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| **FACILITY RISK ASSESSMENT FOR BATTERY ROOM** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Battery Room** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Inspection and maintenance at battery room | Low space | | 2 | 2 | 2 | 0 | 8 | Proper planning, reorganize | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Electrical shock | | 2 | 1 | 5 | 0 | 10 | Hand gloves, safety shoes, helmet. insulated tools. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Battery orientation | | 2 | 1 | 5 | 0 | 10 | Proper planning, reorganize | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Electrolyte | | 2 | 2 | 5 | 0 | 20 | Hand gloves, safety shoes, apron, goggle, helmet, insulated tools. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Suffocation | | 5 | 1 | 3 | 0 | 15 | Ventilation fan | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Low illumination | | 5 | 1 | 3 | 0 | 15 | Install light | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR BATTERY ROOM** |

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| Job Title: **Battery Room**  **Inspection and maintenance at battery room** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Specific gravity measurement/ Top up. | Spillage | Apron, hand gloves goggles, safety shoes, insulated tools. | N | | 2 | 2 | 2 | 3 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Electrical shock | N | | 2 | 2 | 2 | 2 | 0 | | 16 |  | |  | | |  |  |  |  | |  |  |  |
| Short circuit | N | | 2 | 2 | 2 | 2 | 0 | | 16 |  | |  | | |  |  |  |  | |  |  |  |
| Cleaning/ Tightening/ Greasing | Slipping of wrench | N | | 2 | 2 | 2 | 2 | 0 | | 16 |  | |  | | |  |  |  |  | |  |  |  |
| Short circuit | N | | 2 | 2 | 2 | 2 | 0 | | 16 |  | |  | | |  |  |  |  | |  |  |  |
| Cell voltage measurement | Electrical shock | N | | 2 | 2 | 2 | 2 | 0 | | 16 |  | |  | | |  |  |  |  | |  |  |  |
| Short circuit | N | | 2 | 2 | 2 | 2 | 0 | | 16 |  | |  | | |  |  |  |  | |  |  |  |
| Inspection | Suffocation | N | | 2 | 5 | 1 | 2 | 0 | | 10 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR BATTERY ROOM** |

