ATTACHMENT B - ENERGIZED ELECTRICAL WORK PERMIT

Area: All FMD Organizations  Date Effective: 7/1/2014

SECTION I – Justification

Per NFPA 70E, energized electrical work shall be permitted where the employer can demonstrate that de-energizing introduces additional or increased hazards or where the employer can demonstrate that the task to be performed is infeasible in a de-energized state due to equipment design or operational limitations. Provide justification as to why the specified equipment/circuit cannot be de-energized or work deferred until the next scheduled outage.

Customer: ___________________________ Date: ___________________________

SECTION II – Background / Information

Work Order #: ________________ Start Date: ________________ End Date: ________________

Equipment / Circuit Description & Location: __________________________________________

Primary Source Description & Location: ____________________________________________

Alternate Source Description & Location (If Applicable): ________________________________

Emergency Source Description & Location (If Applicable): ______________________________

General Description of Work: ______________________________________________________

Risk or Potential Failure: __________________________________________________________

System Affected: __________________________ Impact to System: ______________________

SECTION III – Emergency Action

In the event of an electrical emergency call 911 or 684-2444. Provide detailed information to the emergency operator letting them know it is an electrical emergency, the specifics of the emergency, and the location of the emergency. Note any additional requirements / information:

____________________________________________________________________________

____________________________________________________________________________
**ATTACHMENT B - ENERGIZED ELECTRICAL WORK PERMIT**

**Area:** All FMD Organizations  
**Date Effective:** 7/1/2014

### SECTION IV - Procedures

Detailed Sequence of Operation to Perform Work (Attach Additional Procedures if Necessary):

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### SECTION V – Hazard Analysis

<table>
<thead>
<tr>
<th>Results of Arc Flash Hazard Analysis</th>
<th>Results of Shock Hazard Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Hazard Boundary: (inches)</td>
<td>Nominal Voltage: (volts)</td>
</tr>
<tr>
<td>Flash Hazard at 18 inches: (cal/cm²)</td>
<td>Insulated Glove Class/Rating:</td>
</tr>
<tr>
<td>Risk Category:</td>
<td>Limited Approach Boundary: (inches)</td>
</tr>
<tr>
<td></td>
<td>Restricted Approach Boundary: (inches)</td>
</tr>
<tr>
<td></td>
<td>Prohibited Approach Boundary: (inches)</td>
</tr>
</tbody>
</table>

For Unlabeled Equipment / Devices, refer to Attachment C - Arc-Flash Boundary / Hazard Assessment Diagrams for Unlabeled Equipment / Devices and Table 2 – Shock Hazard Approach Boundaries for Unlabeled Equipment/Devices

**Means Employed to Restrict Access to Work Area:**

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**Additional Hazards (Project Conditions, Environmental, Obstructions, Etc.):**

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**Hazard Control Practices:**

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Duke University - Facilities Management Department
Environmental Safety and Health Program

ATTACHMENT B - ENERGIZED ELECTRICAL WORK PERMIT

Area: All FMD Organizations Date Effective: 7/1/2014

SECTION VI – Equipment Requirements

<table>
<thead>
<tr>
<th>Personal Protective Equipment (PPE)</th>
<th>Required</th>
<th>Checked</th>
<th>Personal Protective Equipment (PPE)</th>
<th>Required</th>
<th>Checked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard Hat (Type I, Class E)</td>
<td></td>
<td></td>
<td>Safety Glasses/Goggles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arc-Rated Suit Hood</td>
<td></td>
<td></td>
<td>Hearing Protection</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arc-Rated Face Shield</td>
<td></td>
<td></td>
<td>Insulated Gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Balaclava Hood</td>
<td></td>
<td></td>
<td>Leather Gloves</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hair Net/Beard Net</td>
<td></td>
<td></td>
<td>Insulated Tools</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arc-Rated Suit</td>
<td></td>
<td></td>
<td>Category III Meter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arc-Rated FR Clothing</td>
<td></td>
<td></td>
<td>AED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Fiber Clothing</td>
<td></td>
<td></td>
<td>Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer to Table 3 – Protective Clothing and Personal Protective Equipment

SECTION VII – Approvals

Electrically Qualified Persons That Understand and Agree to the Above

Qualified Person: __________________________ Date: ____________
Qualified Person: __________________________ Date: ____________
Qualified Person: __________________________ Date: ____________

Management Approvals to Perform the Work While Electrically Energized

FMD Supervisor/Engineer: __________________________ Date: ____________
FMD Next Level Director/Designee: __________________________ Date: ____________
Contractor Supervisor (If Applicable): __________________________ Date: ____________
Other: __________________________ Date: ____________

Note to Contractors: Whatever legal requirements exist for electrical energized work, nothing in this permit process relieves the Contractor from following all the Contractor’s own rules applicable to electrically energized work. The Contractor shall not rely on Duke’s Electrical Safety program to meet any of the Contractor’s safety or regulatory requirements.