1. INTRODUCTION


1.2. This document outlines the requirements and individual responsibilities when accessing ITC substations and substations shared with other entities.

2. SCOPE AND RESPONSIBILITY

2.1. This procedure applies to all ITC employees and contactors working on equipment and projects involving ITC assets and/or equipment.

2.2. The term “Visitor” in this document means any individual who is not authorized to enter an ITC owned/shared substation or power plant without an authorized escort.

2.3. Before being granted unescorted access to a substation or power plant, each person shall:

   2.3.1. Attend the ITC Site Access/Visitor’s training course.

   2.3.2. Agree to abide by all rules and limitations set forth during the course.

   2.3.3. Sign a confirmation form that the course has been attended.

2.4. Once granted unescorted access to a substation or power plant, the authorized person will be admitted to the site and will be able to escort unauthorized personnel, “Visitors”, who have not received the training.
3. REFERENCES

3.1. ENV-013 Material Safety Data Sheets (MSDS)

3.2. GAP-005 Work in Unattended Substations

3.3. SAF-005 Safety Barriers Policy

3.4. SAF-010 Personal Protective Equipment

3.5. TAG-001 ITC Protective Tagging System


4. PRECAUTIONS

4.1. Special Note:

Some substation and power plant control houses are equipped with communication relaying that is sensitive to 3G and 4G communication devices such as smartphones and hot spots. Use of these devices within the control house may cause a misoperation of the relays. These control houses are clearly labeled near the entrances with a warning sign that prohibits the use of these devices within the building. In addition, within the control house, the panel containing the communication relaying is identified with high visibility tape.

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**WARNING**

3G/4G communication devices such as smartphones and hotspots are prohibited in this building
5. PROCEDURE

5.1. ITC-Owned Substation

5.1.1. An ITC owned station is a station which is primarily owned by the ITC Holdings Corp.

5.1.1.1. An ITC substation is considered attended when a ULC Substation Operator is present. Report to the Operator immediately upon arrival and identify yourself and your purpose for being at the substation.

5.1.1.2. The Operator shall be responsible for maintaining an awareness and/or list of those individuals working at the site. Signing of the Visitor Record or Visitor Log Book is only required if the control building is entered.

5.1.2. If no Substation Operator is present, the substation is considered unattended the ULC Dispatcher must be notified upon entry to and exit from the substation, providing all names of individuals entering, their company and the purpose of the site visit.

5.1.2.1. ULC Dispatcher – ITCT – (248) 946-3424
5.1.2.2. ULC Dispatcher – METC – (248) 946-3421
5.1.2.3. ULC Dispatcher – ITCMW – (248) 946-3423
5.1.2.4. See ITC document GAP-005 for other requirements related to work in unattended substations.

5.1.3. Entry into any control building equipped with access card readers shall require that each individual with a valid access control badge programmed for access into that control building must swipe their access badge to log entry into that building.
5.1.4. Any Visitor who does not have an access control badge programmed for entry to a control building with access card readers must be continuously escorted by someone with approved access. The person who escorts a visitor must sign the Visitor Log Book in each control building, which is entered, for each visitor under escort.

5.1.4.1. Each control building secured with access card readers will have a Visitor Log Book located near the entrance door.

5.1.4.2. Information entered in the Visitor Log Book must include the visitor’s name, the name of the escort, reason for the visit, the time of entry, and the time of departure from that control house.

5.1.4.3. Personnel, with a valid access control ID badge are exempt from the requirement of signing the Visitor Log Book as long as they have swiped their ID badge upon entry to the control building to log their entry.

5.1.5. Entry into any control building not equipped with access card readers shall require that each individual entering the control building, whether authorized for access or not, must sign in on the Visitor Record.

5.1.5.1. For these substations, a Visitor Record will be located on a clipboard inside the control building.

5.1.5.2. Operators are not required to sign the Visitor’s Record but will continue to sign in and out of the Substation Log Book as required.

5.1.6. Signing of the Visitor Record or Visitor Log Book is only required if a control building is entered. Personnel are no longer required to enter a control building for the sole purpose of signing the Visitor Log.

5.1.7. You must keep all security doors and gates locked that would permit access to the public.
5.1.8. Personnel are not allowed to grant admittance to anyone who is not in their group. This does not apply to Substation Operators.

5.1.9. All ITC/ULC employees must make a call to the ULC Dispatcher every two hours when working alone.

5.1.10. The Transmission System Coordinator (TSC) must be contacted prior to opening a TMedic, RTU, RAD, Annuciator Cabinet, Synch breaker control cabinets or Netshelter equipped with a CyberLock.

5.2. Substations owned by other entities

5.2.1. A substation or power plant switchyard is considered attended when a Substation Operator is present. Any person who enters a substation shall immediately report to the Operator Once you have notified the Operator of your presence and the reason you are at that location, then you are to follow the normal sign in procedures. For all power plant switchyards, please notify the appropriate shift supervisor or switchboard operator.