(contd.)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (BUS)** |

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| Area/Facility Title: **Switch yard (Bus)** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule & Emergency Maintenance | HV shock | | 3 | 5 | 4 | 0 | 60 | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Ladder. Safe distance from live parts. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Fall down from height | | 2 | 5 | 4 | 0 | 40 | Hand gloves, safety shoes, safety belt. Helmet. Ladder | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (BUS)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Switch yard (Bus)**  **Schedule & Emergency Maintenance** | | | | | | Point Value →  Parameter ↓ | | | | | | | 1 | | | 2 | | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | | ≤once/year | | | ≤once/month | | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | | First Aid Only | | | Medical Treatment | | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | | Extremely Unlikely | | | Unlikely | | | | Possible | | | | | Probable | | | Multiple |
|  | | | | | Before Additional Controls | | | | | | | | | |  | | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | | Control(s) | | Stressors Y/N | | # of People A | Frequency B | | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Tightening/Nut Bolt changing, | Stressors | | Proper isolation & grounding, hand gloves, safety shoes, safety belt, helmet. Proper use of ladder, | | Y | | 2 | 2 | | 3 | 3 | 0 | | 36 |  | | |  | | |  |  |  |  | |  |  |  |
| Fall down From height | | Y | | 2 | 1 | | 5 | 4 | 0 | | 40 |  | | |  | | |  |  |  |  | |  |  |  |
| Changing Disc insulator. | Stressors | | Y | | 2 | 2 | | 2 | 3 | 0 | | 24 |  | | |  | | |  |  |  |  | |  |  |  |
| Fall down From height | | N | | 2 | 2 | | 3 | 4 | 0 | | 48 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | | All damaged electrical appliances shall be removed from service, use proper PPE | | N | | 2 | 4 | | 2 | 3 | 0 | | 48 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | | 2 | 3 | | 3 | 3 | 0 | | 54 |  | | |  | | |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | | 41 to60 | | | | | | | | 61 to80 | | | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | | Moderate | | | | | | | | Substantial | | | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (CIRCUIT BREAKER)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch yard (Circuit Breaker)** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule & Emergency maintenance, | Height | | 3 | 5 | 3 | 0 | 45 | Hang gloves, safety belt, safety shoes, helmet, ladder. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| High Voltage shock | | 3 | 5 | 4 | 0 | 60 | Proper grounding, hang gloves, safety belt, safety shoes, helmet, ladder | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Porcelain Blast | | 1 | 5 | 5 | 0 | 25 | Safety shoes, helmet | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Bird or squirrel or snake | | 4 | 3 | 4 | 0 | 48 | Inspection, horn, air gun, regular cleaning of grasses and bushes | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (CIRCUIT BREAKER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Switch yard (Circuit Breaker)**  **Emergency or Schedule maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Nut bolt tightening/ CB changing / Pole changing, | Stress | Hang gloves, safety belt, safety shoes, helmet, ladder, proper tools & tackle chain ton. | Y | | 4 | 2 | 3 | 3 | 0 | | 72 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height. | Y | | 2 | 2 | 4 | 4 | 0 | | 64 |  | |  | | |  |  |  |  | |  |  |  |
| Pole or C.B charge | Y | | 5 | 1 | 5 | 2 | 0 | | 50 |  | |  | | |  |  |  |  | |  |  |  |
| During grounding led connection. | Voltage induction | Hand gloves safety belt, safety shoes, helmet, hot stick. | Y | | 1 | 2 | 3 | 3 | 0 | | 18 |  | |  | | |  |  |  |  | |  |  |  |
| Measuring Insulation & conductance. | LV shock | Hand gloves safety belt, safety shoes, helmet, grounding, | Y | | 2 | 1 | 4 | 4 | 0 | | 32 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (CIRCUIT BREAKER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (CURRENT TRANSFORMER)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch yard** (**Current Transformer)** | | | | | | | | Point Value →  Parameter ↓ | | | | 1 | | | 2 | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | ≤once/year | | | ≤once/month | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | First Aid Only | | | Medical Treatment | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | Very Unlikely | | | Unlikely | Possible | | | | Probable | | Multiple |
|  | | Before Controls | | | | |  | | After Initial Controls | | | | | |  | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule & Emergency maintenance. | Fall from height | 3 | 5 | 3 | 0 | 45 | Hang gloves, safety belt, safety shoes, helmet, proper use of ladder. | |  |  |  | |  |  |  |  |  |  |  | |  |  |
| High Voltage shock | 3 | 5 | 4 | 0 | 60 | Proper Grounding, hang gloves, Safety belt, safety shoes, helmet, proper use of ladder | |  |  |  | |  |  |  |  |  |  |  | |  |  |
| Schedule & Emergency maintenance | Porcelain Blast | 1 | 5 | 5 | 0 | 25 | safety shoes, helmet. Maintaining safe distance | |  |  |  | |  |  |  |  |  |  |  | |  |  |
| Bird or squirrel or snake | 4 | 2 | 4 | 0 | 32 | Inspection, horn, air Gun, regular cleaning of grasses and bushes | |  |  |  | |  |  |  |  |  |  |  | |  |  |

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (CURRENT TRANSFORMER)** |

(Contd.)

