# Safety, Integrity, Teamwork, Excellence Standards and Expectations

Safety & Human Performance Tools



## **Focused Core Behaviors**

Focused Core Behaviors are fundamental to safe and efficient operations. Developed by a cross-functional employee team, these behaviors address identified station performance gaps.

We hold ourselves and our teammates accountable to adhere to these behaviors.

#### Safety

• I look for and correct or mitigate hazards in my work space and avoid selfrationalizing risk.

#### Training

- I arrive on time, participate and provide feedback in Training.
- I verify my qualifications are current for every task I perform.

#### **Procedure Use and Adherence**

- I implement procedures right the first time by understanding the steps prior to performing any actions.
- I actively participate in pre-job briefings.

#### **Corrective Action Program**

• I initiate Condition Reports in a timely manner, take ownership of actions and meet due dates.

#### **Emergency Response**

• I meet my Emergency Response commitments by participating in drills and responding to notification alerts. This book describes the fundamental behaviors and values that we expect. It's a reference to how we conduct business safely and reliably each and every day.

We have fostered a culture of collaboration and teamwork. The foundation of our culture is our Vision, Mission, Core Values and Nuclear Safety Culture.

It is my expectation that each of us:

- Focus on Safety in every action we take.
- Foster teamwork and peer challenging.
- Recognize gaps and have a bias for action.
- Solicit and value feedback.

Thank you for your commitment to our team.

#### Dennis Koehl President and CEO

This booklet was developed by a crossfunctional employee team. It is a tool to be used in our daily work. It provides a quick reference to reinforce our safety culture and also contains Performance Improvement and Training tools. It is not designed to take the place of any policy, procedure or guideline.

Team members who helped develop the booklet include: Chris Boudreaux, Ronald Bradford, Kelly Butler, Nathan Cashion, Justin Daily, Sheila Davis, Doug Echard, Tim Frawley, Cathy Gann, Ian Halpin, Carol Hendrix, Kevin Knox, Lenvil Knox, Martin Medina, Keith Owsley, Fred Puleo, Robert Pratt, Robert Ragsdale, Lance Sterling, Pamela Theis, David Thornton, Peggy Travis, Judy Triplett, Brenda Verbeck.



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# Vision

Inspiring the best in people, creating opportunity and empowering change to be the leading energy company in the world.

# Mission

Create value for our owners, employees and communities by generating safe, reliable and affordable electricity.

# 2014 Key Results

- Commitment to Excellence (INPO-1 behaviors)
- 1RE18 Successful Planning and Execution
- Improve Reliability (No MWe Left Behind)
- Maintenance and Technical Training
  Accreditation Renewal

# Core Value - Safety

We promote excellence in nuclear, radiological, environmental, and personal safety. In action we:

- Assess the risk of an activity before proceeding.
- Identify and resolve safety issues in a timely manner.
- Assume responsibility for our own safety.
- Look out for the safety of others.
- Foster an environment where a questioning attitude is valued.

#### **Core Value - Integrity**

We behave in a manner that is worthy of trust. In action we:

- Respect and appreciate open and accurate communication.
- Do the right thing.
- Demonstrate consistency in our actions and behaviors.
- Deliver on our promises and commitments.

# **Core Value - Teamwork**

We work together toward common goals.

In action we:

- Treat people with dignity and respect.
- Seek first to understand and then to be understood.
- Consider the impact to key stakeholders during decision making.
- Recognize each team member plays an important role in achieving success.
- Practice Facilitative Leadership Principles.

# Core Value - Excellence

We strive to deliver our highest levels of performance.

In action we:

- Consider cost and risk when making decisions.
- Incorporate lessons learned to improve performance.
- Demonstrate business acumen and seek to implement best practices that help achieve our site vision.
- Challenge the status quo.
- Champion change.
- Hold each other accountable.

#### **INPO Nuclear Professional Behaviors**

One of the station's Key Results is an ongoing Commitment to Excellence, focusing on exhibiting INPO-1 behaviors. We should all model these behaviors in our daily activities.

#### Performance Objective (NP.1)

Nuclear Professionals apply the essential knowledge, skills, behaviors and practices needed to conduct their work safely and reliably.

### Criteria

- Nuclear Professionals understand the risk associated with assigned jobs and apply the appropriate measures to manage risk. They first and foremost implement their work in a way that protects the operation of the reactor core and the barriers to the release of radioactivity. They also manage the potential operational, radiological, industrial and environmental risks associated with their work.
- Nuclear Professionals understand and anticipate the effects of their actions and are aware of their surroundings to include potential hazards and sensitive equipment.
- Nuclear Professionals question assumptions, identify anomalies, and stop and place their work in a safe condition when

they experience or see conditions different than those expected.

