</p> <p>Critique was conducted on 02/25/10.</p>
FM Evaluation:	Corrective actions will be tracked in Issues Management System on PER-2010-0207.
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:	12-63A Equipment Room								
Facility Function:	Balance-of-Plant - Site/outside utilities								
Corrective Action:									
Lessons(s) Learned:									
HQ Keywords:	01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance 11G--Other - Subcontractor 12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14E--Quality Assurance - Work Process Deficiency 14G--Quality Assurance - Procurement Deficiency								
HQ Summary:	On February 24, 2010, a refrigeration mechanic notified his supervisor of exposed wiring in the Building 12-63A Equipment Room that appeared to be improperly locked/tagged out. The supervisor inspected the area and confirmed with the help of electricians that the wiring was energized with 480 volts. The supervisor instructed the electricians to lock out the circuit involved and to verify absence of energy. The supervisor made proper notifications and preserved the scene for further investigation. A critique was held. There were no injuries to personnel, or damage to equipment, or the environment.								
Similar OR Report Number:	1. None								
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>L. B. Henderson</td> </tr> <tr> <td>Phone</td> <td>(806) 477-3213</td> </tr> <tr> <td>Title</td> <td>Plant Maintenance Department Manager</td> </tr> </table>	Name	L. B. Henderson	Phone	(806) 477-3213	Title	Plant Maintenance Department Manager		
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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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Date	Time	Person Notified	Organization						
02/24/2010	14:41 (CTZ)	Earl Burkholder	PXSO						
Authorized Classifier(AC):	George Weathers Date: 02/26/2010								
11)Report Number:	NA--SS-SNL-NMFAC-2010-0001 After 2003 Redesign								
Secretarial Office:	National Nuclear Security Administration								
Lab/Site/Org:	Sandia National Laboratories - SS								

Facility Name:	SNL NM Site-wide F & M		
Subject/Title:	Structural Maintenance Craftsperson Shocked While Opening Metal Storage Shed in Maintenance Yard in Tech Area I		
Date/Time Discovered:	02/03/2010 14:40 (MTZ)		
Date/Time Categorized:	02/03/2010 16:30 (MTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/04/2010	18:13 (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>At approximately 2:40 pm on February 3, 2010, a structural craftsperson received an electrical shock while opening the door to a 12X24 foot metal shed located in the maintenance yard. The craftsperson notified their Team Lead and went to SNL Medical. After medical evaluation the craftsperson was released back to work.</p> <p>When the shed was moved from Area III in December 2008, an electrical craftsperson (#1) disconnected four conductors; two black, one red, and one white. Approximately 24 feet of the conductors were left hanging from a pull box located on the outside of the shed.</p> <p>The maintenance electrical craftsperson (#2) re-connecting power to the shed at the new location in the maintenance yard assumed these conductors were three power (two black and one red) and one neutral (the white). Electrician #2 pulled a red, black, blue (power conductors) and one white (neutral). These new conductors were connected to three 110 volt 20 amp breakers and then spliced to the four conductors hanging from the pull box on the outside of the shed</p> <p>Investigation identified that one of the black conductors was taped green, indicating a grounded conductor, in a 4X4 junction box located on the inside of the metal shed. The taped green conductor was connected to the</p>		

	<p>ground terminals in the receptacles and lights in the shed. By connecting the new black conductor to the existing black conductor, the metal shed, including the door, was energized.</p> <p>The shed was located on 4X4 skids on a concrete pad. The door was located where the person accessing the shed was standing on dirt. The dirt was wet at the time of the shock as there had been rain and snow in the area. The structural craftsperson's boots had cracks which resulted in wet socks.</p> <p>The error in wiring, wet conditions, and cracked boots created a path to ground when the craftsperson touched the door knob, resulting in the craftsperson receiving the shock.</p> <p>The Electrical Safety Subject Matter Expert scored the event a 480 based on the following data. Hazard Factor (energy): 10 - Environmental factor (damp): 5 - Shock proximity (within the PAB): 10 - Arc proximity (outside the calculated FPB): 0 - Thermal proximity: 0 - Injury (shock): 3</p>
Cause Description:	Critique/Fact Finding Performed 2/4/10
Operating Conditions:	Normal
Activity Category:	Maintenance
Immediate Action(s):	<p>The shocked structural craftsperson reported the incident to their Team Lead, who went to the site and flagged-off the area to prevent re-occurrence.</p> <p>A second Team Lead took the shocked craftsperson to SNL Medical where they were evaluated and released back to work.</p> <p>One of the maintenance electrical Team Leads and an electrical craftsperson de-energized and locked and tagged the circuit breakers putting the area in a safe conduction.</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: Causal Analysis Team</p> <p>By When: 03/19/2010</p>
Division or Project:	4000
Plant Area:	Tech Area I
System/Building/Equipment:	Electrical Distribution
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in

