ORLANDO UTILITIES COMMISSION GENERIC CONTRACTOR ORIENTATION

SITE SPECIFIC WILL BE HANDED TO THE SUCCESSFUL CONTRACTOR PRIOR TO ARRIVING AT THE SITE.

JOB/WORK INFORMATION Date of Orientation Date Work Begins Date Work of Conclusion	CONTRACTOR / COMPANY NAME						
OUC REPRESENTATIVE Print Name Above Phone # Extension # Phone # Extensio JOB/WORK INFORMATION Date of Orientation Date Work Begins Indicate Peak Number Of Contractor Personnel Expected To Be On Site In Box On The Right System Contractor Is Working On Nature Of Work On Site SCOPE OF CONTRACTOR ORIENTATION All Contractors Working On Site Are Required To Review Sections I - IV.							
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Print Name Above Phone # Extension # Phone # Extensio JOB/WORK INFORMATION Date of Orientation Date Work Begins Check The Box On The Right If The Contractor Will Beringing Materials On Site That Require An MSDS System Contractor Is Working On Nature Of Work On Site SCOPE OF CONTRACTOR ORIENTATION All Contractors Working On Site Are Required To Review Sections 1 - IV.	OHC REPRESE						
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All Contractors Working On Site Are Required To Review Sections I - IV.	SCOPE OF CONTRACTOR ORIENTATION						
	All Contractors Working On Site Are Required To Review Sections I - IV.						
11 OTH COTOLOGY DECEMBER 11 NEW MARKET CONTRICTIONS							
Check Each Box Below that Represents the Needs of the Contractor for Section V of the Contractor Orientati		•					or Orientation.
1. Fall Arrest 5. Respiratory Protection 9. Process Safety Manageme	1. Fall Arrest	5	. Respirato	ry Protection	9. I	Process Safety	Management
2. Lockout/Tagout 6. Confined Space Procedure 10. Commercial Diving	0				10.	Commercial	Diving
3. Exposed Energized Electrical Work 7. Welding & Cutting/Hot Work							
4. Scaffold Requirements 8.Trenching and Excavations	4. Scaffold Requirements	8	.Trenching	and Excavations			

The Following Procedures And Rules Have Been Developed To Protect The Employees And Equipment Of The Orlando Utilities Commission. It Is Not Meant To Be All Inclusive Nor Does It Relieve Any Contractor Of Any Of Their Responsibility As Defined In The Contract, Or Any Federal, State, Or Local Regulation.

AREAS OF SPECIAL CONCERN

1.	
2.	
3.	
4.	
5.	
6.	
CONTRACTOR EMPLOYEE NOTIFICATION	
The Contractor is responsible for informing their personnel of the All employees who will be on site to perform work shall sign to Failure to sign the Contractor Employee Notification List may refrom site.	the Contractor Employee Notification List.
CONTRACTOR INJURY/ILLNESS REPORTS	
The Contractor shall provide an injury/illness report to OUC for on site within 48 hours of the event causing the injury/illness.	any work related injury/illness that occurs
<u>VIOLATIONS</u>	
1. Violations of the above rules and regulations may result removed from the site.	in the employee and/or contractor being
OUC Representative	Contractor Representative
EMERGENCY EVACUATION NOTIFICATION	
I have read and understand that the Contractor Representates Evacuation List to Security before any personnel enter or main gate Security office.	
Contractor Representative	

CONTRACTOR EMPLOYEE NOTIFICATION LIST

I have been informed, and understand the rules, regulations and information contained in the Contractor Orientation, and understand violation of these rules may result in my removal from site.

	Print Name	Signature	Date
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Competent and Qualified Person Designation Explanation

Definitions:

Competent Person - means one who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, **AND** who has the authorization to take prompt corrective measures to eliminate them.

Qualified Person - means one who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training and experience, has successfully demonstrated his/her ability to solve or resolve problems relating to the subject matter, the work or the project. **Note:** Generally speaking, a "Qualified Person" is considered to have a higher level of expertise than a "Competent Person".

Explanation of Competent and Qualified Form:

29 CFR 1926 and 29 CFR 1910 (OSHA) requires your company to provide Competent Persons and/or Qualified Persons for various types of work. The **Competent and Qualified Form** has multiple boxes to be checked indicating the person(s) designated as "Competent/Qualified Person" for your company, depending on the scope of work. By checking each appropriate box as "Competent/Qualified Person" on the **Competent and Qualified Form** you are also indicating the person named has met any OSHA requirements for performing duties at this level of responsibility and has the authority to take prompt corrective measures to eliminate hazards and enforce safety rules for your company. Some of the check boxes on the **Competent and Qualified Form** may not have a specific OSHA regulation that mentions a "Competent or Qualified Person", however, this form is used to ensure OUC contacts the person(s) with the appropriate training and authority to take the actions necessary for the safety of your company's employees. While OUC does not require documentation prior to beginning work on site, OUC reserves the right to request documentation of the training and qualifications of those personnel designated as "Competent/Qualified Person" on the **Competent and Qualified Form** should plant management deem it necessary at a later date.

Example:

The ABC Construction Company will be replacing underground water piping attached to the potable water tank. Their work will require Lockout/Tagout, Confined Space Work, Welding & Cutting and Excavation while on site.

	Name of Competent/Qualified Pers	on	John Doe	
	1. Fall Arrest		5. Respiratory Protection	9. Hazardous Materials
V	2. Lockout/Tagout	S	6. Confined Space Procedure	10. Commercial Diving
	3. Exposed Energized Electrical Work		7. Welding & Cutting/Hot Work	11. Other
	4. Scaffold Requirements		8.Trenching and Excavations	

The Contractor Representative prints the name of the person(s) on the form who is to be the "Competent or Qualified Person" and checks each item in their scope of work for which they will be the "Competent or Qualified Person", if one person is to be the sole "Competent or Qualified Person", then the contractor should have each item in their scope of work check under his name. If multiple personnel, or personnel with varying qualifications are needed, write the name of the "Competent or Qualified Person" in the space provided and check only those items in the scope of work for which they will be the "Competent or Qualified Person".

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Competent and Qualified Form

Based upon their training and experience, the following personnel have the authority of a Competent/Qualified Person Representative for the specific types of work noted by the check marks in the table below.

