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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Battery Room** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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.)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch yard (Bus)** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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)** |

(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 (CURRENT TRANSFORMER)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch yard** (**Current Transformer)** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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.)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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)** |

(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 CAPACITOR BANK** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Capacitor Bank** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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** |

(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 CONTROL ROOM** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Control Room**  | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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)** |

(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 LIGHTENING ARRESTOR** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: Switch yard (**Lightning Arrestor)** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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** |

(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 SWITCH YARD (POTENTIAL TRANSFORMER)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch yard (Potential Transformer)** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Switch Yard (Power Transformer)** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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)** |

(cond.)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 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)** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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)** |

(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 RELAY PANEL** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Relay Panel** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: Switch yard (**SF6 Gas Filling in C.B)** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 ExposureE | Risk\* (AxBxC)+E | Initial Controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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 |
| OccupancyOr 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 exposureE | Risk\* (axbxc)+e | Initial controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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** |

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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 FIRE FIGHTING SYSTEM** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Fire Fighting System** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 exposureE | Risk\* (axbxc)+e | Initial controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Office** | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 exposureE | Risk\* (axbxc)+e | Initial controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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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| **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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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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| **FACILITY RISK ASSESSMENT FOR STORAGE** |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Area/Facility Title: **Storage**  | Point Value →Parameter ↓ | 1 | 2 | 3 | 4 | 5 |
| OccupancyOr 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 exposureE | Risk\* (axbxc)+e | Initial controls | Occupancy A | Severity B | Likelihood C | Legal ExposureE | Risk = (AxBxC)+E | Control(s) Added to Reduce Risk | Occupancy A | Severity B | Likelihood C | Legal ExposureE | 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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| **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 ExposureE | Risk\* (AxBxCxD)+E | Control(s) Added to Reduce Risk | Stressors Y/N | # of People A | Frequency B | Severity C | Likelihood D | Legal ExposureE | 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.