	this Category)																											
Corrective Action:																												
Lessons(s) Learned:																												
HQ Keywords:	01S--Inadequate Conduct of Operations - Incorrect/Inadequate Installation 07D--Electrical Systems - Electrical Wiring 08A--OSHA Reportable/Industrial Hygiene - Electrical Shock 08H--OSHA Reportable/Industrial Hygiene - Safety Noncompliance 12C--EH Categories - Electrical Safety 14E--Quality Assurance - Work Process Deficiency																											
HQ Summary:	On February 3, 2010, a structural craftsperson received an electrical shock while opening the door to a 12x24 foot metal shed located in the maintenance yard. The craftsperson notified their Team Lead and went to SNL Medical. After medical evaluation, the craftsperson was released back to work. When the shed was moved from Area III in December 2008, an electrical craftsperson disconnected four electrical conductors and left the conductors hanging from a pull box located on the outside of the shed. When another electrical craftsperson re-connected power to the shed at the new location in the maintenance yard, the wires were incorrectly connected such that the electrical ground was energized with 110 volts, thus energizing the metal shed and door. A maintenance electrical Team Lead and an electrical craftsperson de-energized and locked and tagged the circuit breakers putting the area in a safe condition.																											
Similar OR Report Number:																												
Facility Manager:	<table border="1"> <tr> <td>Name</td> <td colspan="3">Carla Lamb</td> </tr> <tr> <td>Phone</td> <td colspan="3">(505) 844-1753</td> </tr> <tr> <td>Title</td> <td colspan="3">ES&H Coordinator - Facilities Management & Ops Ctr</td> </tr> </table>				Name	Carla Lamb			Phone	(505) 844-1753			Title	ES&H Coordinator - Facilities Management & Ops Ctr														
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Date	Time	Person Notified	Organization																									
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02/03/2010	15:25 (MTZ)	Mike Quinlan	4800																									
Authorized Classifier(AC):	John Norwalk Date: 02/04/2010																											

12)Report Number:	NA--SS-SNL-NMFAC-2010-0002 After 2003 Redesign		
Secretarial Office:	National Nuclear Security Administration		
Lab/Site/Org:	Sandia National Laboratories - SS		
Facility Name:	SNL NM Site-wide F & M		
Subject/Title:	Manufacturer's Representative Fails to Install LOTO Locks and Tags While Performing Work in Chiller Unit Outside Bldg. 720		
Date/Time Discovered:	02/09/2010 14:30 (MTZ)		
Date/Time Categorized:	02/09/2010 16:15 (MTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/11/2010	18:29 (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 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)		
Cause Codes:			
ISM:	4) Perform Work Within Controls		
Subcontractor Involved:	Yes Trane Corporation (sub to Hanna, sub to Summit)		
Occurrence Description:	<p>At approximately 2p.m. on February 9, 2010, a third-tier subcontractor manufacturer's representative was installing a current transformer (CT), sometimes called digital energy monitor, in a chiller located outside Building 720. The CT was being installed to monitor chiller loading and energy consumption.</p> <p>The manufacturer's representative opened the door of the chiller compartment to install the CT. The door, when opened, disconnects electrical power to the equipment the manufacturer's representative was working on. While the representative was installing the CT, an FMOC Electrical Construction Observer was performing a walk through and asked the rep where LOTO had been performed. The representative stated that the door acted as the electrical disconnect, and the door was under the control of the representative while the work was being performed. NFPA70E identifies this method of controlling hazardous electrical energy</p>		