Name of Computant/Ovelified Dayson					
Name of Competent/Qualified Pers	on			0.77	
1. Fall Arrest		5. Respiratory Protection	╄	9. Hazardous Materials	
2. Lockout/Tagout		6. Confined Space Procedure	╄	10. Commercial Diving	
3. Exposed Energized Electrical Work		7. Welding & Cutting/Hot Work	L	11. Other	
4. Scaffold Requirements		8.Trenching and Excavations			
Name of Competent/Qualified Person:					
1. Fall Arrest		5. Respiratory Protection	П	9. Hazardous Materials	
2. Lockout/Tagout		6. Confined Space Procedure		10. Commercial Diving	
3. Exposed Energized Electrical Work		7. Welding & Cutting/Hot Work	Ī	11. Other	
4. Scaffold Requirements		8.Trenching and Excavations			
Name of Competent/Qualified Pers	on			low 1 Mari	
1. Fall Arrest		5. Respiratory Protection	₽	9. Hazardous Materials	
2. Lockout/Tagout		6. Confined Space Procedure	₽	10. Commercial Diving	
3. Exposed Energized Electrical Work		7. Welding & Cutting/Hot Work	┫.	11. Other	
4. Scaffold Requirements		8.Trenching and Excavations			
Name of Competent/Qualified Pers	on	:			
1. Fall Arrest		5. Respiratory Protection		9. Hazardous Materials	
2. Lockout/Tagout		6. Confined Space Procedure		10. Commercial Diving	
3. Exposed Energized Electrical Work		7. Welding & Cutting/Hot Work		11. Other	
4. Scaffold Requirements		8.Trenching and Excavations			
Name of Competent/Qualified Pers	on	:			
1. Fall Arrest		5. Respiratory Protection		9. Hazardous Materials	
2. Lockout/Tagout		6. Confined Space Procedure		10. Commercial Diving	
3. Exposed Energized Electrical Work		7. Welding & Cutting/Hot Work		11. Other	
4. Scaffold Requirements		8.Trenching and Excavations			
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4. Scaffold Requirements		8.Trenching and Excavations			
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1. Fall Arrest		5. Respiratory Protection		9. Hazardous Materials	
2. Lockout/Tagout		6. Confined Space Procedure		10. Commercial Diving	
3. Exposed Energized Electrical Work		7. Welding & Cutting/Hot Work		11. Other	
4. Scaffold Requirements		8.Trenching and Excavations			

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CONTRACTOR EVACUATION LIST

CONTRACTOR/COMPANY:
DATE ENTERING SITE:
DATE LEAVING SITE:
The following Supervisor will account all personnel during an Emergency Evacuation that work for the above named Contractor.
1.

This Page Must Go To The Security Office

SAMPLE INFORMATION GUIDE

(Site Specific Guides will be handed to the contractor when first reporting to the project)

EMERGI	ENCY #
OUC REPRE	SENTATIVE EXT. #
AREA SUPE	RVISOR EXT.
PLANT PAG	ING SYSTEM.
EVACUATIO	ON AREA(S):
PRIMARY =S SECONDARY	ite Specific. Z = Site Specific
EMERGENC	Y PROCEDURES:
1. Medical, Fin	re and Other Plant Emergencies
A.	For medical, fire and other plant emergencies the Control Room shall be notified using the OUC emergency telephone number The person making the call should be prepared to relay the following information: - Type of emergency - Location of emergency - Severity of emergency - Name of caller and telephone number call is being made from
B. C.	The person making the call shall not break communication until directed to by the Control Room. Medical and chemical emergencies will be announced over the Public Address system in conjunction with three two (2) second tones of the alarm system. Do not evacuate when the three two-second tones are used.
2. Evacuation	
A.	In the event a plant evacuation is required an alarm will be sounded (site specific). In between each alarm a verbal announcement will inform all personnel as to the nature of the emergency. Regardless of the verbal announcement, personnel shall evacuate upon hearing the alarm and report to their evacuation areas. Regardless of where a fire is located all personnel must report to their evacuation areas when the alarm is sounded.
B. C.	Outside contractor personnel shall assemble at Site Specific. Supervisors shall be responsible to account for their personnel in the assigned areas. A Contractor Evacuation List will be provided by the Contractor Representatives to Security prior to any personnel beginning work or entering the site. The Contractor Representative will also insure that all of the Contractor's personnel entering the site are informed of their evacuation area. Site Security shall drive to each evacuation area and check in with each Supervisor. Supervisors shall inform Security of any missing persons.
D.	During the emergency use of the paging system, OUC radios, or calls to the Control Room should be limited to only those calls concerning additional information about the current emergency, or to report a new emergency. An "all clear" will be sounded when normal communications may resume.
E.	Personnel shall remain at their assembly areas until released by the OUC designee in charge of the

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emergency scene.

I. SECURITY

1. Identification and Access

- A. Authorization for any Contractor, or person to enter to the site, or to remain on site, can be denied solely at the discretion of the Management or the designated OUC Representative.
- B. All Contractor employees will provide photographic identification to Security as requested upon entering or exiting.
- C. All Contractor employees shall be required to wear an identification badge. The badge shall be worn in plain view on the upper part of the body.
- D. No employee shall enter any electrical enclosure or substation without prior approval.
- E. Contractor Employees shall only be allowed in pre-approved areas.
- F. The use of the plant restroom facilities shall be prohibited unless prior arrangements have been made.
- G. Smoking shall only be allowed in designated areas.

2. Materials and Equipment

- A. Property removal forms are required to take any material or equipment off site. They shall be signed by the appropriate OUC Supervisor.
- B. The following are specifically prohibited on site: Firearms or other deadly weapons, explosives or fireworks, alcoholic beverages, narcotics or non-prescription drugs, pets, open fires, posting of unauthorized signs.
- C. All vehicles and equipment entering the site are subject to search by Security or other personnel designated by OUC. OUC reserves the right to forbid access to any vehicle, as well as the driver and occupants of any vehicle that is not searched or has deficiencies that may impair the safety of the vehicle or equipment.
- D. Material and equipment shall be stored only in pre-approved areas. Unless prior approval is obtained, the use of OUC trash bins, dumpsters, etc., is not allowed. Contractors must make arrangements for storage and removal of all waste products or trash.
- E. The use of cameras or video equipment shall be prohibited unless prior arrangements have been made.

