SECTION D — NETWORK RELIABILITY AND PROTECTION OF SERVICE

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TABLE D-1 – SUMMARY OF CHANGES IN SECTION D

<table>
<thead>
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<th>Revision Date</th>
<th>Item</th>
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<td>N/A; March 2016 TP76300 Rewrite</td>
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<td>Modification</td>
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<td>07/24/2018</td>
<td>4.1.11, 4.1.12, Figure D-2</td>
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1. **GENERAL**

   Installation Supplier = Organization performing the requested work activity.  
   AT&T Engineer = Person requesting the work activity.  

1.1 **Introduction**

1.1.1 The Installation Supplier shall ensure, as part of the evaluation of the installation, that all equipment added, rearranged or modified is properly installed and in conformance with AT&T installation specifications.

1.1.2 The Installation Supplier shall ensure, as part of the evaluation of the installation, that all work has been done in accordance with the detail specifications or approved changes to the detail specifications.

1.1.3 Network reliability and the protection of service require full coordination and cooperation between the Installation Supplier and AT&T throughout the job. This section delineates the requirements for Job Start Agreement (JSA) and Method of Procedure (MOP), important documents to facilitate job planning and coordination.

1.1.4 Changes in this issue of Section D are summarized in Table D-1.

1.1.5 If an electronic authorization is used to approve the Job Start Agreement (JSA) or Method of Procedure (MOP), a supporting email, that includes the date, TEO number and CLLI, shall also be sent by the signee to indicate that they are the person who approved the document. This email shall be attached to the JSA or MOP and then placed in the job folder at job completion. The name of the individual approving the document shall be included in the signature field of the JSA or MOP along with the date of approval.

1.2 **Service Interruptions**

1.2.1 The Installation Supplier shall plan all work to minimize service interruptions.

1.2.2 A service interruption is defined as any one of the following conditions:

   a) Interrupts, severely impairs or denies service availability to one or more subscribers.

   b) Reduces the capacity of multiple access circuits where such reduction seriously impairs completion of offered traffic through an office.

   c) Interrupts or seriously impairs the proper functioning of equipment for customer billing.

   d) Interrupts or impairs in any way the functioning of national security circuits or emergency service such as 911.

   e) Interrupts or reduces power.

   f) Interrupts any type of operational support systems

1.2.3 If an unplanned service interruption occurs, the Installation Supplier shall:

   a) Cease all work activity

   b) Immediately notify the appropriate personnel listed in the MOP

   c) Assist in the restoration of service, at the direction of AT&T personnel
2. JOB START AGREEMENT

2.1 Preparation

2.1.1 A Job Start Agreement (JSA) shall be completed and approved (signed) for every job.

2.1.2 The JSA is used to cover non-volatile (general) work activities.

2.1.3 The Job Start Agreement (JSA) shall document the start and complete dates for the job interval and serves as authorization to start a job.

2.1.4 No work activity shall begin until the following criteria have been met.
   
   a) Approved AT&T One Ticketing System (AOTS) Change Record (CR), requested by the Installation Supplier. If EJF is used, the AOTS ticket number shall be recorded in the AOTS field provided in the Overview Section.

   b) JSA is approved and signed by both the AT&T representative and the installation supplier.

   c) Current date is the “Actual State Date” or greater and not greater than the “Scheduled Complete Date” on the JSA.

2.1.5 The JSA shall remain current throughout the duration of the job.

2.1.6 The Installation Supplier shall complete and immediately forward the approved (signed) JSA to the AT&T Engineer.

   Note: If used, the EJF system notifies the AT&T Engineer electronically upon submission and completion of this task.

2.1.7 A copy signed by both the AT&T Representative and the Installation Supplier shall be available at the job site throughout the duration of the job.

2.1.8 The Installation Supplier shall negotiate the date of the JSA meeting with the AT&T Representative(s).

2.1.9 The Installation Supplier shall convene the JSA meeting with the AT&T Representative(s). The AT&T Equipment Engineer will be responsible for determining the AT&T Representative(s) for the JSA meeting, at which the job plans will be discussed and the JSA (Figure D-1) approved.

2.1.10 The JSA shall include in the General Job Description the location of the major equipment components being added, modified or removed on the job, (i.e. bay location, shelf with bay location and shelf designation, etc.).