- Nuclear Professionals have high ownership for the preparation and safe execution of assigned work activities. They consider the most likely undesired consequences of their activities and validate contingency actions. They actively participate in briefings and are focused and engaged in the tasks they execute.
- Nuclear Professionals understand and apply error-prevention techniques. They understand management expectations and the basis for applying each technique to avoid plant events.
- Nuclear Professionals understand and apply standards for procedure use and adherence. They use procedures or other approved written guidance to manipulate plant equipment under the conditions for which the procedures were developed. If procedures cannot be followed as written, nuclear professionals stop and correct the procedures.
- Nuclear Professionals understand what is expected of them regarding radiological protection; they perform work in accordance with station radiological work instructions and postings and practice

ALARA. Nuclear professionals correctly respond to dosimeter, contamination and radiation alarms.

- Nuclear Professionals understand what is expected of them regarding industrial safety; they perform work in accordance with established safety standards and expectations. They select the appropriate safety equipment for each task and use personal and safety equipment correctly. Nuclear professionals view their own and their co-workers' safety as a personal responsibility.
- Nuclear Professionals maintain high personal responsibility for their performance. They are receptive to feedback and strive to continuously learn to perform their jobs better. Nuclear professionals coach and provide feedback to each other.
- Nuclear Professionals attend and actively participate in training. They perform tasks for which they are qualified.
- Nuclear Professionals learn from operating experience and use this knowledge to improve performance.
- Nuclear Professionals have a low threshold for reporting problems and they recommend improvements. Nuclear professionals promptly engage their

supervisors and others with questions and concerns. They do not tolerate longstanding issues and they pursue solutions continuously.

- Nuclear Professionals understand their assigned emergency preparedness responsibilities, including assembly and evacuation, and are well-prepared to perform their emergency response organization duties.
- Nuclear Professionals practice good housekeeping and control of work areas to minimize the potential for injuries and the spread of contamination. This includes minimizing the generation of radioactive waste.

# Accountability

We do what we say. We accept individual accountability and hold each other accountable. We set clear standards and expectations for issue resolution that create ownership.

We strive to demonstrate attitudes and behaviors that are "Above the Line."

#### We "See it, Own it, Solve it, Do it."®

#### SOSD<sup>™</sup> Accountability Tool

- Identify the Gap.
- Apply the Steps to Accountability<sup>®</sup> by asking these four questions:

#### See It<sup>®</sup> - What is the reality we most need to acknowledge?

- Obtain the perspectives of others.
- Be open and candid in my communication.
- Ask for and offer feedback.
- Hear the hard things so that I openly see the reality of the situation.

# 2. Own It<sup>®</sup> - How are we contributing to the problem and/or solution?

- Be personally invested.
- Learn from both successes and failures
- Ensure that my work is aligned with Key Results.
- Act on the feedback that I receive.

- 3. Solve It<sup>®</sup> What else can we do?
  - Constantly ask "What else can I do?"
  - Collaborate across functional boundaries.
  - Creatively deal with obstacles.
  - Take the necessary risks .
- 4. Do It<sup>®</sup> Who is accountable to do what, by when?
  - Do the things I say I'll do.
  - Stay Above the Line<sup>®</sup> by not blaming others.
  - Track progress with proactive and transparent reporting.
  - Build an environment of Trust.

#### The Steps to Accountability Chart®



How To Recognize When You Are Below The Line

- You find yourself blaming others and pointing a finger.
- You don't listen when others tell you, directly or indirectly, that they think you could have done more to achieve better results.
- Your discussions of problems focus more on what you cannot do rather than on what you can do.
- You feel you are being treated unfairly, and you don't think you can do anything about it.
- You spend a lot of time talking about things you cannot change (e.g., your boss, owners, the economy's performance and government regulations).
- You cite your confusion as a reason for not taking action.
- You find yourself saying:
  - "It's not my job."
  - "There's nothing I can do about it."
  - "All we can do is wait and see."
  - "Just tell me what you want me to do."
- You find yourself spending valuable time crafting a compelling story detailing why you were not at fault.

#### Activity vs. Results

While achieving desired results does require action, activity alone does not produce results. When action is the objective, the result is usually a "culture of activity," with people simply going through the motions. Focusing everyone's work on the Key Results creates ownership and accountability, directing activity towards desired actions and producing the Key Results without mandate or force.



#### The Results Pyramid®

"The results we achieve are a product of the actions we take. The actions we take are influenced by the beliefs we hold. The beliefs we hold are created by the experiences we have."