5.2.2. If there is no Operator present:

5.2.2.1. Detroit Edison (DE) Owned Substation:

5.2.2.1.1. All ITC/ULC employees, contractors and visitors shall follow the instructions on the sign posted by the Visitor’s Record.

5.2.2.1.2. All ITC/ULC employees, contractors and visitors must sign the Visitor’s Record located by one of the doors inside the control building. It is usually a yellow pad on a clipboard hanging on the wall. Please fill in all applicable information.

5.2.2.1.3. You must follow all normal substation Visitor requirements regarding security, etc.
5.2.2.1.4. When no DTE Operator is present you must place a call to the appropriate Area Field Coordinator during normal business hours. Numbers are posted on the wall.

5.2.2. Consumers Energy (CE) Majority Owned Substation

5.2.2.2.1. All ITC/ULC Employees, contractors and visitors must sign the CE Substation Log Book when entering the substation.

5.2.2.2.2. You must call the appropriate CE System Control Center regardless of whether or not there is an Operator in attendance when you arrive and again when you leave at CE System Control South 800-952-5001 or West 800-453-4543.

5.2.2.2.3. You must sign the ITC Visitor’s Record and if no ULC Substation Operator is in attendance, employees shall follow the instructions on the sign posted by the Visitor’s Record.

5.2.2.2.4. Upon arrival, notify the CE Crew Leader (or other personnel) if the substation is attended and tell them who are and why you are there.

5.2.2.2.5. You must follow all normal substation Visitor requirements regarding security, etc.

5.2.2.3. Alliant Energy (AE) Majority Owned Substation

5.2.2.3.1. Unless other arrangements have been made, before entering or immediately upon entry, notify the local dispatcher/DDC at 319-286-1320 and provide the following information:
SUBSTATION AND POWER PLANT ADMITTANCE RULES AND RESPONSIBILITIES

- Time of entry
- Reason for entry (if work is to be done, give specific information about equipment involved as requested)
- Estimated time of departure

5.2.2.3.2. You must follow all normal substation Visitor requirements regarding security, etc.

5.2.2.4. Facilities owned by other entities

5.2.2.4.1. Follow all posted rules and requirements

5.3. Substations and Power Plant Switchyards: Movement of Vehicles

5.3.1. All vehicles should be kept on the indicated driveway and parked in recognized parking areas.

5.3.2. Vehicles may not be parked where they will obstruct any fire fighting equipment.

5.3.3. No truck or car within an outdoor switchyard is to be backed up unless preceded or guided by a second person, except in a recognized driveway or parking area.

5.4. Power Plant Access

5.4.1. At all power plant locations, the power plant is responsible for the grounds and security. In order to access the power plant buildings (other than relay houses on the mats), the individual(s) must be escorted by personnel from the power plant.

5.4.1.1. If you require access to the plant buildings, notify the Shift Supervisor of your presence and a person will be dispatched.

5.4.1.2. If you know that you are going to be in a plant, a courtesy call should be made in advance to allow for the plant person to be available.
5.4.1.3. Access to ITC assets in the power plant switchyard does not require an escort. Follow all normal procedures as necessary, to check in at the main gate or site guard house.

5.4.1.4. ITC will provide a list of qualified personnel for plant switchyard access to all entities requesting this information.

5.4.1.5. For security purposes, personnel may be asked for picture identification (company badge or driver’s license).

5.4.1.6. Access to any nuclear facility requires prior authorization.

5.4.1.7. The signing of a Visitor Log Book at critical substations located on plant property shall be followed as cited in Section 5.1 of this policy.

5.5. Barriers at Substations and Power Plants

5.5.1. Various types of barriers are used in substations and in power plants to protect personnel against electrical and physical hazards.

5.5.1.1. Barricades, fences, locks, baffles, guards, etc. are often used alone or in conjunction with other barriers and are treated the same.