2.1.11 At the JSA meeting, the AT&T Representative(s) and Installation Supplier shall discuss all items listed on the JSA. The JSA shall be completed and approved (signed) by both the AT&T Representative(s) and the Installation Supplier at least five (5) business days prior to the start of the job, unless otherwise negotiated.

2.1.12 At job completion, a copy of all the approved JSAs shall be included in the job folder.

2.2 Revised Job Start Agreement
2.2.1 It is recognized that, during the duration of a job, conditions arise which may have an adverse impact on the scheduled completion date. These conditions may be the responsibility of either the Installation Supplier or the AT&T Equipment Engineer and include, but are not limited to, changes in the original order, damaged equipment, shipping delays, labor, engineering omissions or errors, defective software and service or safety requirements.

2.2.2 As soon as the Installation Supplier determines that the scheduled installation completion date is in jeopardy, the Installation Supplier shall contact the AT&T Equipment Engineer.

2.2.3 When a new installation completion date has been negotiated between the Installation Supplier and the AT&T Equipment Engineer, a revised JSA shall be issued. The specific reason for the new completion date shall be noted on the revised JSA. The revised JSA shall be checked “Revised”, signed, dated and distributed the same as the original JSA.

2.2.4 When a job scope change has been communicated between the Installation Supplier and the AT&T Equipment Engineer, a revised JSA shall be issued. Changes in the job scope specifics shall be noted on the revised JSA along with the new completion date the revised JSA shall be checked “Revised”, signed, dated and distributed the same as the original JSA.

2.3 Post-job Job Start Agreement

2.3.1 After the Job Completion Report (see Section E of ATT-TP-76300) has been issued, the Installation Supplier shall complete a post-job Job Start Agreement if additional or corrective work associated with the original job is required. This post-job JSA shall have the “POST JOB” box checked to indicate that this is a continuation of an existing job.

2.3.2 The Installation Supplier shall forward the signed post-job JSA to the AT&T Equipment Engineer and have it available at the job site.

2.3.3 At completion of the work, all approved copies of the JSA(s) shall be included in the job folder.

3. METHOD OF PROCEDURE

3.1 Introduction

3.1.1 The written Method of Procedure (MOP) is the document used to detail how, when and where work activities are performed including those that pose a significant risk to service (volatile work activities).

3.1.2 A MOP shall be created, approved, executed and completed for all volatile work activities being performed.

3.1.3 AT&T reserves the right to require a MOP for any work deemed by AT&T as volatile work activity.

3.1.4 The initial MOP shall be identified as MOP No. 1 in the MOP No. field. When multiple MOPs are written on a job, the MOPs shall be numbered consecutively.

3.1.5 The Installation Supplier shall reference section 2, Change Management Record in APEx document ATT-002-200-715, Ask Yourself Handbook for processes associated with MOPs.
3.1.6 The Installation Supplier shall not perform any work activity without an approved AOTS Change Record.

3.1.7 AT&T Engineering and Operations Personnel shall comply with AT&T Change Management (AOTS-CM) Process for all work activities deemed volatile.

3.2 Volatile Work Activities

3.2.1 The following is a list of volatile work activities that shall be conducted during the "maintenance window", as directed by AT&T.

Installing cable over live equipment is not required to be done in the maintenance window unless it meets the criteria below.

a) All activities on live power equipment that includes the addition, rearrangement or removal of power equipment, cable or terminations.

b) All software upgrades and transition activity, including integration of major equipment components, except trunks and service circuits.

c) Backplane work, shelf replacement, processor hardware activity.

d) All relocation, re-cabling or other rearrangements of any currently in-service equipment.

e) All relocation, re-cabling or other rearrangements of site specific equipment that is unique and identified as critical to service.

f) Equipment removals and cable mining jobs that are considered to pose a significant risk to service.

g) All other work operations on building and telecommunications equipment that are considered to pose a significant risk to service.

1. Examples would include but are not limited to:
   i. Electrical Switchgear maintenance and repairs, other than infrared testing.
   ii. Major Chiller teardowns, where there is no redundancy
   iii. Work above live telecommunications equipment, specifically when it involves:
      • Any work with tools
      • Any work that involves parts that may fall
   iv. Building structural work that could undermine the safety or support of existing equipment
   v. The GFS organization has the final say on when maintenance work activity is required

h) All cutting of installed Fiber Protection System (FPS) that contains fibers.