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | |  |  |  |  |  |  | |  |  |  |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | 41 to60 | | | | | | | 61 to80 | | | | 81 or greater | | |
|  | | Negligible | | | | Acceptable | | | Moderate | | | | | | | Substantial | | | | Intolerable | | |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (CURRENT TRANSFORMER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Switch yard** (**Current Transformer)**  **Emergency and Schedule maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Nut bolt tightening/C.T changing | Stress | Hang gloves, safety belt, safety shoes, helmet, ladder, proper tools & tackle chain ton. | Y | | 4 | 2 | 3 | 3 | 0 | | 72 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height. | Y | | 2 | 1 | 4 | 4 | 0 | | 32 |  | |  | | |  |  |  |  | |  |  |  |
| C.T change | Y | | 5 | 1 | 5 | 2 | 0 | | 50 |  | |  | | |  |  |  |  | |  |  |  |
| During grounding led connection. | Voltage induction | Hand gloves safety belt, safety shoes, helmet, Hot stick. | Y | | 1 | 2 | 2 | 3 | 0 | | 12 |  | |  | | |  |  |  |  | |  |  |  |
| Measuring Insulation & conductance. | LV shock | Hand gloves safety belt, safety shoes, helmet, grounding, | Y | | 2 | 1 | 4 | 3 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (CURRENT TRANSFORMER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR CAPACITOR BANK** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Capacitor Bank** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Emergency & schedule maintenance | Low Space | | 1 | 5 | 3 | 0 | 15 | Proper use of PPE, regular cleaning | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| High Voltage shock | | 1 | 5 | 4 | 0 | 20 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Capacitor Blast | | 1 | 5 | 5 | 0 | 25 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Bird or squirrel | | 3 | 2 | 3 | 0 | 18 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR CAPACITOR BANK** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Capacitor Bank**  **Emergency and Schedule maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Nut bolt tightening/ LA changing/ Cap. cell change, capacitance/ inductance test | NCT charge from semi dead part | Hang gloves, safety belt, safety shoes, helmet, 15 min delay after shutdown.  Proper grounding. | Y | | 3 | 1 | 4 | 3 | 0 | | 36 |  | |  | | |  |  |  |  | |  |  |  |
| HV shock from adjacent live part | Y | | 2 | 1 | 4 | 4 | 0 | | 32 |  | |  | | |  |  |  |  | |  |  |  |
| Capacitor charge from semi dead part | Y | | 2 | 1 | 5 | 3 | 0 | | 30 |  | |  | | |  |  |  |  | |  |  |  |
| During grounding led connection. | Voltage induction | Hand gloves safety belt, safety shoes, helmet | Y | | 1 | 1 | 4 | 3 | 0 | | 12 |  | |  | | |  |  |  |  | |  |  |  |
| Measuring capacitance | HV shock or Voltage induction | Hand gloves safety belt, safety shoes, helmet | Y | | 2 | 1 | 4 | 3 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR CAPACITOR BANK** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR CONTROL ROOM** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Control Room** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Room space | Low space | | 2 | 3 | 4 | 0 | 24 | Hand gloves, safety shoes, helmet**.** | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Control panel Inspection. | Shock(AC/DC) | | 1 | 3 | 5 | 0 | 15 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Control panel | Emit heat form device and heater | | 5 | 2 | 5 | 0 | 50 | Effective functioning of ac | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| CT terminal open | Meter burning | | 1 | 5 | 3 | 0 | 15 | Proper tighten. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Short ckt. | Fire | | 3 | 5 | 3 | 0 | 45 | Firefighting equipment | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Lose connection | Body not earthed properly | | 5 | 2 | 1 | 0 | 10 | Proper tighten. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR CONTROL ROOM** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Control Room**  **Operation, Control Panel Maintenance, Test, Troubleshooting** | | | | | | Point Value →  Parameter ↓ | | | | | | | 1 | | | 2 | | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | | ≤once/year | | | ≤once/month | | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | | First Aid Only | | | Medical Treatment | | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | | Extremely Unlikely | | | Unlikely | | | | Possible | | | | | Probable | | | Multiple |
|  | | | | | Before Additional Controls | | | | | | | | | |  | | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | | Control(s) | | Stressors Y/N | | # of People A | Frequency B | | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Operation/Cleaning/ Wiring/ Continuity test/ functionality test/ troubleshooting. | LV AC shock | | Hand gloves, safety shoes, helmet. Insulated tools. | | N | | 2 | 2 | | 5 | 3 | 0 | | 60 |  | | |  | | |  |  |  |  | |  |  |  |
| 220 or 110 VDC shock | | N | | 2 | 1 | | 3 | 5 | 0 | | 30 |  | | |  | | |  |  |  |  | |  |  |  |
| Short Ckt. | | N | | 2 | 1 | | 4 | 2 | 0 | | 16 |  | | |  | | |  |  |  |  | |  |  |  |
| Burning from Electric heater | | N | | 2 | 1 | | 1 | 2 | 0 | | 4 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | | All damaged electrical appliances shall be removed from service, use proper PPE | | N | | 2 | 4 | | 2 | 3 | 0 | | 48 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | | 2 | 3 | | 3 | 3 | 0 | | 54 |  | | |  | | |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | | 41 to60 | | | | | | | | 61 to80 | | | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | | Moderate | | | | | | | | Substantial | | | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (ISOLATOR)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: Switch yard (**Isolator)** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule & Emergency maintenance | Fall from height | | 3 | 5 | 3 | 0 | 45 | Safety belt, safety shoes, helmet, proper use of ladder. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| High Voltage shock | | 3 | 5 | 3 | 0 | 45 | Proper grounding, hang gloves, safety belt, safety shoes, helmet, ladder | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Porcelain Blast | | 1 | 5 | 5 | 0 | 25 | Safety shoes, helmet | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Bird or squirrel or snake | | 4 | 2 | 4 | 0 | 32 | Inspection, horn, air gun, regular cleaning of grasses & bushes | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (ISOLATOR)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Switch Yard (Isolator)**  **Emergency or Schedule maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Nut bolt tightening / Isolator changing | Stress | Hang gloves, safety belt, safety shoes, helmet, ladder, proper tools & tackle chain ton. | Y | | 4 | 2 | 3 | 3 | 0 | | 72 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height. | Y | | 2 | 1 | 4 | 4 | 0 | | 32 |  | |  | | |  |  |  |  | |  |  |  |
| P.T charge | Y | | 5 | 1 | 5 | 2 | 0 | | 50 |  | |  | | |  |  |  |  | |  |  |  |
| During grounding led connection. | Voltage induction | Hand gloves safety belt, safety shoes, helmet, hot stick. | Y | | 1 | 2 | 3 | 3 | 0 | | 18 |  | |  | | |  |  |  |  | |  |  |  |
| Measuring Insulation, Contact resistance. | LV shock | Hand gloves safety belt, safety shoes, helmet, grounding, | Y | | 2 | 1 | 4 | 3 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (ISOLATOR)** |