II. HAZARDOUS MATERIALS ON SITE

1. Location of Extremely Hazardous Materials

- A. The following Extremely Hazardous Materials are found on site in some OUC facilities:
 - 1. Anhydrous Ammonia
 - 2. Asbestos
 - 3. Biocide
 - 4. Chlorine
 - 5. <u>Hydrogen</u>
 - 6. <u>Liquid Nitrogen</u>
 - 7. Radioactive Materials
 - 8. Sodium Hydroxide
 - 9. Sulfuric Acid
- B. All Contractor personnel working on site must be aware of the presence and hazards of these materials. Any personnel working in the immediate area must be notified of the appropriate actions to take in an emergency involving these materials. The actions to be taken are:
 - 1. Exit the area immediately.
 - 2. Notify the Control Room using the **Emergency Procedures** noted in the **Emergency Procedures** section of this document.
 - 3. Follow the directions given by OUC personnel as to evacuation, etc.

- C. Contractors whose scope of work will include performing maintenance, repair, renovation or specialty work on any system involving extremely hazardous materials shall perform a Job Hazard Analysis (JHA) for the work to be performed in conjunction with OUC personnel.
- D. Contractors bringing hazardous or toxic materials on site shall provide, upon request, an emergency plan for any spill/release of the material they are using, and the appropriate training records for the type of work of the personnel are expected to perform.
- E. Potable (Drinking) Water and Re-Use Water (Stanton Energy Center)
 - 1. The only water that is acceptable for drinking on site is the following:
 - a. Spigots found at sinks in offices or restrooms.
 - b. Spigots found at sinks inside kitchens.
 - c. Drinking fountains.

DO NOT DRINK FROM ANY OTHER SOURCE OF WATER

- 2. Emergency Eyewash/Showers use potable water supplies, but it is not recommended they be used for drinking unless thoroughly flushed.
- 3. All plant Service Water and Fire Water is Re-Use water. This includes all outlets in the plant environment. The Re-Use water is treated wastewater from a local Orange County sewage treatment plant. Water reuse involves taking domestic wastewater, giving it a high degree of treatment, and using the resulting high-quality reclaimed water for a new, beneficial purpose. Extensive treatment and disinfection ensure that public health and environmental quality are protected. The treatment of wastewater prevents it from being considered a hazard for incidental contact. However, Re-Use Water is not considered suitable for drinking, or hygiene activities such as washing the face, hands, etc. When prolonged contact is likely to occur, rubber gloves, rain suits etc. should be used.

III. EMERGENCY PROCEDURES

1. Medical, Fire and Other Plant Emergencies

- A. For medical, fire and other emergencies the appropriate OUC personnel (defined by OUC at beginning of the project) be notified using the company phone system.
 - 1. The person making the call should be prepared to relay the following information:
 - Type of emergency.
 - Location of emergency.
 - Severity of emergency.
 - Name of caller and telephone number call is being made from.
 - 2. The person making the call shall not break communication until directed to by the OUC person. Depending on the OUC location Medical and chemical emergencies may be announced over the Public Address system in conjunction with three two (2) second tones of the alarm system. Do not evacuate when the three two-second tones are used.

B. Evacuation Plan

1. Some of the OUC locations have developed evacuation plans. They will be given to the contractor when they first arrive at the site.

IV. GENERAL SAFETY

1. Work Apparel and Hearing Protection

- A. Hardhats and safety glasses shall be worn at all times (except while in air-conditioned areas or vehicles with enclosed cabs).
- B. Good leather work shoes or boots shall be worn. Athletic and open toed shoes shall not be allowed.

 Exception: Athletic style shoes which meet the requirements and specifications established in the American Standard Safety Requirements for Foot Protection ANSI Z41-1991 may be worn.

- C. Shirts covering the full trunk and upper arm shall be worn. Cut off jeans or shorts shall not be allowed. Minimum acceptable apparel is considered a Cotton Tee-Shirt and Cotton Pants. Personnel who may be exposed to arcs or flames shall not wear apparel that may <u>increase</u> their injuries in an accident. Further guidelines for proper apparel for personnel who may be exposed to arcs or flames can be found in 29 CFR 1910.269 and the additional requirements noted in **Section V, Paragraph 3** <u>Exposed Energized Electrical</u> **Work** of this document.
- D. Hearing protection shall be worn while working in excessively noisy areas or when using tools that exceed 90 decibels. Further information on hearing protection requirements may be found in 29 CFR 1910.95.

2. Vehicular Safety

- A. Unless otherwise stated, only company owned or rented vehicles will be allowed on site. All contractor employee personal vehicles shall park in the construction parking lot unless otherwise designated.
- B. Personnel riding in the bed of a pickup truck shall not sit above the floor of the bed unless provided with a suitable seat with a backrest that prevents them from falling out of the vehicle. Sitting on the tailgate while the vehicle is in motion is strictly prohibited.
- C. Personnel shall not ride on the running boards, fenders, etc., of any vehicle.
- D. All persons operating motor vehicles must have the appropriate license for the vehicle being operated.
- E. The project speed limit is 15 mph unless otherwise posted.

3. Housekeeping

- A. Special attention shall be given to keeping the inside of the structures and surrounding grounds clean and free from trash and debris. Work areas and storage areas shall be continuously cleaned each workday.
- B. All hoses, cables, extension cords, and similar materials shall be located, arranged, grouped and routed overhead so that they will not block any access way or work area, and will permit easy cleaning and maintenance.
- C. Material and supplies shall be stored in an orderly manner to prevent their falling or spreading, and to eliminate tripping and stumbling hazards.
- D. Flammable and combustible liquids shall only be stored, or dispensed, using Underwriters Laboratories or Factory Mutual listed safety containers and only in approved quantities.
- E. Gas or diesel powered vehicles and equipment shall not be allowed in any building unless prior approval has been obtained; a Welding and Cutting Permit is utilized to receive approval.
- F. Upon completion of work, all equipment, material and waste shall be removed from the plant site.
- G. Any operation that produces air contaminants above the permissible exposure limits noted on the Material Safety Data Sheet for the material being used, or above the limits set in Table Z-1-A (29 CFR 1910.1000), shall provide engineering controls to restrict the exposure of air contaminants above the limits to only those personnel working in the immediate area of the work to be performed. The suggested method of protecting the adjacent areas from air contaminants above the limits is a ventilation/exhaust system with tenting if necessary. The exhaust of the system must have the appropriate filter(s) to prevent the air contaminants from producing an exposure above the permissible exposure limits. Other methods of controlling of air contaminant exposure requires approval by the Safety Manager prior to beginning to perform the work.