3.3 MOP Preparation and Use

3.3.1 The MOP requirements are determined by the job documentation (Job Specifications, Drawings etc.), complexity and technology type (e.g., switch, transport, and power).
3.3.2 Unless otherwise authorized by the AT&T Representative, the Installation Supplier shall perform a walk-through at the job site with the AT&T Representative to identify and address specific requirements and potential risks to service.

3.3.3 The Installation Supplier shall list the detailed work steps associated with the volatile work activity in logical sequence.

a) The following work steps shall always be included:
   1. Notify the Network Reliability Center (NRC) to document opening and closing ticket numbers and name of person contacted prior to beginning work and when work is completed.
   2. Verify that no affected equipment alarm conditions exist.
   3. The responsibility (Installation Supplier and/or AT&T) for each work activity.
   4. Protection required for the equipment
   5. Location and availability of spare fuses/breaker
   6. The visual verification that the correct fuse/breaker types and sizes are installed as denoted in the drawing (including preassembled bays), recorded as a specific check in the equipment test record and placed in the job folder and EJF, if applicable.

b) The following also shall be considered when developing a MOP (additional considerations may be necessary for unusual installations):
   1. Possible service problems and restoration procedures.
   2. The time the various steps will be performed and the equipment to be removed from service, including the number and schedule of circuits to be impacted.
   3. The skill level of personnel performing the work outlined on the MOP.
   4. Notification to collocators affected by the work activities.
   5. Availability of an alternative communication link such as an FX line, etc.

3.3.4 If the Installation Supplier is authorized to perform volatile work activity that is normally performed by AT&T personnel, the responsibility shall be defined in the MOP.

3.3.5 Unless agreed upon by the AT&T Representative, the MOP shall be presented for approval (signatures) at least seven (7) business days before the volatile work activity is to begin.

3.3.6 The MOP shall be presented for approval (signatures) at least three (3) business days before the non-volatile work activity is to begin.

3.3.7 At the discretion of the AT&T Representative, a dry run of the installation activity plan may be held with the Installation Supplier to ensure that procedures described in the MOP match the physical layout of the system to be worked on. As part of the MOP, the Dry Run sections of the form shall be completed and signed by both the Installation Supplier and the AT&T Representative. It is recommended that a dry run be done when there is volatile work activity or work activity for an AT&T personal to perform.
3.3.8 Before any volatile work is performed, all persons involved in the work operation(s) covered by this MOP shall complete the Ask Yourself questions, check each box and sign off at the bottom, then the AT&T Representative shall approve (sign) the form.

3.3.9 No volatile work activity shall begin until both the AT&T Representative and the Installation Supplier have approved (signed) the MOP. A verbal MOP is not acceptable.

3.3.10 A copy of the signed, approved MOP shall be available at the work site and readily accessible to Installation Supplier personnel while work is being performed.

3.3.11 The Installation Supplier shall provide a Level 4 representative on-site to oversee any volatile MOP work performed by the Installation Supplier’s personnel or non-approved subcontractors.

3.3.12 The Installation Supplier shall not deviate from the approved MOP unless authorized in writing by the AT&T Representative. In the case of a change in job scope the MOP shall be amended and approved by the AT&T Representative. The Installation Supplier shall perform a walk-through based on the amended MOP at the job site with the AT&T Representative to identify and address specific requirements and potential risks to service

3.3.13 The Installation Supplier shall adhere to the Safe-Stop Points (SSP), back-out procedures, and restoration procedures as detailed in the MOP.

Note: A Safe-Stop Point refers to a step in a work activity when all work can be stop without causing a safety issue or potentially causing a network problem.

3.3.14 The Installation Supplier shall stop the MOP activities if conditions are encountered or observed that have affected or will adversely affect service or if external conditions change during the MOP activity such that unanticipated risk is introduced into the Network. (Example - Severe weather or emergency event.).

3.3.15 The MOP shall include adequate testing time after a transition or modification.

3.3.16 The installation vendor prior to working on in-service equipment shall validate with the AT&T representative that no standing alarms are present. An AT&T representative is responsible for clearing any standing alarms before the installation vendor can proceed with planned work activity.

Note: The operation center that monitors the equipment has the final say, with input from the local AT&T representative, as to whether a vendor can proceed with work activity associated with equipment that is in an alarm condition. If approved to work on equipment in an alarm condition, the MOP step shall be updated, dated, noted with the approver’s ATTUID and initialed by the local AT&T representative.