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR LIGHTENING ARRESTOR** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: Switch yard (**Lightning Arrestor)** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule & Emergency maintenance. | Fall from height | | 3 | 5 | 4 | 0 | 60 | Safety belt, safety shoes, helmet, ladder. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| High Voltage shock | | 3 | 5 | 4 | 0 | 60 | Proper grounding, hang gloves, safety belt, safety shoes, helmet, ladder | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Porcelain Blast | | 1 | 5 | 5 | 0 | 25 | Safety shoes, helmet | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Bird or squirrel or snake | | 4 | 2 | 4 | 0 | 32 | Inspection, horn, air gun, regular cleaning of grasses and bushes. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR LIGHTENING ARRESTOR** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Switch yard (Lightning Arrestor)**  **Emergency or Schedule maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Nut bolt tightening /L.A changing | Stress | Hang gloves, safety belt, safety shoes, helmet, ladder, proper tools & tackle chain ton. | Y | | 4 | 2 | 3 | 3 | 0 | | 72 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height. | Y | | 2 | 1 | 4 | 4 | 0 | | 32 |  | |  | | |  |  |  |  | |  |  |  |
| L.A charge | Y | | 5 | 1 | 5 | 2 | 0 | | 50 |  | |  | | |  |  |  |  | |  |  |  |
| During grounding led connection. | Voltage induction | Hand gloves safety belt, safety shoes, helmet, hot stick. | Y | | 1 | 2 | 2 | 3 | 0 | | 12 |  | |  | | |  |  |  |  | |  |  |  |
| Measuring Insulation | LV shock | Hand gloves safety belt, safety shoes, helmet, grounding, | Y | | 2 | 1 | 4 | 3 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR LIGHTENING ARRESTOR** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (POTENTIAL TRANSFORMER)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch yard (Potential Transformer)** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule & Emergency maintenance. | Fall from height | | 3 | 5 | 4 | 0 | 60 | Hang gloves, safety belt, safety shoes, helmet, ladder. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| High Voltage shock | | 3 | 5 | 4 | 0 | 60 | Proper grounding, hang gloves, safety belt, safety shoes, helmet, ladder | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Porcelain Blast | | 1 | 5 | 5 | 0 | 25 | Safety shoes, helmet | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Bird or squirrel or snake | | 4 | 2 | 4 | 0 | 32 | Inspection, horn, air gun, regular cleaning of grasses and bushes | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (POTENTIAL TRANSFORMER)** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Switch yard (Potential Transformer)**  **Emergency or Schedule maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Nut bolt tightening /P.T changing | Stress | Hang gloves, safety belt, safety shoes, helmet, ladder, proper tools & tackle chain ton. | Y | | 4 | 2 | 3 | 3 | 0 | | 72 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height. | Y | | 2 | 1 | 4 | 4 | 0 | | 32 |  | |  | | |  |  |  |  | |  |  |  |
| P.T charge | Y | | 5 | 1 | 5 | 2 | 0 | | 50 |  | |  | | |  |  |  |  | |  |  |  |
| During grounding led connection. | Voltage induction | Hand gloves safety belt, safety shoes, helmet, hot stick. | Y | | 1 | 2 | 3 | 3 | 0 | | 18 |  | |  | | |  |  |  |  | |  |  |  |
| Measuring Insulation | LV shock | Hand gloves safety belt, safety shoes, helmet, grounding, | Y | | 2 | 1 | 4 | 4 | 0 | | 32 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (POTENTIAL TRANSFORMER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (POWER TRANSFORMER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch Yard (Power Transformer)** | | | | | | | | Point Value →  Parameter ↓ | | | | 1 | | | 2 | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | ≤once/year | | | ≤once/month | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | First Aid Only | | | Medical Treatment | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | Very Unlikely | | | Unlikely | Possible | | | | Probable | | Multiple |
|  | | Before Controls | | | | |  | | After Initial Controls | | | | | |  | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule & emergency maintenance | HV shock | 2 | 5 | 3 | 0 | 30 | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Ladder. Safe distance from live parts. | |  |  |  | |  |  |  |  |  |  |  | |  |  |
| LV shock | 2 | 5 | 3 | 0 | 30 |  |  |  | |  |  |  |  |  |  |  | |  |  |
| Fall down from height | 5 | 4 | 3 | 0 | 60 | Hand gloves, safety shoes, safety belt. Helmet. Ladder | |  |  |  | |  |  |  |  |  |  |  | |  |  |
| HV shock | 2 | 5 | 3 | 0 | 30 | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Ladder. Safe distance from live parts. | |  |  |  | |  |  |  |  |  |  |  | |  |  |
| Transformer oil | High temperature due to short circuitcan can cause explosion | 4 | 4 | 4 | 0 | 64 | Cooling fan, protection system, oil schedule check. | |  |  |  | |  |  |  |  |  |  |  | |  |  |

