

# TEMPORARY CHANGE REQUEST

TCR NO. **TCR-ENG-022,R1-003**

(e.g., TCR-ENG-021,R0-001)

The Temporary Change Request (TCR) Form is to be used to process urgent or minor changes for PPPL Policies, Organization/Mission Statements and Procedures. The TCR should be used when changes are:  
1) urgent, and can not wait the 2-4 week period for Department Head review/comment, or  
2) minor, and do not warrant Department Head review.

Person Requesting Change: Andy Morrison Phone Ext: 2841

Department Name: QA/QC Best Practices

Document Number: ENG-022 Revision No.: 1

Document Title: Scheduled Site Power Outage Notification

**Reason for change:**

Add Management Systems, Training and Records retention section.  
Changed the procedure to become a verbal notification.  
Updated titles.

**Change description:** (Summarize and attach changed pages, with changes clearly indicated)

Added Management Systems, Training and Records retention section.  
Updated titles of various positions.  
Removed the steps requiring documentation of the outage changing the process to a verbal one.

1. Does this TCR significantly alter the intent or scope of the document? YES:        NO: **X**       

2. Does this TCR significantly impact ES&H? YES:        NO: **X**       

If 1 or 2 is YES, Explain why the changes should not be routed for Department Head review:

\_\_\_\_\_  
**Department/Division Head Approval**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Head, Quality Assurance/Quality Control**                      **Date**

Release/Effective date of this TCR: \_\_\_\_\_

Incorporate this TCR into next revision of this document? YES: **X**        NO:       

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|             |  |  |   |   |
|-------------|--|--|---|---|
| <b>PPPL</b> | PRINCETON PLASMA<br>PHYSICS LABORATORY | <b>PROCEDURE</b>   |   | No. ENG-022 Rev 1<br>page 1 of 3  |
|             |  | <b>Subject:</b><br><br>Scheduled Site Power Outage<br>Notification | <b>Effective Date:</b><br><br>March 2, 1999 | <b>Initiated by:</b><br><br>Engineering and Infrastructure Department<br>Head |
|             |  | <b>Supersedes:</b><br><br>Revision 0, dated<br>February 14,1992    | <b>Approved:</b><br><br>Director            |   |

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**Management System (Primary):** 03.00 Engineering  
**Management System Owner:** Head, Engineering and Infrastructure  
**Management Process:** 03.03 Systems Engineering  
**Process Owner:** Head, Electrical Power Branch  
**Sub-Process:** 03.03.01 AC Power Distribution  
**Sub-Process Owner:** Head, Electrical Power Branch, Head Electrical Engineering  
**Subject Matter Experts (SMEs):** AC Power Senior Engineer  
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### Applicability

This procedure applies to PPPL Sites C, D and the Canal Pump House, which use alternating current (AC) voltage for power.

### Introduction

This procedure provides the guidelines for notification and acknowledgement (of major power users) for a scheduled AC power outage affecting the PPPL Site(s) and/or Main Campus Sites, as listed. It is not intended to address power outage(s) implemented by "others"; i. e., Projects, Maintenance & Operations, etc.

This procedure is divided into two sections: Section A describes the process for a localized low voltage (480 volts and below) power outage; Section B describes the process for a more extensive medium and/or high voltage (4160 volts and above) power outage.

The AC Power Senior Engineer, calls upon, negotiates with, and obtains approval from the Sites major AC power users to arrange a scheduled power outage.

### Reference Documents

None

### Definitions

USA Voltage Classes from IEEE 100 "The Authoritative Dictionary of IEEE Standards Terms"  
Low Voltage (LV) - 1000V or less ==> at PPPL 480V and below  
Medium Voltage (MV) 1001-100,000V ==> at PPPL = 4.16kV, 13.8kV, 26.4kV  
High Voltage (HV) - 100,001V-230,000V ==> at PPPL = 138kV

**Procedure**

**A. Low Voltage Power Outage (480 Volts and Below; Applicable to PPPL Sites C, D, and Canal Pump House Only)**

**Responsibility**

**Action**

- |   |   |
|---|---|
| EE Division, AC Power Senior Engineer (or Designee) | <ol style="list-style-type: none"> <li>1. Informs, verbally, major power users that an AC power outage is required for their area.</li> <li>2. Obtains verbal approval from major power users for scheduled AC power outage.</li> <li>3. Conducts scheduled power outage, performs work, and restores AC power.</li> <li>4. Contacts major power users and informs that AC power has been restored to normal operating status.</li> </ol> |
|---|---|

**B. Medium and/or High Voltage Power Outage (4.160 kV and Above) TCR-ENG,R1-003**

**Responsibility**

**Action**

- |  |  |
|--|--|
| AC Power Senior Engineer (or Designee) | <ol style="list-style-type: none"> <li>1. Provides verbal notification and obtains verbal approval from major power users for scheduled AC power outage.</li> <li>2. Send Email to all staff notifying of the pending outage.</li> </ol> |
| AC Power Senior Engineer (or Designee) | <ol style="list-style-type: none"> <li>3. Notifies AC Power Section Outage Coordinator to contact Security and request a public address announcement immediately prior to outage commencement.</li> </ol>                                |
| Power Branch Outage Coordinator        | <ol style="list-style-type: none"> <li>4. Contacts Security and requests a public address announcement be made five to ten minutes prior to the start of the scheduled power outage.</li> </ol>  |
| Security                               | <ol style="list-style-type: none"> <li>5. Announces over the public address system that the scheduled AC power outage is to start in five to ten minutes.</li> </ol>   |

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Power Systems  
Group

6. Completes necessary work, and then restores AC power to normal operating status.

7. Contacts Security and requests that a public address announcement be made notifying users of AC power restoration.

Security

8. Announces over the public address system that AC power has been restored to normal operating status.

**Training** TCR-ENG-022,R1-003

Power Systems  
Group Leader  
Branch Head

A. Target Audience: Power System Branch Engineers  
Instructor: \_\_\_ Power System Group Leader Branch Head

Training Method:

Read only

Email distribution only

Frequency:

Once only

Other: Upon changes to this Procedure

**Records Requirements Specific To This Procedure** TCR-ENG-022,R1-003

Records Custodians must assure records are maintained as follows:

| Record Title                             | Record Custodian | Location | Retention Time |
|--|------------------|----------|----------------|
| No records as a result of this procedure |                  |          |                |