At the conclusion of the work activity the installation vendor and AT&T representative shall validate that no standing alarms exist with respect to the equipment that was worked on. The installation vendor and the AT&T representative shall work together to clear any standing alarm(s).

Testing of local alarms (e.g. visual and audible) and remote alarms (e.g. Dantel and
Westronic) with external AT&T monitoring systems (e.g. NMA) is the responsibility of the AT&T representative.

Example:

- With respect to terminating to a SPDU (e.g. BDFB), the AT&T representative should test alarms at the same time they are inserting the pilot and main fuse.
- With respect to new discrete alarms associated with a network element, the AT&T representative should test alarms as part of their test and turn up procedure.

3.3.17 After completing each detailed step, the Installation Supplier shall date, time and initial the step, and if on-site coverage is required, have the AT&T Representative initial and date each step.

3.3.18 At job completion, a copy of all the approved MOP(s), including all the required pages, shall be placed in the job folder.

4. CRITICAL POWER MOPS

4.1 Critical Power MOP

4.1.1 A critical Power MOP shall be provided for the following work activities:

- Transitions associated with power plant replacements
- Battery string replacements in single battery string power plants
- Primary power rearrangements on BDFBs
- All DC primary transition work
- All AC work that affects the DC power plant including standby engines
- Power plant capacity expansions
- Shunt replacement
- Primary bus extension/expansion
- Other documented regional requirements
- Whenever an Energized Electrical work Permit is required (see Section D, 4.1.11)

4.1.2 Critical Power MOP shall adhere to the requirements as listed in Section 3 as well as those in the following paragraphs.

4.1.3 Unless agreed upon by the AT&T Representative, the MOP shall be presented for signatures at least ten (10) business days before the volatile work activity is to begin for all of the Critical Power Jobs defined above.

4.1.4 In addition to the signatures required in 3.3.9, no Critical Power MOP volatile work activity shall begin until the appropriate AT&T Power Maintenance Engineer, AT&T Operations, other AT&T Representatives, and the Installation Supplier have signed the MOP. A verbal MOP is not acceptable.
4.1.5 A dry run of the installation activity plan shall be conducted with the AT&T Representative and the Installation Supplier to ensure that procedures described in the Critical Power MOP match the physical layout of the system to be worked on.

4.1.6 The Dry Run form shall be completed and signed by both the Installation Supplier and the AT&T Representative.

4.1.7 The Installation Supplier shall adhere to the Safe-Stop Points (SSP), back-out procedures, and restoration procedures as detailed in the MOP. The Safe-Stop Points shall be clearly identified in the detailed steps of the MOP.

4.1.8 The Critical Power MOP shall include detailed steps to validate the integrity of the power plant bonding and grounding before any work activity begins.
   a) The Installation Supplier shall conduct a visual inspection per ATT-TP76403 Section 3, paragraph 3.3.2 Figure 3-1.
   b) The Installation Supplier shall report all discrepancies (via a JIM where applicable) to the Power Engineer for resolution before proceeding with work activities.

4.1.9 Steps shall be identified on Critical Power MOPs that require an AT&T Representative to be on site and shall observe the Vendor while work is being done. The AT&T employee will monitor Critical Power MOP compliance and the completion of these steps as the work progresses.

4.1.10 After completing each detailed step, the Installation Supplier shall date, time and initial the step and have the AT&T Representative initial each step.

4.1.11 The Energized Electrical Work Permit (“EEWP”) section of a Critical Power MOP shall be completed before working on energized circuits or other equipment with greater than 50Vac or nominal 140Vdc, unless the exceptions at either a), b), c), or d) apply. “Working on” means intentionally contacting electrical conductors or circuit parts with any part of the body or with tools, probes, or test equipment.
   a) An EEWP is not required for a qualified person doing testing, troubleshooting, or voltage measuring, using appropriate safe work practices and Personal Protective Equipment (PPE).
   b) An EEWP is not required for work on circuits used for communications services, e.g., POTS, ADSL, HDSL, ISDN, which can be handled safely bare-handed - see Section B, Subsection 1.6.6(c)).
   c) An EEWP is not required to insert or remove a plug-in cord with an energized receptacle (e.g., all standard types of locking, non-locking, and pin and sleeve IEC-320, IEC-309, NEMA, and California Standard 50A input plugs and output receptacles). The appliance, equipment, or rack PDU outlet strip shall be installed with its breaker in the open (off) position.
   d) An EEWP is not required for a qualified person to insert or remove a branch circuit plug-in breaker unit (aka bus plug) with an energized UL857 compliant track busway (e.g., Starline T5 Series or similar) or modular power distribution unit (e.g., Schneider Modular
The plug-in breaker unit must be engineered to work with the track busway and installed with the breaker in the open (off) position per manufacturer's instructions. These products are ‘finger-safe’ and unloaded plug-in units may be installed into a live busway per the UL857 Standard. Their design inherently reduces the likelihood and severity of an Arc Flash (AF) event. However, appropriate safe work practices and PPE shall be used when inserting or removing plug-in breaker units with an energized busway.