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| **FACILITY RISK ASSESSMENT FOR SWITCH YARD (POWER TRANSFORMER)** |

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|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Transformer breather box | Presence of humidity in the air breather can cause explosion | | 1 | 2 | 3 | 0 | 6 | Monitoring | |  |  |  |  |  |  | |  |  |  |  |  |  |
| CT , PT,LA body | Burst & human injury | | 1 | 2 | 3 | 0 | 6 | Regular checked any abnormality | |  |  |  |  |  |  | |  |  |  |  |  |  |
| Switch Yard equipment | Electrocution | | 4 | 5 | 4 | 0 | 80 | Follow safety sign, Use appropriate PPE, proper earthing. | |  |  |  |  |  |  | |  |  |  |  |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | |  |  |  |  |  |  | |  |  |  |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | 41 to60 | | | | | | | 61 to80 | | | | 81 or greater | | |
|  | | Negligible | | | | Acceptable | | | Moderate | | | | | | | Substantial | | | | Intolerable | | |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (POWER TRANSFORMER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Switch Yard (Power Transformer)**  **Power Transformer Schedule & Emergency Maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ Tightening | Spillage | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Ladder | Y | | 4 | 2 | 3 | 3 | 0 | | 72 |  | |  | | |  |  |  |  | |  |  |  |
| Electrical shock | Y | | 2 | 2 | 3 | 3 | 0 | | 36 |  | |  | | |  |  |  |  | |  |  |  |
| Short circuit | Y | | 4 | 2 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |
| Insulation measurement | Electrical shock | Hand gloves, safety shoes, safety belt. Helmet. Proper grounding. | Y | | 2 | 2 | 3 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |
| Short circuit | N | | 2 | 2 | 2 | 4 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Testing (O.C, S.C, Tan-delta, SFRA, Winding resistance etc. ) | Electrical shock | Hand gloves, safety shoes, safety belt. Helmet. Proper grounding | Y | | 2 | 2 | 2 | 3 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Short circuit | N | | 2 | 2 | 2 | 4 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Inspection | Suffocation | Proper ventilation | y | | 1 | 1 | 5 | 5 | 0 | | 25 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR SWITCH YARD (POWER TRANSFORMER)** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR RELAY PANEL** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Relay Panel** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Maintenance, testing & troubleshooting | Compact area | | 1 | 3 | 3 | 0 | 9 | Proper isolation & grounding, hand gloves, safety shoes, Safety belt. helmet. Safe distance from live parts | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| LV AC shock | | 1 | 2 | 5 | 0 | 10 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| DC shock | | 1 | 4 | 3 | 0 | 12 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| HV open CT shock | | 1 | 5 | 3 | 0 | 15 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Electrical heater | | 1 | 1 | 3 | 0 | 3 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Body not earthed properly | | 5 | 2 | 1 | 0 | 10 |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR RELAY PANEL** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Relay Panel**  **Maintenance/ Test/ Troubleshooting** | | | | | | Point Value →  Parameter ↓ | | | | | | | 1 | | | 2 | | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | | ≤once/year | | | ≤once/month | | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | | First Aid Only | | | Medical Treatment | | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | | Extremely Unlikely | | | Unlikely | | | | Possible | | | | | Probable | | | Multiple |
|  | | | | | Before Additional Controls | | | | | | | | | |  | | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | | Control(s) | | Stressors Y/N | | # of People A | Frequency B | | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ wiring/ continuity test/ relay functionality test. | HV open ct shock | | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Safe distance from live parts | | N | | 2 | 1 | | 5 | 2 | 0 | | 20 |  | | |  | | |  |  |  |  | |  |  |  |
| LV ac shock | | N | | 2 | 1 | | 2 | 5 | 0 | | 20 |  | | |  | | |  |  |  |  | |  |  |  |
| Dc shock | | N | | 2 | 1 | | 4 | 2 | 0 | | 16 |  | | |  | | |  |  |  |  | |  |  |  |
| Burning from heater | | N | | 2 | 1 | | 1 | 2 | 0 | | 4 |  | | |  | | |  |  |  |  | |  |  |  |