5.5.1.2. ITC/ULC employees must never reconfigure or remove barrier rope installed by another entity.

5.5.1.3. Employees from another entity must never touch or remove ITC barrier ropes.

5.5.1.4. No Visitor may remove or rearrange any barriers regardless of ownership.

5.5.1.5. No one is permitted to climb over, reach through or pass under safety barrier ropes.

5.5.1.6. Passing objects over or under safety barrier ropes is prohibited.
5.5.2. ITC Barriers

5.5.2.1. Orange-White Ropes – Equipment under test.

5.5.2.2. Purple-Yellow Ropes – Radiation hazard.

5.5.2.3. Yellow Ropes – Physical or chemical hazard.

5.5.2.4. Black-Red-White Ropes – Control movement or access around areas containing de-energized equipment.

5.5.3. DE Barriers at Substations and Power Plants

5.5.3.1. Orange – White Ropes – Equipment under test.

5.5.3.2. Purple-Yellow Ropes – Radiation hazard.

5.5.3.3. Yellow Ropes – Physical or chemical hazard.

5.5.3.4. Orange Ropes – Control movement or access in areas containing energized equipment.

5.5.4. CE Barriers at Substations and Power Plants

5.5.4.1. Orange-White Ropes – Equipment under test.

5.5.4.2. Purple-Yellow Ropes – Radiation hazard.

5.5.4.3. Yellow Ropes – Physical or Chemical hazards.

5.5.4.4. Black-Yellow - Control movement or access into areas

5.5.5. AE Barriers at Substations and Power Plants.

5.5.5.1. AE does not use any barriers at their Substations and power plants. Upon entering, consider all equipment to be energized.
5.6. Personal Protective Equipment

5.6.1. All ITC employees, contractors and visitors shall wear appropriate personal protective equipment (PPE) while performing work on ITC facilities and equipment.

5.6.2. For further information refer to ITC procedure, SAF-010, “Personal Protective Equipment”.

5.6.3. Hard Hats

5.6.4. Hard hats must be worn at all times when working at all company and field locations where there is any danger of head injury. Hard hats must meet the ANSI Z89.1, Class E standards.

5.6.5. Eye Protection

5.6.5.1. Safety glasses with side shields must be worn at all times.

5.6.5.2. Safety glasses must have side protection and meet ANSI Z87.1 standards for Occupational Eye Protection (marked as such on the glasses).

5.6.6. Hearing Protection

5.6.6.1. Hearing protective devices shall be worn in designated loud noise areas or as necessary. Hearing protection devices are supplied to persons who periodically enter areas where high noise levels exist.

5.6.7. Footwear

5.6.7.1. Suitable work shoes are defined as foot protection having durable soles and substantial leather upper tops. Footwear such as athletic or open toed shoes is not allowed in substations or warehouses.
5.6.8.  Wearing Apparel

5.6.8.1.  Fire retardant (FR) clothing is required to be worn by all ITC/ULC employees, contractors and visitors working in ITC substations or anywhere there is a possibility of an arc flash hazard.

5.6.8.2.  The company requires individual garments (or layers) to have a Hazard Risk Category (HRC) rating of 2, with long sleeves and long pants, for all field activities which have an arc flash hazard risk.

5.6.8.3.  Certain jobs and activities may require additional protection when the activities expose them to possible electrical arcs or flames.

5.6.9.  Additional Requirements

For further information regarding the use of personal protective equipment when entering substations and power plants refer to ITC procedure, SAF-010, titled: “Personal Protective Equipment”.

5.7.  Obtaining Emergency Assistance in ITC owned or shared substations

5.7.1.  In case of an accident or injury without an Operator in attendance, there is an orange colored Emergency Call Sheet posted near the telephone at the Operator’s desk.

5.7.2.  The call sheet lists phone numbers for obtaining assistance and gives the substation address/cross streets so the location can be easily found.

5.7.3.  In an emergency, it is permissible for all employees, contractors and visitors to allow admittance only to those persons necessary to provide medical assistance.

5.7.4.  In the event of an emergency, the TSC shall be notified and advised of the known details of the incident as soon as possible.

5.7.5.  If an employee/contractor working at an ITC owned or shared substation is involved in an emergency event, notify the TSC and the TSC will notify the appropriate Control Room.
5.8. Obtaining Emergency Assistance in Power Plants

5.8.1. When performing work at a power plant, ITC/ULC employees or their contractors must notify the Shift Supervisor immediately:

5.8.1.1. Of a fatal injury.

5.8.1.2. When an injury requires hospitalization.

5.8.2. The Shift Supervisor will make arrangements for EMS or other first aid as necessary.

5.9. Protective Tagging System, “Red Tagging”

5.9.1. ITC has established a protective tagging system for controlling energy sources related to the servicing and maintenance of the Electrical Transmission System and associated switching substations within the ITC service area. This system applies to all ITC employees and contractors.

5.9.1.1. ITC Red Tags are shown in Figure 1.

5.9.2. A Red Tag on a piece of equipment is an order NOT to operate that piece of equipment or component.

5.9.3. No person may place or remove this tag except the ULC Operator in charge of the protective transaction (Local) or Operating Agent under the direction of the TSC (System).

5.9.4. These Red Tags must not be disturbed, and the break must not be bridged by any means.

5.9.5. Only the Operators from other entities can install/remove their respective Red Tags/Hold Cards.

5.9.5.1. DTE Red Tags are shown in Figure 2.

5.9.5.2. CE Personal Protective Tags are shown in Figure 3.

5.9.5.3. AE Hold Cards are shown in Figure 4.
Figure 1. ITC Red Tags

Figure 2. DTE Red Tags
Figure 3. CE Personal Protective Tags

**DANGER DO NOT OPERATE**

THIS TAG SHALL BE USED ONLY FOR PERSONAL PROTECTION

This tag properly filled out is to be placed on each switch or its disconnects controlling a line or circuit or valves or other devices for equipment on which personnel are to work.