The need for protecting the adjacent areas from air contaminants shall be assumed unless the Contractor can provide documentation from a Certified Industrial Hygienist that the exposure level is below the permissible exposure limits. Any dust or other contaminant produced from the operation is the Contractor's responsibility, and the Contractor shall ensure it is cleaned/removed upon completion of the work unless prior arrangements have been made.

4. Hazardous or Toxic Materials

A. The Contractor shall provide Material Safety Data Sheets covering all hazardous materials furnished under or otherwise associated with the work under this contract in accordance with applicable federal, state and local laws.

- Before entering the site, the contractor must provide a copy of all the Material Safety Data Sheets for the materials that will be used on site to perform their work, or any of their subcontractor's work. Should additional materials be needed after work has begun, the materials must receive approval by OUC and the MSDS must be on site and supplied to OUC before the material is brought on site.
- B. All hazardous and toxic material brought on site, *or generated by the work process*, shall be clearly labeled with the Contractor's name. All containers must have the appropriate labels containing the information on the hazards of the materials. The minimum requirements for day use containers or similar containers that do not have the appropriate manufacturers warning label are: the trade name of the product, a hazard warning such as the NFPA 704 system or H.M.I.S. System.
- C. Hazardous and toxic materials shall only be stored in pre-approved locations.
- D. Contractors are responsible for all hazardous materials or toxic materials brought on site or generated by their work and shall properly dispose of all hazardous and toxic material for which they are responsible at their cost unless prior arrangements are made. Contractors shall immediately report any spills to the appropriate OUC representative.

5. Fire Equipment and Fire Hydrants

- A. Fire equipment and fire hydrants shall not be used unless there is an emergency or unless prior approval has been given.
- B. To prevent hydrant damage when using a fire hydrant, it shall be opened all the way when in use and closed all the way when not in use.
- C. If a plant fire extinguisher is used it shall be turned in to the appropriate OUC representative.

6. Ladders

- A. All ladders and use of ladders shall comply with 29 CFR 1910.25, 1910.26 and 1910. 27.
- B. Site Specific Rules regarding ladders are the following:
 - 1. **Portable metal ladders shall not be used.** Exception: Such ladders may be used in specialized work, as high voltage substations, where non-conductive ladders might present a greater hazard. These ladders shall be properly marked.
 - 2. Ladders shall not be used as scaffold platforms.
 - 3. Boxes, chairs, etc., shall not be used as ladders.
 - 4. Portable straight ladders shall be used only if they have non-skid bases.
 - 5. When working from a portable ladder, employees shall ensure that the ladder is securely placed, held, tied, or otherwise made secure to prevent slipping or falling.
 - 6. Personnel working from portable ladders shall wear fall arrest equipment whenever they are exposed to a fall of 24 feet or more.

7. Mechanical

- A. Pulley, gear and similar equipment guards shall be replaced if removed.
- B. No work shall be performed in close proximity to running conveyor belts.
- C. No one shall ride, stand on, or cross over a conveyor.

8. Cranes, Hoists, Forklifts and Heavy Equipment

- A. Prior approval must be obtained before using any plant crane, hoist, forklift or heavy equipment.
- B. Only qualified persons shall operate any crane, hoist, forklift or heavy equipment.
- C. All Contractor hoists and cranes must meet the requirements as specified in 29 CFR 1910 and 1926.
- D. Upon request, the Contractor must provide the inspection records of any Contractor supplied hoist or crane to be used on site.
- E. All forklift operators must have a license/certification as being qualified to operate a forklift and a current valid evaluation indicating they have the skills necessary for the type of forklift they will be using.

9. Area Protection and Access

- A. Work area protection is the adequate protecting of all employees by the use of suitable barriers, warning signs, lights, flags, flagmen, etc., as the job requires on approaches to work areas, excavations, open manholes, floor holes, etc. Proper work area protection shall be preplanned.
- B. Safe access shall be provided to all work areas.
- C. Any open floor hole with a vertical dimension greater than four (4) feet shall have a suitable barrier with appropriately constructed guardrails, midrails and toeboards, or suitable cover, designed for 2 times the intended load. For short duration jobs, warning tape with signs denoting that 100% Fall Protection is needed, in conjunction with a standby employee to ensure personnel entering the designated area wear the appropriate fall arrest equipment, may be utilized. The barricade tape must be placed at least six (6) feet from the edge of the fall exposure and the standby employee must be present <u>AT ALL TIMES WHEN THE FLOOR HOLE IS OPEN</u>.
- D. Open manholes are required to have a suitable barrier with appropriately constructed guardrails, midrails and toeboards.

E. Any *Leading Edge* type of fall exposure (roof, walkway without handrails etc.) in excess of four (4) feet shall be protected appropriately constructed guardrails, midrails and toeboards. For short duration jobs, warning tape with signs denoting 100% Fall Protection is needed may be used. The barricade tape must be placed at least six (6) feet from the edge of the fall exposure. All personnel entering past the barricade tape must wear the appropriate fall arrest equipment.

10. Tools and Equipment

- A. All portable power tools, portable lighting, and other temporary equipment require the use of a Ground Fault Circuit Interrupter (GFCI).
- B. Electrical equipment and tools shall be wired and grounded as required by applicable electrical codes.
- C. Appropriate guarding shall be used on tools and equipment.
- D. Defective tools and equipment must be identified as defective by tagging, marking etc. and may not be used until repaired.
- E. Use of OUC tools or equipment is forbidden unless authorized by the OUC Representative.

11. Operation and Modification of Equipment

- A. Contractor employees shall not operate any switch, valve, breaker, etc., unless they receive approval from their OUC representative and the Tagging Authority for the equipment they need to operate.
- B. Contractor employees shall not make any circuit logic, control modifications, or other modification to equipment without approval from the appropriate OUC representative.