| Pinching | | N | | 2 | 1 | | 1 | 2 | 0 | | 4 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | | All damaged electrical appliances shall be removed from service, use proper PPE | | N | | 2 | 4 | | 2 | 3 | 0 | | 48 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | | 2 | 3 | | 3 | 3 | 0 | | 54 |  | | |  | | |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | | 41 to60 | | | | | | | | 61 to80 | | | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | | Moderate | | | | | | | | Substantial | | | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR SF6 GAS FILLING** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: Switch yard (**SF6 Gas Filling in C.B)** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | Risk\* (AxBxC)+E | Initial Controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Gas filling | High pressure gas | | 3 | 3 | 4 | 0 | 36 | Hand gloves, musk, safety shoes, safety belt, helmet. Maintain proper instructions | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR SF6 GAS FILLING** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: Switch yard (**SF6 Gas Filling in C.B)** | | | | | | Point Value →  Parameter ↓ | | | | | | | 1 | | | 2 | | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | | ≤once/year | | | ≤once/month | | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | | First Aid Only | | | Medical Treatment | | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | | Extremely Unlikely | | | Unlikely | | | | Possible | | | | | Probable | | | Multiple |
|  | | | | | Before Additional Controls | | | | | | | | | |  | | | | After Additional Controls | | | | | | | | |  |
| Job step/task | Hazard | | Control(s) | | Stressors Y/N | | # of People A | Frequency B | | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Rolling gas cylinder from trolley | Cylinder fall down | | Hand gloves, musk, safety shoes, safety belt, helmet, careful carrying | | Y | | 3 | 3 | | 3 | 2 | 0 | | 54 |  | | |  | | |  |  |  |  | |  |  |  |
| Gas filling | Gas leakage | | N | | 2 | 2 | | 4 | 2 | 0 | | 32 |  | | |  | | |  |  |  |  | |  |  |  |
| Leakage of gas pipe | | Y | | 2 | 2 | | 3 | 2 | 0 | | 24 |  | | |  | | |  |  |  |  | |  |  |  |
| Without regulator filling | Over charge | | Y | | 3 | 3 | | 4 | 1 | 0 | | 36 |  | | |  | | |  |  |  |  | |  |  |  |
| During opening & tithing nozzle. | Man fall down from height. | | Hand gloves, safety shoes, safety belt, helmet. | | Y | | 2 | 2 | | 4 | 3 | 0 | | 48 |  | | |  | | |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | | 41 to60 | | | | | | | | 61 to80 | | | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | | Moderate | | | | | | | | Substantial | | | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR TRANSMISSION LINE** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Transmission Line** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy a | Severity b | Likelihood c | Legal exposure  E | Risk\* (axbxc)+e | Initial controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Schedule and emergency maintenance | Hv shock | | 2 | 5 | 4 | 0 | 40 | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Proper use of ladder. Safe distance from live parts. | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Fall down from height | | 1 | 5 | 4 | 0 | 20 | Safety belt. Helmet. Proper use of ladder | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Overhead Lines | Contact with or near approach to a live high voltage | | 5 | 4 | 4 | 0 | 80 | Use proper PPE, maintain safe distance | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR TRANSMISSION LINE** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Transmission Line**  **Schedule & Emergency Maintenance** | | | | Point Value →  Parameter ↓ | | | | | | 1 | | | 2 | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | ≤once/year | | | ≤once/month | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | First Aid Only | | | Medical Treatment | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | Extremely Unlikely | | | Unlikely | | | Possible | | | | | Probable | | | Multiple |
|  | | | Before Additional Controls | | | | | | | | |  | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | Control(s) | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Cleaning/ tightening/ nut bolt changing, | Stressors | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Ladder | Y | | 2 | 2 | 3 | 3 | 0 | | 36 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height | Y | | 2 | 1 | 5 | 4 | 0 | | 40 |  | |  | | |  |  |  |  | |  |  |  |
| Changing disc insulator. Tower angle replacement | Stressors | Y | | 2 | 2 | 2 | 3 | 0 | | 24 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height | N | | 2 | 2 | 3 | 4 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |
| Row or tree trimming. | Stressors | Proper isolation & grounding, hand gloves, safety shoes, safety belt. Helmet. Ladder, saw, rough, hot stick | Y | | 4 | 2 | 4 | 2 | 0 | | 64 |  | |  | | |  |  |  |  | |  |  |  |
| Fall down from height | Y | | 4 | 2 | 4 | 2 | 0 | | 64 |  | |  | | |  |  |  |  | |  |  |  |
| Hv shock | Y | | 2 | 2 | 5 | 3 | 0 | | 60 |  | |  | | |  |  |  |  | |  |  |  |
| Use of electrical appliances | Electrocution or injury | All damaged electrical appliances shall be removed from service, use proper PPE | N | | 2 | 4 | 2 | 3 | 0 | | 48 |  | |  | | |  |  |  |  | |  |  |  |

