

Job Risk Analysis

Name(s) of Risk Team Members: A. Etkin, W. Lamar, D. McDonald, D. Meany				Point Value → Parameter ↓	1	2	3	4	5							
Job Title: Working on or near Energized Electrical Parts Job Number or Job Identifier: JRA 6-06				Frequency (B)	≤once/year	≤once/month	≤once/week	≤once/shift	>once/shift							
Job Description: Install bypass between terminals 11 to 12 on relay 3K65 in the Access Control System.				Severity (C)	First Aid Only	Medical Treatment	Lost Time	Partial Disability	Death or Permanent Disability							
Training and Procedures List (optional):				Likelihood (D)	Extremely Unlikely	Unlikely	Possible	Probable	Multiple							
Approved by: <i>E. Lessard</i> Date: 5-24-2006 Rev. #: 0																
Stressors (if applicable, please list all):				Reason for Revision (if applicable):			Comments:									
				Before Additional Controls					After Additional Controls							
Job Step / Task	Hazard	Control(s)	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	Control(s) Added to Reduce Risk	Stressors Y/N	# of People A	Frequency B	Severity C	Likelihood D	Risk* AxBxCxD	% Risk Reduction
Prepare documentation and obtain approval of bypass	None	None	N	5	2	1	1	10								
Position safety watch, system expert, observer and worker	Shock or electrocution	All equipment is listed or reviewed by CEE, Tier 1 inspections, procedures, training, drawings, energized electrical work permits, qualified technicians, postings, locked areas, guarding, work planning, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	4	2	1	1	8	See Further Description below.							

Position safety watch, system expert, observer and worker	Arc Blast	Training, Limited power source, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	4	2	1	1	8								
Walk-down details of bypass	Shock or electrocution	All equipment is listed or reviewed by CEE, Tier 1 inspections, procedures, training, drawings, energized electrical work permits, qualified technicians, postings, locked areas, guarding, work planning, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	2	2	1	2	8								
Walk-down details of bypass	Arc Blast	Training, Limited power source, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	2	2	1	1	4								
Connect one end of jumper to nonenergized terminal of relay 3K65	Shock or electrocution	All equipment is listed or reviewed by CEE, Tier 1 inspections, procedures, training, drawings, energized electrical work permits, qualified technicians, postings, locked areas, guarding, work planning, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	1	2	1	1	2								

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Connect one end of jumper to energized terminal of relay 3K65	Shock or electrocution	All equipment is listed or reviewed by CEE, Tier 1 inspections, procedures, training, drawings, energized electrical work permits, qualified technicians, postings, locked areas, guarding, work planning, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	1	2	1	2	4								
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Confirm relay 3K66 is energized	Shock or electrocution	All equipment is listed or reviewed by CEE, Tier 1 inspections, procedures, training, drawings, energized electrical work permits, qualified technicians, postings, locked areas, guarding, work planning, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	1	2	1	1	2								

Confirm relay 3K66 is energized	Arc Blast	Training, Limited power source, C-AD management has implemented requirements and mechanisms to meet PPE requirements identified in NFPA 70E as of December 22, 2004. Enhanced PPE requirements established April 2006. Implementation of a plan to meet OSHA's NRTL requirements began June 1, 2005.	N	1	2	1	1	2								
Confirm AGS ring lights are on when ring is in CA state.	None	None	N	1	1	1	1	1								
Further Description of Controls Added to Reduce Risk:																
<u>Temporary Procedure to Open or Close Breakers and Switches</u> to enhance NFPA 70 E PPE requirements, enhanced awareness, PPE labels on breakers, panels or switches																
*Risk:	0 to 20	21 to 40	41-60	61 to 80	81 or greater											
	Negligible	Acceptable	Moderate	Substantial	Intolerable											