V. SPECIAL HAZARDS AND WORK CONDITIONS

1. Fall Arrest

- A. Fall arrest equipment shall be properly used when exposed to a fall in excess of six (6) feet, when the use of other fall protection means are not practical. Fall protection shall be provided 100% of the time personnel are exposed to a fall in excess of six (6) feet, with the exception of working from a portable ladder with a fall exposure of twenty-four (24) feet in height or lower. Any time personnel work from a portable ladder in excess of than twenty-four (24) feet, or climb a <u>fixed</u> ladder that has a fall exposure greater than twenty-four (24) feet; the appropriate fall protection measures must be taken. Appropriate fall arrest equipment is considered the following:
 - 1. A full body harness is required for use as part of the fall arrest system. A body belt or a chest harness is not considered proper fall arrest equipment.
 - 2. All lanyards used for fall arrest shall have double locking snap hooks.
 - 3. All lanyards used for fall arrest shall have a shock absorber that limits the arresting force to less than 900 pounds in the event of a fall.
 - 4. Those devices which limit the fall distance in such a manner as to ensure the arresting force does not exceed 900 pounds may be used without a shock absorber (e.g.: retractable lifelines, ladder clamps, etc.).

Note: Floor Holes and Leading Edge Fall Exposures require fall protection or fall arrest at an exposure of 4 feet.

B. Additional requirements and information on fall protection may be found in 29 CFR SUBPART M.

2. LOTO Procedure (Lockout/Tagout)

A. Stanton Energy Center requires all contractors to comply with 29 CFR 1910.269(d) - Hazardous Energy Control (Lockout/Tagout) Procedures, the SEC LOTO Procedure will be used to ensure the control of hazardous energy.

- B. No personnel shall work in such proximity to any part of an electric power circuit that he may contact in the performance of the work unless protected against electrical shock. Effective protection is considered to be the following:
 - 1. De-energize the circuit and use of the SEC LOTO Procedure.
 - 2. If the circuit is required to be worked on while energized, it must be guarded by effective insulation or other means and must conform to the guidelines for work performed on energized equipment, as found in 29 CFR 1910.269 and the additional requirements noted in **Paragraph 3. Exposed Energized Electrical Work** of this document.
- C. Anytime personnel must de-energize or de-pressurize equipment to perform their work safely, the requirements of the SEC LOTO Procedure must be followed. Precautions to relieve, or block, stored energy must also be taken. Examples are, but are not limited to:
 - 1. Capacitors.
 - 2. Pressure trapped in piping or vessels.
 - 3. Spring operated equipment.
 - 4. Hydraulics.
 - 5. Eccentrics
- D. The SEC LOTO Procedure uses three different colored tags for the purposes of preventing equipment from being operated. Violation of any of these tags may cause serious injury or equipment damage. Any contractor employee violating a LOTO Tag will be removed from site.
- E. **Red Tags:** Operations hangs Red Tags to prevent operation of equipment. Equipment that is Red Tagged may only be operated by Operations personnel, and only after approval has been obtained from the Tagging Authority.
 - 1. The SEC LOTO Procedure requires "Blockout" with Red Tags. Blockout is the use of a heavy-duty tiewrap to prevent inadvertent operation of equipment similar in manner to the use of a lock for this purpose.
- F. **Yellow Tags:** Personnel designated as Primary Authorized Employees hang Yellow Tags. Equipment that is Yellow Tagged may only be operated under the authority and by direct communication with, the Primary Authorized Employee.
 - 1. The SEC LOTO Procedure requires "Blockout," or Lockout, to be used with Yellow Tags in compliance with the provisions of the SEC LOTO Procedure. Blockout is the use of a heavy-duty tie-wrap to prevent inadvertent operation of equipment similar in manner to the use of a lock for this purpose. The decision as to which is appropriate, Blockout or Lockout, is the responsibility of the Primary Authorized Person.
- G. A Yellow Tag shall not be placed on equipment that has a Yellow or Red Tag already placed on it, and a Red Tag shall not be placed on equipment with a Yellow Tag or Red Tag hung on it.
- H. **Blue Tags:** When equipment is tagged to prevent injury to personnel, a Blue Tag is hung adjacent to a Red or Yellow Tag by a person designated as a Lead Authorized Person. No equipment may be operated while a Blue Tag is attached to the equipment.
 - 1. Only Lead Authorized Persons may hang OUC/PRBU Blue Tags and perform the other duties assigned this designation in the SEC LOTO Procedure.
 - 2. A Blue Tag shall only be removed by the Lead Authorized Person who hangs the tag, except under the Emergency Release Provisions of the SEC LOTO Procedure.
 - 3. Contractor employees who have been designated as Lead Authorized Persons may provide Blue Tag administration for contractor employees using the provisions of the SEC LOTO Procedure. Only personnel designated by the OUC PRBU Safety & Training Manager may be Lead Authorized Persons. The designation of Lead Authorized Person is based upon successfully passing training requirements and demonstration of the proper use of the SEC LOTO Procedure.
 - 4. Contractors who have no person designated as a Lead Authorized Person will have their personnel work under the Blue Tags of an OUC Representative that has the designation. The OUC Lead Authorized Person will create an Authorized Person Clearance Log. All contractor employees working under the Blue Tags of an OUC Lead Authorized Person shall sign on the Authorized Person Clearance Log before beginning work, and shall sign off of the Authorized Person Clearance Log when the work is complete, or when they will no longer be working on the equipment. The OUC Lead Authorized Person shall not remove a Blue Tag if any signatures are not cleared from (signed off) the Authorized Person Clearance Log.

- 5. Each contractor employee is responsible for his or her own LOTO device (signature). No person shall sign for another person, work under the signature of another person, or sign off for another person on the Authorized Person Clearance Log except under the Emergency Provisions of the SEC LOTO Procedure.
- 6. When the OUC Lead Authorized Person deems it necessary, they have the authority to require all contractor employees to sign off the Authorized Person Clearance Log at the end of each work shift when contractor employees are leaving the site for the day.
- 7. The OUC Lead Authorized Person has the authority to require the contractor to designate a "Senior Authorized Person". The Senior Authorized Person is responsible to ensure all contractor employees sign on and off the Authorized Person Clearance Log as needed for their protection and provide the completed Authorized Person Clearance Log to the OUC Lead Authorized Person as needed to control hazardous energy.