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| **JOB RISK ASSESSMENT FOR TRANSMISSION LINE** |

(Contd.)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Use of Metallic Tapes and Other Conductive Equipment | Electrocution or injury | | Metallic tapes & conductive equipment shall avoid where applicable, use of proper PPE | | N | 2 | 3 | | 3 | 3 | 0 | 54 |  | |  |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | 41 to60 | | | | | | 61 to80 | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | Moderate | | | | | | Substantial | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR FIRE FIGHTING SYSTEM** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Fire Fighting System** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy a | Severity b | Likelihood c | Legal exposure  E | Risk\* (axbxc)+e | Initial controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Fire Fighting system | Fire | | 2 | 2 | 2 | 0 | 8 | PPE & proper safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Portable ABC Dry Powder | Pressurized Cylinder | | 1 | 1 | 2 | 0 | 2 | Protection as per Safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Portable CO2 Extinguisher | Pressurized Cylinder | | 1 | 1 | 2 | 0 | 2 | Protection as per Safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| DCP Extinguisher | Pressurized Cylinder | | 1 | 1 | 2 | 0 | 2 | Protection as per Safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Portable Dry Powder | Pressurized Cylinder | | 1 | 1 | 2 | 0 | 2 | Protection as per Safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| **JOB RISK ASSESSMENT FOR FIRE FIGHTING SYSTEM** |

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| Job Title: **Fire fighting system** | | | | | | Point Value →  Parameter ↓ | | | | | | | 1 | | | 2 | | | | 3 | | | | | 4 | | | 5 | |
| Frequency  (B) | | | | | | | ≤once/year | | | ≤once/month | | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift | |
| Severity  (C) | | | | | | | First Aid Only | | | Medical Treatment | | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability | |
| Likelihood  (D) | | | | | | | Extremely Unlikely | | | Unlikely | | | | Possible | | | | | Probable | | | Multiple | |
|  | | | | | Before Additional Controls | | | | | | | | | |  | | | | After Additional Controls | | | | | | | | |  | |
| Job Step/Task | Hazard | | Control(s) | | Stressors Y/N | | # of People A | Frequency B | | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Use of fire extinguisher | High pressure gas | | Follow instructions carefully | | Y | | 3 | 1 | | 2 | 2 | 0 | | 12 |  | | |  | | |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | | 41 to60 | | | | | | | | 61 to80 | | | | | | | | 81 or greater | | | | |
|  | | Negligible | | Acceptable | | | | | Moderate | | | | | | | | Substantial | | | | | | | | Intolerable | | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| **FACILITY RISK ASSESSMENT FOR OFFICE** |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Office** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy a | Severity b | Likelihood c | Legal exposure  E | Risk\* (axbxc)+e | Initial controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Office | Posture, Eyestrain | | 5 | 1 | 4 | 0 | 20 | Protection as per Safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Computer, Printer | Posture, Eyestrain | | 5 | 1 | 4 | 0 | 20 | Protection as per Safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| computer | electricity, radiation | | 5 | 1 | 4 | 0 | 20 | Protection as per Safety instruction | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Toilets | Human Waste | | 2 | 2 | 3 | 0 | 12 | Clean & disposal | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Electric heater | Fire, Electric shock | | 5 | 1 | 4 | 0 | 20 | Maintain safety cautions | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| C:\Users\A.Noor\AppData\Local\Microsoft\Windows\INetCacheContent.Word\pgcb logo.jpg | **POWER GRID COMPANY OF BANGLADESH LTD.** |
| **JOB RISK ASSESSMENT FOR OFFICE** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: Office | | | | | | Point Value →  Parameter ↓ | | | | | | | 1 | | | 2 | | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | | ≤once/year | | | ≤once/month | | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | | First Aid Only | | | Medical Treatment | | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | | Extremely Unlikely | | | Unlikely | | | | Possible | | | | | Probable | | | Multiple |
|  | | | | | Before Additional Controls | | | | | | | | | |  | | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | | Control(s) | | Stressors Y/N | | # of People A | Frequency B | | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Improper sitting | Back pain | | Follow ergonomics | | Y | | 4 | 5 | | 1 | 3 | 0 | | 60 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of computer | Eye strain, Headache | | Follow ergonomics | | Y | | 4 | 5 | | 1 | 3 | 0 | | 60 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of electric heater | Fire, Electric shock | | Maintain safety cautions | | Y | | 1 | 5 | | 1 | 3 | 0 | | 15 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of other electrical equipment | Fire, Electric shock | | Maintain safety cautions | | Y | | 1 | 5 | | 1 | 3 | 0 | | 15 |  | | |  | | |  |  |  |  | |  |  |  |
| Use of other electrical appliances | Electrocution or injury | | All damaged electrical appliances shall be removed from service, use proper PPE | | N | | 2 | 4 | | 2 | 3 | 0 | | 48 |  | | |  | | |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | | 41 to60 | | | | | | | | 61 to80 | | | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | | Moderate | | | | | | | | Substantial | | | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.