A separate tag must be placed on each switch or mechanical control for each person who is designated to be in charge of the work.

No tag shall be removed until orders to do so are received from the same authority that ordered the tag placed.

No switch, valve or device, on which a tag has been placed, shall be operated.

When this tag has been removed and properly filled out, handle it in accordance with your departmental procedures.

**PERSONAL PROTECTIVE TAG**
Figure 4. AE Hold Cards and Caution Cards
5.10. Safety Data Sheets

5.10.1. Workers at power plants and substations need to be aware when working with chemical products or hazardous substances.

5.10.2. There are two sources of information:

5.10.2.1. Container Labels

5.10.2.2. Safety Data Sheets (SDS)

5.10.3. The MSDS for chemicals brought on site by ITC, DE, CE or AE should be available to the other group.

5.10.4. In the event that information is required by ITC, the DE, CE or AE authority must be contacted.

5.10.5. The ITC Operator will be the contact person for chemicals brought on site by ITC.

6. ATTACHMENTS

6.1. N/A

7. MISCELLANEOUS

7.1. N/A
8. APPROVALS

Owner: <E-Signature on file> Date: 10/06/2016

Approver: <E-Signature on file> Date: 10/25/2016

9. REVISION HISTORY

<table>
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<th>Date Published</th>
<th>Revision Number</th>
<th>Individual Making Edits</th>
<th>Reason / Comments</th>
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<tr>
<td>04/03/07</td>
<td>000</td>
<td>R. Gilmore</td>
<td>This procedure replaces 05.01.043 titled, “Station and Power Plant Visitor’s Responsibility and Admittance Rules”.</td>
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<tr>
<td>05/10/07</td>
<td>001</td>
<td>R. Gilmore</td>
<td>Removed redundant information and made more grammatically consistent per E. Howell.</td>
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<tr>
<td>12/11/08</td>
<td>002</td>
<td>D. Yinger</td>
<td>Updated header and changed “station” to “substation” where appropriate per E. Howell, added ITCMW information, changed owner to D. Yinger-Manager, Training</td>
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<tr>
<td>05/29/09</td>
<td>003</td>
<td>D. Yinger</td>
<td>Changed procedure category from “SSE” to “SAF” per E. Howell and D. Yinger. Updated procedure numbers for documents in Reference section. Added Reference 3.4, removed redundant information and made more grammatically consistent.</td>
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| 01/27/10       | 004             | M. Bradley              | • Changed procedure Owner from D. Yinger to M. Bradley.  
• Added provision for cases where no substation operator is in attendance at 5.1.1.  
• Replaced directions at 5.1.2 and removed step formerly at 5.1.3 to keep instructions aligned with SEC-003 Physical Security Policy. |
<table>
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<tr>
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<th>Author/Editor</th>
<th>Changes/Updates</th>
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<td>10/01/10</td>
<td>005</td>
<td>J. Bennett H. Miller E. Howell</td>
<td>• Changed procedure Owner from M. Bradley to H. Miller.</td>
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<td>• Changed document title</td>
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<td>• Added reference 3.6</td>
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<td></td>
<td>• Incorporated new details in section 5.1 related to Visitor Record and Visitor Log Book requirements</td>
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<td>• Updated section 5.6.7 on fire retardant clothing</td>
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<tr>
<td>10/27/10</td>
<td>006</td>
<td>L. Nemeth</td>
<td>• Added exceptions for Substation Operators in 5.1.5.2 and 5.1.8</td>
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<td>• Added all personnel to sections that previously referred just to visitors.</td>
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<td>03/30/11</td>
<td>007</td>
<td>H. Miller J. Bennett</td>
<td>• Changed document Approver from E. Howell to J. Bennett per organizational change.</td>
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<td>01/23/13</td>
<td>008</td>
<td>A. Blank J. Bennett</td>
<td>• Changed document owner to Allen Smith, Safety Manager</td>
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<td>• Added information in 5.1.10 regarding contacting the TSC prior to opening a TMedic, RTU, RAD, Annuciator Cabinet, or Netshelter equipped with a CyberLock.</td>
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<td>10/25/16</td>
<td>009</td>
<td>A. Smith</td>
<td>• Revised and updated the following sections:</td>
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<td>• 2.0 Scope and Responsibilities</td>
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<td>• 5.1 ITC Substations</td>
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<td>• 5.2 Other Entity Substations</td>
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<td></td>
<td>• 5.6 Personal protective Equipment</td>
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