e) **Note:** The term “Permit” is used here to follow NFPA 70E® terminology. This is not a “permit” in the traditional sense of a written approval from an Authority Having Jurisdiction (AHJ) or other governmental body. Rather, this permit is a written communication between AT&T and the Installation Supplier, authorizing the latter to perform the work while electrically energized, following procedures specified in the EEWP.

4.1.12 When the Energized Electrical Work Permit (“EEWP”) section of a Critical Power MOP is required by 4.1.11, provide the information identified on Figure D-2.
FIGURE D-1 – JOB START AGREEMENT
A reproducible Job Start Agreement form is provided on the following page.
JOB START AGREEMENT

Check One:  □ Original  □ Revised  □ Post Job

☐ CRITICAL POWER JOB
This document establishes a firm work schedule for the start and completion of the job and authorizes the Installation Supplier to begin work. A MOP shall be issued before any Volatile Work Activity begins.

JOB INFORMATION:
CLLI __________________________ City __________________________ State __________________________
TEO No. __________________________
Equipment Engineer __________________________
Installation Supplier __________________________

FIRM SCHEDULE FOR WORK TO BE DONE AT THIS JOB SITE:
Actual Start Date __________________________ Scheduled Completion Date __________________________
Daily Work Schedule: Start Time __________________________ Stop Time __________________________

JOB DESCRIPTION:

REASON FOR REVISION:
Work shall not begin on this project until the designated AT&T Representative properly authorizes this Job Start Agreement and the following items have been discussed:

☐ Arrangements for building access
☐ On-site coverage
☐ Equipment to be installed, removed, and/or modified
☐ In-Service equipment affected, requiring a MOP before work begins
☐ Building and/or equipment protection during installation
☐ Cable penetrations (complete Cable Penetration Reporting Log)
☐ Storage of equipment, material, and tools
☐ Environmental permits, notifications, and floor drilling training
☐ Alarm installation, cross-connection leads, and testing responsibility
☐ Target walk-through date (before or on completion date)
☐ Problem resolution contacts (immediate supervisor):

Manager (AT&T) Tel. No. Pager No.
NOC/STC/TTC Tel. No. Pager No.
Manager (Supplier) Tel. No. Pager No.

If a service interruption occurs, the Installation Supplier shall:
1. Stop all work operations immediately.
2. Notify local Network Equipment Space and/or ASC personnel of details immediately.
3. Not replace fuses or restore breakers without the direction of AT&T.
4. Provide a written report to AT&T as directed.

☐ Other pertinent factors unique to this project: ____________________________________________

☐ Check box if the Job Start Agreement includes attachments.

Agreement has been reached on all items checked above. No deviations from this agreement will be allowed without the approval of the designated AT&T Representative.

*AT&T Rep. Signature/Title & Date  *Installation Supplier Signature/Title & Date

Other Signature (As required)/Title & Date  Other Signature (As required)/Title & Date

Installation Supplier shall distribute this completed form to:
☐ AT&T Equipment Eng. ☐ Yellow wallet
☐ AT&T Power Maintenance Engineer*
*ONLY on Critical Power Jobs
FIGURE D-2 – METHOD OF PROCEDURE
Reproducible MOP forms are provided on the following pages.
METHOD OF PROCEDURE

MOP No. _________________

JOB INFORMATION:
CLLI ____________________ City ____________________ State ____________________
TEO No. ____________________
Installation Supplier ____________________

MOP AUTHOR: ______
Skill Level ____________________ Telephone ____________________

GENERAL MOP DESCRIPTION:

DETAILED MOP SCHEDULE:
Start Date                     End Date               Shift/Work Hours
From      To

AFFECTED COLLOCATORS NOTIFIED:
Yes                      N/A

Detailed list of equipment to be Added (A) / Removed (R) / Modified (M):
Where Volatile Work Activity is to be performed

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List of all Handbooks, Technical Documents, Bulletins, Flashes, and Warnings related to work operations under this MOP:

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METHOD OF PROCEDURE

MOP No. _________________

TEO No. ______________________

If a service interruption occurs, the Installation Supplier shall:

1. Cease all work operations immediately.
2. Local Network Equipment Space and/or NRC personnel shall be notified of outage details immediately.
3. No fuses or breakers shall be replaced or restored without the direction of AT&T.
4. Provide a written report to AT&T as directed.