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| C:\Users\A.Noor\AppData\Local\Microsoft\Windows\INetCacheContent.Word\pgcb logo.jpg | **POWER GRID COMPANY OF BANGLADESH LTD.** |
| **FACILITY RISK ASSESSMENT FOR STORAGE** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Storage** | | | | | | | | | Point Value →  Parameter ↓ | | | | | 1 | | | 2 | | 3 | | | | 4 | | 5 |
| Occupancy  Or Use | | | | | ≤once/year | | | ≤once/month | | ≤once/week | | | | ≤once/day | | ≤once/shift |
| Severity | | | | | First Aid Only | | | Medical Treatment | | Lost Time | | | | Partial Disability | | Death or Permanent Disability |
| Likelihood | | | | | Very Unlikely | | | Unlikely | | Possible | | | | Probable | | Multiple |
|  | | | Before Controls | | | | |  | | | After Initial Controls | | | | | |  | | After Additional Controls | | | | | |  |
| Item or activity | Hazard (s) | | Occupancy a | Severity b | Likelihood c | Legal exposure  E | Risk\* (axbxc)+e | Initial controls | | | Occupancy A | Severity B | Likelihood C | | Legal Exposure  E | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | | Occupancy A | Severity B | Likelihood C | Legal Exposure  E | | Risk\* (AxBxC)+E | % Risk Reduction |
| Hazardous material storage | Trimming & fall | | 4 | 1 | 3 | 0 | 12 | Use of PPE | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Lube Oil Storage | Oil Spill and leakage | | 3 | 1 | 4 | 0 | 12 | Use of PPE | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Waste materials storage | Trimming & fall | | 4 | 1 | 3 | 0 | 12 | Use of PPE | | |  |  |  | |  |  |  | |  |  |  |  | |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | | | 21 to40 | | | | 41 to60 | | | | | | | | 61 to80 | | | | 81 or greater | | | |
|  | | Negligible | | | | Acceptable | | | | Moderate | | | | | | | | Substantial | | | | Intolerable | | | |

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| C:\Users\A.Noor\AppData\Local\Microsoft\Windows\INetCacheContent.Word\pgcb logo.jpg | **POWER GRID COMPANY OF BANGLADESH LTD.** |
| **JOB RISK ASSESSMENT FOR STORAGE** |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Job Title: **Storage** | | | | | | Point Value →  Parameter ↓ | | | | | | | 1 | | | 2 | | | | 3 | | | | | 4 | | | 5 |
| Frequency  (B) | | | | | | | ≤once/year | | | ≤once/month | | | | ≤once/week | | | | | ≤once/day | | | ≤once/shift |
| Severity  (C) | | | | | | | First Aid Only | | | Medical Treatment | | | | Lost Time | | | | | Partial Disability | | | Death or Permanent Disability |
| Likelihood  (D) | | | | | | | Extremely Unlikely | | | Unlikely | | | | Possible | | | | | Probable | | | Multiple |
|  | | | | | Before Additional Controls | | | | | | | | | |  | | | | After Additional Controls | | | | | | | | |  |
| Job Step/Task | Hazard | | Control(s) | | Stressors Y/N | | # of People A | Frequency B | | Severity C | Likelihood D | Legal Exposure  E | | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | | | | Stressors Y/N | | # of People A | Frequency B | Severity C | Likelihood D | | Legal Exposure  E | Risk\* (AxBxCxD)+E | % Risk Reduction |
| Walking | Tripping | | Sufficient light, Maintain safety cautions | | N | | 2 | 4 | | 1 | 4 | 0 | | 16 |  | | |  | | |  |  |  |  | |  |  |  |
| Picking any material | Falling | | Maintain safety cautions, Use of PPE | | N | | 2 | 4 | | 1 | 4 | 0 | | 16 |  | | |  | | |  |  |  |  | |  |  |  |
| Further Description of Controls Added to Reduce Risk: | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| \*Risk | | 0 to20 | | 21 to40 | | | | | 41 to60 | | | | | | | | 61 to80 | | | | | | | | 81 or greater | | | |
|  | | Negligible | | Acceptable | | | | | Moderate | | | | | | | | Substantial | | | | | | | | Intolerable | | | |

Each hazard should occupy one line in the risk table. That is, the risk from each hazard is to be assessed individually. A single activity must be entered three times in the table since there are three hazards associated with this activity.

Note: For legal exposure, the value should be either 5 for identified legal requirements or 0 for no such requirements could be identified.