3. Exposed Energized Electrical Work

- A. No employee shall approach or take any conductive object closer to exposed, energized lines or equipment than set forth in **TABLE 1** in this section unless, the employee is *Qualified* as per the definition in 29 CFR 1910.269 and the employee is insulated from the energized part(s) using gloves, sleeves, or tools rated for the voltage of the exposed, energized part(s), or the exposed energized part(s) are insulated from the employee.
- B. All personnel performing exposed, energized, electrical work on equipment under the exclusive control of the facility shall barricade unshielded areas and wear the appropriate level of protective apparel (ATPV Rating) within the barricaded area. The distance the unshielded area shall be barricaded shall conform to the following:

50 volts to 599 volts = 10 feet Greater Than 600 Volts = 20 feet

Note: Exposed, energized, work on electrical equipment not under the exclusive control of the facility shall conform to the appropriate guidelines and regulations per the authority having control of the equipment.

- C. All electrical protective devices shall meet the requirements of 29 CFR 1910.137 as minimum standard.
- D. Additional requirements may be found in 29 CFR 1910.269.

TABLE 1
AC LIVE-LINE EXPOSURE MINIMUM APPROACH DISTANCE

	DISTANCE		
NOMINAL VOLTAGE PHASE TO PHASE	PHASE TO GROUND EXPOSURE (FT - IN)	PHASE TO PHASE EXPOSURE (FT - IN)	
50 to 1000	AVOID CONTACT	AVOID CONTACT	
1100 to 15000	2 - 1	2 - 2	
15100 to 36000	2 - 4	2 - 7	
36100 to 46000	2 - 7	2 - 10	
46100 to 72500	3 - 0	3 - 6	
72600 to 121000	3 - 2	4 - 3	
138000 to 145000	3 - 7	4 - 11	
161000 to 169000	4 - 0	5 - 8	
230000 to 242000	5 - 3	7 - 6	
345000 to 362000	8 - 6	12 - 6	
500000 to 550000	11 - 3	18 - 1	
765000 to 800000	14 - 11	26 - 0	

4. Scaffold Requirements

- A. Detailed regulations on specific types of scaffolding are given in 29 CFR, Part 1926 Subpart L.
- B. Competent persons as defined by **29 CFR 1926.450 (b)** must be designated to supervise the erecting, moving, dismantling, and alteration of scaffolds.
- C. A Competent Person shall check all scaffolding each shift (prior to use) to ensure it is of sufficient strength and rigidity to safely support the weight of workers and material to which it will be subjected.
- D. The following rules are site-specific requirements for scaffolding and supports.
 - 1. **Scaffolds** 4 feet and higher must have standard guardrails and midrails installed on all open sides and ends of the platform where feasible. If standard guardrails and midrails are not installed on all open sides and ends of the platform, the scaffold must denoted as requiring fall protection using the Yellow Scaffold Tag. Toeboards shall be installed on all open sides and ends of platforms more than 10 feet above the ground or floor unless other precautions are taken for personnel.
 - 2. All scaffolds shall have the appropriate tag hung indicating their suitability for use. Only the competent person in charge of the erection/dismantling of the scaffold may sign the scaffold tag. The scaffold tag shall be signed and dated in the spaces provided on the back of the tag. Any other pertinent information may be written on the back of the tag.
 - a. When any scaffold is incomplete (such as during erection or dismantling) or damaged, the red colored scaffold tag shall be hung appropriately. The front of the red scaffold tag will read as follows:

WARNING-THIS SCAFFOLD IS NOT COMPLETE-DO NOT USE

In the event a piece(s) of scaffold is damaged it shall be tagged and the reason noted on the back of the tag under the warning header. The damaged piece of scaffold shall be removed from service and placed out of service, with the tag remaining in place, until the scaffold piece(s) is repaired or destroyed.

b. In the event a scaffold must be built which is unable to have the guardrails and midrails, or has a ladder access with a fall hazard of greater than 24 feet, fall protection shall be used. Any scaffold which requires the use of fall protection shall have a yellow scaffold tag hung appropriately. The front of the yellow scaffold tag will read as follows:

CAUTION-FALL PROTECTION MUST BE USED ON THIS SCAFFOLD

For those scaffolds which require fall protection only because the ladder access exceeds 24 feet, the competent person shall indicate on the back of the yellow scaffold tag (under CAUTION header) that fall protection is needed only while climbing/descending the ladder access.

c. Those scaffolds that are complete and meet the proper specifications shall have a green scaffold tag hung appropriately. The front of the green scaffold tag will read as follows:

ATTENTION: THIS SCAFFOLD WAS BUILT TO MEET PROPER SPECIFICATIONS IT IS SAFE TO USE.

- d. Any scaffold which is tagged with a green or yellow scaffold tag shall have the tags removed and replaced with a red scaffold tag before any modification may be made which changes the safety status of the scaffold.
- e. Scaffold tags shall be hung at approximately eye level and adjacent to each ladder access. In the event the scaffold does not have a ladder access, the tag shall be placed at each access location where it is easily visible before accessing the scaffold.

5. Respiratory Protection

- A. Respirator protection shall be worn when required. The Contractor's Respiratory Program shall meet the applicable O.S.H.A standard for the operation or maintenance to be performed. Upon request, the records of your respirator program shall be provided to OUC for the personnel needing to use respiratory protection. This information must contain, but not be limited to, the following:
 - 1. Training record for the type of respirator to be used.
 - 2. Medical clearance for respirator use.
 - 3. Fit test records for tight fitting respirators requiring a seal on the face.
 - 4. Methods used to determine the change out schedule for respirator cartridges.

The Safety Manager is the Respiratory Program Administrator has final authority on the type and level of respiratory protection used; unless the Contractor provides written authorization to use a different level of respiratory protection from the Contractor's Respirator Program Administrator. The written authorization must include the data and methodology used to determine the level of respiratory protection.