List sequence for notification of service interruption or degradation

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<tbody>
<tr>
<td>SE</td>
<td>1-877-363-2490 Opt 5</td>
<td>Charlotte, NC</td>
</tr>
<tr>
<td>MW</td>
<td>1-877-363-2490 Opt 3</td>
<td>Chicago, IL</td>
</tr>
<tr>
<td>SW</td>
<td>1-877-363-2490 Opt 4</td>
<td>Irving, TX</td>
</tr>
<tr>
<td>UVerse</td>
<td>1-877-363-2490 Opt 1</td>
<td>Irving, TX</td>
</tr>
<tr>
<td>NESDSLAM</td>
<td>1-877-363-2490 Opt 2</td>
<td>Irving, TX</td>
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<table>
<thead>
<tr>
<th>Mobility</th>
<th></th>
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<tbody>
<tr>
<td>Mobility NRC (MNRC)</td>
<td>1-800-638-2822</td>
<td>Atlanta, GA</td>
</tr>
</tbody>
</table>

Installation Supplier Personnel working under this MOP

<table>
<thead>
<tr>
<th>Name</th>
<th>Skill Level</th>
<th>Emergency No.</th>
<th>Name</th>
<th>Skill Level</th>
<th>Emergency No.</th>
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</table>
The Installation Supplier shall not deviate from the approved MOP unless authorized by the AT&T Representative. The approved MOP shall be filed in the job folder. Copies can be made for further distribution if requested. Asterisk (*) denotes mandatory signatures on all MOP’s, (**) denotes mandatory signatures on all Critical Power MOP’s. The Installation Supplier shall determine from AT&T Representative whether additional signatures are required. All work shall be completed in accordance with all AT&T requirements.

### MOP APPROVAL

<table>
<thead>
<tr>
<th>Title</th>
<th>Print Name</th>
<th>Phone/Pager No.</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>*AT&amp;T Rep.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>*Installation Supplier</td>
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</tr>
<tr>
<td>**AT&amp;T Eng.</td>
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<tr>
<td>**AT&amp;T PowerRep.</td>
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<td></td>
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</tr>
<tr>
<td>AT&amp;T Maint. Eng.</td>
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</tr>
<tr>
<td>AT&amp;T Site Manager</td>
<td></td>
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<tr>
<td>Other as Required</td>
<td></td>
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</tr>
</tbody>
</table>
METHOD OF PROCEDURE

MOP No. _________________

TEO No. ______________________

When AT&T requires this page, it shall be completed and included with the previous required pages of the MOP.

______________

DRY RUN - Required ☐ Yes ☐ No

A Step-by-Step “Dry Run” of the Volatile Work Activities listed in the “Detailed Steps” portion of this MOP has been performed by the following representative(s):

The Installation Supplier’s personnel who will be performing the work activities:

Name: ___________________________ Date: ______________

Name: ___________________________ Date: ______________

Name: ___________________________ Date: ______________

Name: ___________________________ Date: ______________

AT&T Representative and Installation Supplier responsible for the equipment/system being worked on:

*AT&T Rep. 
Signature: ___________________________ Date: ______________

*Installation Supplier Signature: ___________________________ Date: ______________

Yes ☐ No ☐ N/A ☐ (If there were changes as a result of the “Dry Run” they incorporated into a revised, signed, and approved MOP?)
METHOD OF PROCEDURE

MOP No. _________________

TEO No. _______________________

ASK YOURSELF QUESTIONS

BEFORE ANY CRITICAL WORK IS PERFORMED, ALL PERSONS INVOLVED IN THE WORK OPERATION(S) COVERED BY THIS MOP SHALL COMPLETE THE ASK YOURSELF QUESTIONS.

AFFIRM YOU HAVE COMPLETED THE ASK YOURSELF QUESTIONS BY CHECKING THE BOXES BELOW AND SIGN OFF AT THE BOTTOM.

