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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Extended duration from       to       (maximum of 12 months) | | | | | | | | | | One-time use only | | |
| Division: | | Building: | | | Room/Area: | | | | | Person in charge: | | |
| Job supervisor/responsible engineer: | | | | | | | Start date: | | | | | Expiration date: |
| Description of work (scope) to be done: | | | | | | | | | | | | |
| Description of circuit/equipment: | | | | | | | | | | | | |
| Reference all applicable drawings, diagrams, identification tags, and so on.  Field verify the possible energy sources.  Determine all possible sources of electrical supply to the equipment including stored energy (capacitors, inductors, and so on).  Simple LOTO: isolation device ID  Complex LOTO: (written procedure)        When reenergizing equipment after work is completed, wear PPE determined below. | | | | | | | | | | | | |
| **Results of Shock Hazard Analysis (Electrical Safety Manual (ESM) Chapter 7) from the Arc Flash/Shock Hazard Sticker.** | | | | | | | | | | | | |
| Maximum voltage: | | Glove voltage rating:     (Inspect gloves before use, check certification date) | | | | | | | | | | |
| Limited approach boundary:      (in.) | | | | Restricted approach boundary:      (in.) | | | | | | | | |
| Insulated tools and equipment required | | | | | | | | | | | | |
| **Results of Arc Flash Hazard Analysis (Electrical Safety Manual (ESM) Chapter 8) from the Arc Flash/Shock Hazard Sticker.** | | | | | | | | | | | | |
| Incident energy      cal/cm2 | | | Arc flash boundary:      (in.) | | | | | | Working distance:      (in.) | | | |
| Arc flash PPE category: | | | | | | | | | | | | |
| Required additional PPE: | | | | | | | | | Use barricades and warning signs. | | | |
| Additional personnel: | Safety watch | | | | | Additional person | | | | | Observer (required) | |
| Qualified electrical workers level      (must be trained per Electrical Safety Manual (ESM) Chapter 6, qualified, and have full knowledge of equipment) | | | | | | | | | | | | |
| Capacitor training required as determined by JHQ | | | | | | | | | | | | |
| Line manager must determine if the work is to be completed by skill of the worker or by procedure.  Skill of the worker  Procedure required ― Procedure number: | | | | | | | | | | | | |
| See page 2 and attachments for added information, special requirements, procedures, WCDs, or written work plans. | | | | | | | | | | | | |
| If this form reflects Mode 2 work (energized diagnostics, testing and troubleshooting), it has been verified that work cannot be completed in Mode 0, i.e., connecting instruments to test points in Mode 0. | | | | | | | | | | | | |
| If this form reflects an energized operational voltage check or a megger test following repair, installation, or replacement of electrical components (Mode 0) then this is an excpetion to Mode 2 approval for energized diagnostics, testing, and troubleshooting. Only the QEW and the line supervisor/foreman or designee are required to review and approve. | | | | | | | | | | | | |
| **APPROVALS:** | | | | | | | | | | | | |
| Hazard analysis verified by (QEW): | | | | | | | | Sign & Date: | | | | |
| Line supervisor/foreman, or designee: | | | | | | | | Sign & Date | | | | |
| ***Additional approval signatures below this line are REQUIRED for Mode 2 work (except voltage checks and megger test).*** | | | | | | | | | | | | |
| ESH Coordinator: | | | | | | | | Sign & Date | | | | |
| Electrical Safety SME: | | | | | | | | Sign & Date | | | | |
| Division Director or Dept. Mgr. | | | | | | | | Sign & Date | | | | |
| **PERSON IN CHARGE (PIC) delivers the** **job briefing – must include scope of work, hazard analysis, and required controls.** | | | | | | | | | | | | |
| Printed or typed name: | | | | | | | | Sign & Date: | | | | |
| **AUTHORIZED WORKERS that have attended required job briefing by the person-in-charge.:** | | | | | | | | | | | | |
| Printed or typed name(s): | | | | | | | | Signature(s) & Date(s): | | | | |
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| **Notes:** Include here any details needed from the blocks above: |
|  |
| **Closeout information:** Use the spaces below to provide feedback on any improvements, corrections, or clarifications if needed. |
| Date work was completed: |
|  |

Upon completion, return this form to [electricalsafety@anl.gov](mailto:electricalsafety@anl.gov)