B. Additional information on respiratory protection may be found in 29 CFR 1910.134 and 1910.120.

6. Confined Space Procedure

- A. A Confined Space Entry Permit shall be obtained before entering into any confined space. The Confined Space Entry Permit shall be obtained from the appropriate OUC Representative.
 - 1. A confined space is any one of the following areas that employees may need to enter in the course of their work:
 - a. A structure such as a boiler or condenser
 - b. A container such as a tank, drum, sump, vault, or other vessel
 - c. A pipe, ventilation or exhaust duct, sewer, coal silo, mill, manhole.
 - 2. Any structure which was not designed for continuous human occupancy where there may be a lack of oxygen or where potentially explosive, flammable, poisonous, asphyxiant, suffocant, or anesthetic vapors or gases could be present in hazardous amounts. Any structure in which engulfment or entrapment is possible. Confined spaces should be marked; however, lack of proper marking does not relieve personnel of determining if the space requires to be considered as a confined space prior to entry.

B. Responsibilities:

- 1. Contractors Representatives: Shall coordinate their requests for a Confined Space Permit through their OUC representative. Unless other arrangements are made through the OUC representative, it is the Contractor's responsibility to assign a qualified person to authorize a Confined Space Permit, as the Person in Charge of the Work, and to provide a rescue plan, the personnel, equipment and/or devices necessary to ensure the requirements of the Confined Space Permit are met.
- 2. Supervisors: It shall be all supervisors' responsibility to inform their employees of the requirements of the Confined Space Entry Procedure and the hazards associated with working in confined spaces and to initiate disciplinary action for any violation of the procedure.
- 3. Employees: It shall be all employees' responsibility to abide by the requirements of the Confined Space Entry Procedure.
- C. Personnel required to enter a confined space shall obtain a Confined Space Entry Permit from the appropriate authorized person.
- D. The employee issuing the permit and the employee requesting the permit shall fill out the permit and it shall be posted in a conspicuous location near the entrance to the confined space.
- E. The following items shall be considered and the appropriate actions taken before anyone enters the confined space:
 - 1. The atmosphere shall be tested to determine the oxygen percentage level and the presence of explosive or toxic gases, fumes, or dust.
 - a. Only an approved instrument shall be used. Instruments found not working properly shall immediately be repaired.
 - b. Employees conducting the tests shall be properly trained.

- c. All levels of the confined space shall be tested to ensure there are no pockets of hazardous gases, fumes, or oxygen deficient areas.
- d. If long work in the confined space is anticipated, tests shall be conducted periodically to ensure that safe conditions are maintained. A test shall be conducted a minimum of once each shift to ensure the atmosphere remains in a safe condition.
- e. Constant monitoring may be required based on the hazards and the work being performed (i.e., welding, painting, coating, using chemicals). In the Air Quality Control Building constant monitoring for Sulfur Dioxide is required inside the modules and the connecting ductwork while the boiler is in operation.
- F. All test results shall be recorded on the Confined Space Entry Permit.
- G. Detailed requirements for welding in confined spaces are given in 29 CFR, Part 1910.252.
- H. Entry into a confined space with an unsafe atmosphere shall be avoided if at all possible. An employee required to enter a confined space with an unsafe atmosphere shall be equipped with the necessary personal protective equipment. Any entry into a confined space with an unsafe atmosphere requires a consultation with OUC Plant Management and the methods of protecting employees must be agreed upon before work may be performed. Any entry into a confined space with an atmosphere that is Immediately Dangerous to Life or Health (IDLH) requires a Job Hazard Analysis (JHA) and consultation with Plant Management, the Safety Manager or designee.
- I. The confined space shall be ventilated as required to ensure a continuous supply of breathing air to the work area.
- J. The Red Tag or Yellow Tag Procedure shall be used to ensure all equipment and systems that could affect the confined space are rendered inoperative.
- K. If required, the space shall be prepared by isolation, draining, venting and cleaning.
- L. No employee shall enter a confined space unless a standby employee (hole man) is stationed outside the entrance.
 - 1. It shall be the standby employee's responsibility to provide assistance to the employees working in the confined space, and to summon emergency assistance in the event of an emergency.
 - 2. The standby employee shall not enter the confined space or leave the area without being replaced by another employee.
 - 3. It shall be the standby employee's responsibility to keep track of employees entering and exiting the confined space. He/she shall log them in and out on the back of the Confined Space Entry Permit.
- M. The "Person in Charge of the Work" as denoted on the OUC Confined Space Permit shall ensure a rescue plan, rescue equipment and fire equipment are available in the event of an emergency. The rescue plan must indicate the equipment required for extricating personnel in an emergency and must be at the entrance to the confined space under the control of the standby employee with a copy of the OUC Confined Space Permit.

1. If the contractor is providing their own rescue services:

- a. The name of the response team or person(s)and their response time must be indicated on the Rescue Plan. The response time must be no longer than four minutes for the rescuer(s) to respond to the scene.
- b. The availability of rescue services for each shift that entry occurs in the confined space must be denoted on the Confined Space Permit in the appropriate location.
- c. The OUC Representative must be notified each shift entry occurs that the contractor is providing their own rescue services for the confined space.

2. If OUC is providing rescue services:

- a. There must be an OUC approved Rescue Plan and there must also be a OUC Rescue Checklist for use by the OUC Emergency Response Team at the entrance to the confined space under the control of the standby employee.
- b. Any deviation(s) from a OUC approved rescue plan must be approved by the OUC Representative.
- c. Any confined space that must be entered for which there is not a OUC pre-approved rescue plan requires a plan to be written and approved by the Safety Division before entry is allowed.
- d. In cases where there is not a Safety representative available, the OUC Representative <u>and</u> a OUC Confined Space Qualified ERT member may authorize the deviation to the Rescue Plan or write a new rescue plan.