	<p>as Individual Qualified Employee Control Procedure under 120.2(D) (1).</p> <p>OSHA requirements prohibit the use of Individual Control. As a result Individual Control is not allowed as a LOTO control method. The manufacturer's representative was unaware that Individual Control was not allowed at SNL and was following the manufacturer's standard work practices.</p> <p>Investigation identified: The chiller is a Hazard Category 0 and the worker was wearing two cotton tee shirts, an arc flash rated shirt of 8 calories, a jacket of 28.2 calories, new class 0 gloves with leathers, cotton pants, ANSI approved safety glasses and leather safety boots, which exceeds PPE requirements for Category 0.</p> <p>The worker has 22 years experience in the industry and 12 years with the chiller manufacturer.</p> <p>There was no exposure to the worker as a result of this incident.</p>
Cause Description:	Critique/Fact Finding Performed 2/11/10
Operating Conditions:	Normal
Activity Category:	Construction
Immediate Action(s):	Work was suspended. Notifications were made.
FM Evaluation:	EOC # 15038
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	Yes. Before Further Operation? No By Whom: Causal Analysis Team By When: 03/26/2010
Division or Project:	4000/Building 720 Construction
Plant Area:	Tech Area I
System/Building/Equipment:	480 Volt Chiller/Outside Building 720
Facility Function:	Balance of Plant - Infrastructure (Other Functions not specifically listed in this Category)
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	01K--Inadequate Conduct of Operations - Lockout/Tagout Noncompliance (Electrical) 11G--Other - Subcontractor

	12I--EH Categories - Lockout/Tagout (Electrical or Mechanical) 14E--Quality Assurance - Work Process Deficiency 14G--Quality Assurance - Procurement Deficiency																								
HQ Summary:	On February 9, 2010, a third-tier subcontractor manufacturer's representative was installing a current transformer (CT), sometimes called digital energy monitor, in a chiller located outside Building 720, without installing a lockout/tagout as required. When questioned by an FMOC Electrical Construction Observer, the representative stated that the door acted as the electrical disconnect, and the door was under the control of the representative while the work was being performed. NFPA70E identifies this method of controlling hazardous electrical energy as Individual Qualified Employee Control Procedure under 120.2(D) (1). OSHA requirements prohibit the use of Individual Control. As a result Individual Control is not allowed as a LOTO control method. The manufacturer's representative was unaware that Individual Control was not allowed at SNL and was following the manufacturer's standard work practices. There was no exposure to the worker as a result of this incident. The work was suspended.																								
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Facility Manager:	<table border="1"> <tr> <td>Name</td> <td>Carla Lamb</td> </tr> <tr> <td>Phone</td> <td>(505) 844-1753</td> </tr> <tr> <td>Title</td> <td>ES&H Coordinator - Facilities Management & Ops Ctr</td> </tr> </table>	Name	Carla Lamb	Phone	(505) 844-1753	Title	ES&H Coordinator - Facilities Management & Ops Ctr																		
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13)Report Number:	NE-ID--BEA-MFC-2010-0001 After 2003 Redesign																								
Secretarial Office:	Nuclear Energy, Science and Technology																								
Lab/Site/Org:	Idaho National Laboratory																								