Check Box

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
</table>
| ☐   | ☐  | 1. DO I HAVE THE PROPER AND THE APPROPRIATE BUILDING ACCESS PERMISSIONS FOR THE ENVIRONMENT I AM ABOUT TO ENTER?  
| ☐   | ☐  | • Ensure you have worked with the local operations supervisor and corporate real estate supervisor to obtain the proper IDs required.  
| ☐   | ☐  | • Be sure to carry and display the appropriate company IDs at all times.  
| ☐   | ☐  | 2. DO I KNOW WHY I AM DOING THIS WORK?  
| ☐   | ☐  | • Ensure the reason is more than just a directive.  
| ☐   | ☐  | • Understand the impact the work has on our network reliability and the customers we support.  
| ☐   | ☐  | • Understand the proper sequence in which the work is to be performed.  
| ☐   | ☐  | 3. HAVE I IDENTIFIED AND NOTIFIED EVERYBODY – IMPACTED CUSTOMERS AND INTERNAL GROUPS – WHO WILL BE DIRECTLY AFFECTED BY THIS WORK?  
| ☐   | ☐  | • Notify all organizations that may be impacted, such as Network Operations, Tier Support, Technical Support Group (TSG), GNOC.  
| ☐   | ☐  | • Identify other organizations that might be impacted by this work (e.g. Customer Facing Operations, Provisioning, Product Management)  
| ☐   | ☐  | 4. CAN I PREVENT OR CONTROL SERVICE INTERRUPTION?  
| ☐   | ☐  | • Ensure all appropriate elements/processes are monitored during the work activity.  
| ☐   | ☐  | • Possess a clearly understood back-out/recovery plan.  
| ☐   | ☐  | • Survey the work area and make sure all appropriate safety precautions have been taken.  
| ☐   | ☐  | • SMOP will not be approved without an acceptable back-out plan.  

D-18
5. IS THIS THE RIGHT TIME TO DO THIS WORK?
   • Anticipate customer impact of possible network failure. Is the time right for the
     customer (i.e. if the customer is Sony and they have a big new game release
     tomorrow, working on their service tonight may not be the best plan)?
   • Provide for improved communication of Change Management/Network Events
     (i.e. is there a hurricane coming up the east coast – if so, it is probably best to
     delay planned maintenance until after the storm clears).
   • Ensure scheduled work meets AY Handbook/other maintenance window
     requirements.
   • Ensure technical support resources are available.

6. AM I TRAINED AND QUALIFIED TO DO THIS WORK?
   • Feel comfortable that the training you have received or your prior experience will
     support the work you will be doing.
   • Perform a procedural review of the technical documentation to assure a solid
     understanding of the work to be performed.

7. ARE THE WORK ORDERS, MOPS, AND SUPPORTING DOCUMENTATION
   CURRENT AND ERROR FREE?
   • Verify you have the most recent document (e.g. vendor documentation, methods
     and procedures).
   • Read through the documentation at least once, verifying the contents, prior to
     beginning the work.
   • Verify that the procedure has been certified in the appropriate environment.

8. DO I HAVE EVERYTHING I NEED TO QUICKLY AND SAFELY RESTORE
   SERVICE IF SOMETHING GOES WRONG?
   • Know who to contact in the event something goes wrong.
   • Have the tools available on the job site that may be required to restore service.
   • Verify the availability and locations of spare fuses, back-up power and circuit
     packs, back-up disk or tape.
   • Review the SMOP, each step required is listed and will provide a good idea of
     the proper tools needed.

9. HAVE I WALKED THROUGH THE PROCEDURE?
   • Complete a walk through at the start of each shift for which work is to be
     performed and whenever personnel changes occur.
   • Understand the procedures and your responsibilities.
   • Ensure the procedure to be performed makes sense (sequence of steps,
     completeness, testing, safety, etc.).

10. HAVE I MADE SURE THE PROCEDURE CONTAINS PROPER CLOSURE
    INCLUDING OBTAINING CLEARANCE AND RELEASE FROM THE
    APPROPRIATE WORK CENTER?
    • Make sure you follow the correct procedure and use the proper tools to close the
      work.
    • Validate that the clearance is made or the release for the appropriate work center
      is done so there is no system or job impact upon closure.
METHOD OF PROCEDURE

MOP No. _________________

TEO No. ____________________________

THE DETAILED STEPS OF THE WORK OPERATION SHALL BE LISTED AND COMPLETED SEQUENTIALLY:

For all removals, all AT&T TP requirements including the following shall be adhered to:

1. The Installation Supplier shall verify, via detailed steps in the removal MOP that the AT&T Representative has made the equipment busy and removed all associated fuses, patch cords, cross-connections, etc. before any removal is started.