- e. To ensure OUC ERT Confined Space Rescue Services are available, the Person in Charge of the Work shall call the OUC Representative, and verify the availability of rescue services and denote it in the appropriate space on the Confined Space Permit.
- N. A communication system shall be preplanned to include communications between the standby person and employees inside the confined space, and a method to call for emergency assistance.
- O. Safe access to the confined space shall be maintained at all times.
 - 1. If the confined space is entered by a ladder, the ladder shall remain in place and shall be fastened in a firm position while employees are inside the confined space.
 - 2. If possible, all cords, hoses, leads, etc., shall be routed through an entrance other than the employee access into the confined space.
- P. All electrical equipment used shall be properly grounded. GFCI protection is required for use with portable lighting and portable power tools used in confined spaces.
- Q. To prevent the latching of self-locking doors or hatches while employees are working inside a confined space, the locking devices shall be made inoperative before employees enter.
- R. No work activities that cause or produce open flames, such as welding, shall be performed without a Welding and Cutting Permit.
- S. Electric welding, gas welding, cutting, or any other hot work, shall not be performed on the interior, exterior, or near the openings of any confined space that may contain flammable or explosive vapors until the confined space has been properly cleared.
- T. Compressed gas bottles other than compressed air shall not be allowed in a confined space.
- U. All entryways deeper than five (5) feet vertically require a mechanical device (e.g., Tripod) for emergency extrication to be in place at all times while personnel are in the Confined Space.
- V. After the permit has been hung, but before any employee enters the confined space, a pre-entry briefing with all employees required to enter the confined space shall be conducted by the person in charge of the work. The briefing shall cover all the items required to safely enter the confined space and the hazards associated with working in confined spaces.
- W. When the work in the confined space is complete, the person that requested the permit shall ensure all personnel and equipment are out of the confined space. They shall then sign off on the permit and turn it in to their supervisor. The supervisor shall turn it in to the Safety Coordinator or their OUC representative.
- X. Failure to follow the guidelines of the confined space procedure may require work to stop until the correct procedures are followed. The determination as to who is responsible for the cost of a work stoppage will be determined by the OUC Representative and Contractor Representative.

7. Welding and Cutting/Hot Work

- A. A welding and cutting/ hot work permit is required whenever welding, cutting or heating is done. Welding and cutting permits shall be coordinated through the appropriate OUC representative.
- B. When welding or cutting in elevated positions, precautions shall be taken to prevent sparks and hot metal from falling on people and equipment below. Walls, roofs, ceilings, pipes, tanks and partitions shall be assessed to determine if welding or cutting on them will cause a fire due to conductive heat, radiated heat or sparks from the hot work process. Conveyors and ductwork shall be considered when performing welding, cutting or other hot work that might carry sparks or otherwise cause a fire at a distant location. The conveyors or ducts must be protected, or shut down to prevent fires due to the welding, cutting or hot work if is determined the work may cause a fire. The person requesting the permit or the OUC Representative shall notify the appropriate Operations Area Supervisor when beginning work, and at the end of each shift that the day's hot work has concluded until the hot work being performed under the permit is complete.
- C. Welding screens shall be used while working next to other employees or walkways and stairways.
- D. Suitable fire extinguishing equipment shall be immediately available at all locations where welding and cutting work is being performed.
- E. A fire watch shall be provided during and after the work is completed to ensure no fire hazards exist. The minimum length of time for a fire watch is 30 minutes, however, based upon the determination of the OUC Representative, the fire watch may be required for up to an hour.

8. Trenching and Excavations

- A. Before any work is started, all underground structures and utilities affected by the work shall be located and marked. A map or drawing of the proposed excavation or trenching and any obstructions must be reviewed by all personnel involved in the trenching or excavation and agreement reached as to the methods used to ensure no underground utilities or structures are damaged during the process of the excavation or trenching.
- B. All excavations 5 foot or deeper shall be shored or sloped in accordance with Federal, State and local standards.
- C. All excavations 4 feet or deeper shall have a ladder for access into the excavation with no more than 25 feet of travel in any direction.
- D. Spoil piles shall be kept a minimum of 2 feet from the edge of the excavation.
- E. The soil type on site is to be considered Type C for excavations and trenches.
- F. All excavations or trench operations shall be inspected and supervised by a "Competent Person" as designated in 29 CFR 1926 Sub Part P Excavations.
- G. Further information on the requirements for excavations and trenching can be found in 29 CFR 1926 Sub Part P Excavations.

9. Process Safety Management

- A. OUC has some systems which are covered by 29 CFR 1910.119 Process Safety Management of Highly Hazardous Chemicals:
- B. In accordance with 29 CFR 1910.119 (h) (1) (Process Safety Management), the Orlando Utilities Commission is required to review the safety performance and safety program of contractors who perform maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to systems that are covered by the standard as part of the evaluation used to determine the award of contracts. In order for your company to be evaluated for award of the contract, a completed, signed and dated **Contractor Safety Evaluation** form must be submitted along with a copy of the contractor's Experience Modification Rate (EMR) on Insurance Company Letterhead. Failure to submit the Contractor Safety Evaluation will remove the Contractor from the qualified contractor/vendor list and the contractor will not be eligible for award of the contract.
- C. All contractors awarded work that is on the systems covered by the Process Safety Management Standard shall provide documentation that all employees have received training in the potential fire, explosion, or toxic release hazards related to his/her job and the process and the applicable provisions of the emergency plan. The documentation shall include the identity of the contract employee, the date of the training, and the means used to verify that the employee understood the training. In addition, a Job Hazard Analysis (JHA) is required for all work on systems covered by the Process Safety Management Standard and the JHA must be reviewed by all personnel involved in the work prior to the work beginning, and as needed, during the progress of the work. Any modification to the JHA during the job must be approved by the senior contractor supervisor on site and either the OUC Safety Manager or their designees.
- D. All contractors awarded work that is on the systems covered by the Process Safety Management Standard shall report any injuries or illness related to work in the process areas immediately and shall provide an injury and illness log on a weekly basis to the Safety Manager.
- F. All contractors awarded work that is on the systems covered by the Process Safety Management Standard shall comply with all other pertinent provisions of 29 CFR 1910.119 that are not mentioned in this document.

10. Commercial Diving Operations

- A. All diving operations shall conform to the non-diving safety procedures contained in the Contractor Orientation.
- B. The OUC Area Supervisor on duty shall be made aware of each days planned diving activities.
- C. Diving operations will be supervised by an OUC representative.
- D. Any diving operation taking place at the intake of a pump or pumps shall be a surface supplied air dive with helmet and shall meet all requirements as outlined in 29 CFR 1910.425.
- E. An operational 2-way voice communication system shall be used for all dives.
- F. Communications shall be checked at least each 3 minutes. A correct response from the diver is required to continue the dive.

- G. All divers must be line-tended.
- H. Detailed information concerning the requirements for diving operations are given in 29 CFR 1910. SUBPART T Commercial Diving Operations.