Facility Name:	Materials and Fuels Complex		
Subject/Title:	Electrical Junction Box Struck by Front End Loader While Removing Snow		
Date/Time Discovered:	02/09/2010 14:30 (MTZ)		
Date/Time Categorized:	02/10/2010 12:00 (MTZ)		
Report Type:	Notification		
Report Dates:	Notification	02/11/2010	17:09 (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 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)		
Cause Codes:			
ISM:			
Subcontractor Involved:	No		
Occurrence Description:	<p>On 02/09/2010 at approximately 1339, a Heavy Equipment Operator (HEO) was operating a front end loader in a security protected area at the Materials and Fuels Complex (MFC) on the Idaho National Laboratory (INL) removing snow when he struck an electrical junction box hidden beneath the snow with the blade of the from end loader. The security protected area is not normally accessed for snow removal. When the front end loader struck the junction box it damaged a conduit and severed at least one 120 volt conductor running inside the conduit, resulting in a trip of one of the electrical breakers providing power to conductors running through the junction box. The HEO did not observe any electrical arc flash and was unaware of what he had struck since the junction box was buried beneath the snow. The HEO stopped work and notified his manager and facility management who responded immediately.</p> <p>The tripped breaker resulted in a loss of power to some security equipment and some of the plant perimeter lights.</p> <p>There were no injuries as a result of this event.</p> <p>It was initially determined on 02/09/2010 that this event was not ORPS reportable. After a critique was held on 02/10/2010 it was determined that this event was ORPS reportable as a Management Concern under 10(2c).</p>		

Cause Description:	
Operating Conditions:	Normal Operations
Activity Category:	Maintenance
Immediate Action(s):	<ol style="list-style-type: none"> 1. Snow removal in the security protected area was stopped and personnel access to the area was controlled. 2. Security implemented compensatory measures for their equipment being out of service. 3. The power panel with the tripped breaker was deenergized and a LO/TO was initiated. The leads powering the conductors in the damaged junction box were lifted from the tripped breaker and the power panel was reenergized.
FM Evaluation:	
DOE Facility Representative Input:	
DOE Program Manager Input:	
Further Evaluation is Required:	<p>Yes. Before Further Operation? No By Whom: By When:</p>
Division or Project:	Facilities and Site Services/Facility Management
Plant Area:	Security
System/Building/Equipment:	Security Equipment/Perimeter Lighting
Facility Function:	Balance-of-Plant - Safeguards/security
Corrective Action:	
Lessons(s) Learned:	
HQ Keywords:	05D--Mechanical/Structural - Mechanical Equipment Failure/Damage 07C--Electrical Systems - Power Outage 07D--Electrical Systems - Electrical Wiring 08F--OSHA Reportable/Industrial Hygiene - Industrial Operations Issues 08J--OSHA Reportable/Industrial Hygiene - Near Miss (Electrical) 11D--Other - Natural Phenomena 12G--EH Categories - Industrial Operations 14E--Quality Assurance - Work Process Deficiency
HQ Summary:	<p>On February 9, 2010, a Heavy Equipment Operator was removing snow with a front-end loader in a security protected area at the Materials and Fuels Complex when he struck an electrical junction box hidden beneath the snow with the blade of the loader. The security protected area is not normally accessed for snow removal. When the front-end loader struck the junction box, it damaged a conduit and severed at least one 120-volt conductor running inside the conduit, resulting in a trip of one of the circuit breakers providing power to conductors running through the junction box. The operator did not see any electrical arc flash and was</p>

	unaware of what he had struck because the junction box was buried beneath the snow. The operator stopped work and notified his manager and facility management who responded immediately. The tripped circuit breaker resulted in a loss of power to some security equipment and some of the plant perimeter lights. The power panel with the tripped circuit breaker was de-energized and a lockout/tagout was initiated. There were no injuries as a result of this event and Security implemented compensatory measures for their equipment being out of service.			
Similar OR Report Number:				
Facility Manager:	Name	Lively, David B.		
	Phone	(208) 533-7438		
	Title	Facility Complex Manager		
Originator:	Name	ALLEN, JEFFREY K		
	Phone	(208) 526-5320		
	Title	OPERATIONS ASSISTANT		
HQ OC Notification:	Date	Time	Person Notified	Organization
	NA	NA	NA	NA
Other Notifications:	Date	Time	Person Notified	Organization
	02/10/2010	12:00 (MTZ)	Scott D. McBride	F&SS
	02/10/2010	13:00 (MTZ)	Lance L. Lacroix	DOE-ID
Authorized Classifier(AC):	Jeffrey L. Garner Date: 02/11/2010			

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 at (800) 473-4375. Hours: 7:30 a.m. - 5:00 p.m., Mon - Fri (ETZ).
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