2. The Installation Supplier shall verify (with a clamp-on ammeter) the absence of current for each power lead to be removed.

<table>
<thead>
<tr>
<th>Step No.</th>
<th>Supplier</th>
<th>AT&amp;T</th>
<th>&quot;SSP&quot;</th>
<th>Description of Volatile Work Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>X</td>
<td></td>
<td></td>
<td>PREVENT PLANT OPERATING ERRORS (POEs) - &quot;at&amp;t&quot; CUSTOMERS EXPECT 100% RELIABLE SERVICE ** AVOID POEs &amp; OUTAGES ** Do not Rush or Perform ANY Action that MIGHT cause a POE Outage on this job. No job is so urgent that we cannot take time to perform our work safely and in a manner to prevent errors.</td>
</tr>
</tbody>
</table>
* (SSP) Safe Stop Point

** If on-site coverage provided

Use additional pages if required to list detailed steps. MOP shall also include relevant attachments.

Are there attachments to this MOP: Yes ☐ No ☐
# METHOD OF PROCEDURE

MOP No. _______________

**ENERGIZED ELECTRICAL WORK PERMIT** – Required [ ] Yes [ ] No

<table>
<thead>
<tr>
<th>AT&amp;T Order No. (TEO):</th>
<th>[ ]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supplier Order No.:</td>
<td></td>
</tr>
<tr>
<td>CLLI Code (8):</td>
<td></td>
</tr>
<tr>
<td>Installation Company:</td>
<td></td>
</tr>
</tbody>
</table>

## PART I: TO BE COMPLETED BY THE INSTALLATION SUPPLIER SUPERVISOR

<table>
<thead>
<tr>
<th>Description of circuit(s) / equipment to be worked on:</th>
<th>See Detailed list of equipment to be added / Removed / Modified Where Volatile Work Activity is to be performed section of the MOP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of work to be done:</td>
<td>See General MOP Description and Step-by-Step Volatile Work Activities listed in the Detailed Steps portion of the MOP.</td>
</tr>
</tbody>
</table>
| Justification of why the circuit(s) / equipment cannot be de-energized or the work deferred until the next scheduled outage: | Select one or both and provide explanation:  
[ ] Additional hazards or increased risk  
[ ] Infeasibility  
Explaination: |
| Name of Installation Supplier Supervisor and Date | See Electronic Job Folder |

## PART II: TO BE COMPLETED BY THE ELECTRICALLY QUALIFIED PERSONS DOING THE WORK

<table>
<thead>
<tr>
<th>Detailed description of job procedures to be used:</th>
<th>See Step-by-Step Volatile Work Activities listed in the Detailed Steps portion of the MOP.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of safe work practices to be employed:</td>
<td></td>
</tr>
</tbody>
</table>
| Results of the shock and arc flash risk assessment (e.g., per the Arc Flash assessment equipment label): | Voltage to which personnel will be exposed ________ V  
Restricted Approach Boundary  
Limited Approach Boundary  
Arc Flash Boundary  
Available incident energy at the working distance or arc flash PPE category ________ cal/cm² @ _____ inches |
<table>
<thead>
<tr>
<th>Shock and arc flash personal protective equipment (PPE) necessary to safely perform the assigned task (not already listed in ATT-TP-76300 section B paragraph 1.2.18.(b)):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means employed to restrict the access of unqualified persons from the work area</td>
</tr>
<tr>
<td>Evidence of completion of a job briefing, including discussion of any job-related hazards</td>
</tr>
</tbody>
</table>
| Do you agree the above-described work can be done safely? | □ Yes  
□ No (return to Installation Supplier Supervisor) |

Electrically Qualified Person
Name________________________________ Date____________

Electrically Qualified Person
Name________________________________ Date____________

**PART III: APPROVAL(S) TO PERFORM THE WORK WHILE ELECTRICALLY ENERGIZED**

See Critical Power MOP signature page (when included as part of the EJF Critical Power MOP).

Installation Supplier Supervisor ______________________________ Date  _______________

AT&T TFS Representative ______________________________ Date  _______________

(END OF SECTION)