(The Oz Principle, Partners in Leadership®)

# **Facilitative Leadership**

Our culture is built on a foundation of collaboration and teamwork. We utilize Facilitative Leadership, tapping the power of participation. We model three attributes:

- Collaborative
- Strategic
- Receptive and Flexible

#### Seven Practices of a Facilitative Leader

- Share inspiring visions
- Focus equally on Results, Process and Relationships
- Seek maximum appropriate involvement
- Design pathways to action
- Facilitate agreement
- Coach for performance
- Celebrate accomplishments



## Effective Meetings

#### **Desired Outcome Statements**

A Desired Outcome is what your meeting aims to achieve, the expected result. A Desired Outcome statement answers the question: "What will we walk out of this meeting with?"

Products	Knowledge
• Lists	Awareness of
Plans	so that
Decisions	Understanding of
Agreements	so that

#### What They Look Like

- Brief, written statements
- Specific and measurable
- From the perspective of the participant
- Nouns not verbs

#### **Recognition and Rewards**

Everyone likes to feel appreciated. A recognition can be as simple as a "Hey Thanks" or a hand written note.

When sending someone a recognition or reward, apply the following guidelines:

- Make recognition criteria clear and well communicated.
- Ensure the recognition or reward matches the achievement.
- Ensure the recognition or reward is meaningful to the person receiving it.



#### Everyone is personally responsible for safety.

Safety Culture – We exhibit the right behaviors and are committed to protecting the health and safety of our employees and the public.

Personal Safety – Every employee is involved in activities and decisions that impact their safety.

Radiological Safety – We are aware of and follow proper radiological work practices to control dose, contamination and radioactive material.

Environmental Safety – Our policies and procedures ensure our employees, community and workplace is free of dangers that could harm the environment.

**Nuclear Safety Culture** - a collective commitment by leaders and all employees to emphasize safety over competing goals to ensure protection of people and the environment. A safety-conscious work environment is one element of a strong nuclear safety culture.

# Traits of a Healthy Nuclear Safety Culture

#### 1. Personal Accountability

All individuals take personal responsibility for safety. Responsibility and authority for nuclear safety are well-defined and clearly understood. Reporting relationships, positional authority, and team responsibilities emphasize the overriding importance of nuclear safety.

#### 2. Questioning Attitude

Individuals avoid complacency and continuously challenge existing conditions and activities in order to identify discrepancies that might result in error or inappropriate action. All employees are watchful for assumptions, anomalies, values, conditions or activities that can have an undesirable effect on plant safety.

#### 3. Effective Safety Communication

Communications maintain a focus on safety. Safety communication is broad and includes plant-level communication, job-related communication, worker-level communication, equipment labeling, operating experience and documentation. Leaders use formal and informal communication to convey the importance of safety. The flow of information up the organization is considered to be as important as the flow of information down the organization.

#### 4. Leadership Safety Values and Actions

Leaders demonstrate a commitment to safety in their decisions and behaviors. Executive and senior managers are the leading advocates of nuclear safety and demonstrate their commitment both in word and action. The nuclear safety message is communicated frequently and consistently, occasionally as a stand-alone theme. Leaders throughout the nuclear organization set an example for safety. Corporate policies emphasize the overriding importance of nuclear safety.

#### 5. Decision-Making

Decisions that support or affect nuclear safety are systematic, rigorous and thorough. Operators are vested with the authority and understand the expectation, when faced with unexpected or uncertain conditions, to place the plant in a safe condition. Senior leaders support and reinforce conservative decisions.

#### 6. Respectful Work Environment

Trust and respect permeate the organization. A high level of trust is established in the organization, fostered, in part, through timely and accurate communication. Differing professional opinions are encouraged, discussed and resolved in a timely manner. Employees are informed of steps taken in response to their concerns.

#### 7. Continuous Learning

Opportunities to learn about ways to ensure safety are sought out and implemented. Operating experience is highly valued, and the capacity to learn from experience is well developed. Training, self-assessments and benchmarking are used to stimulate learning and improve performance. Nuclear safety is kept under constant scrutiny through a variety of monitoring techniques, some of which provide an independent "fresh look."

#### 8. Problem Identification and Resolution

Issues potentially impacting safety are promptly identified, fully evaluated, promptly addressed and corrected commensurate with their significance. Identification and resolution of a broad spectrum of problems, including organizational issues, are used to strengthen safety and improve performance.

#### 9. Environment for Raising Concerns

A safety-conscious work environment (SCWE) is maintained where personnel feel free to raise safety concerns without fear of retaliation, intimidation, harassment or discrimination. The station creates, maintains and evaluates policies and processes that allow personnel to raise concerns freely.

#### 10. Work Processes

The process of planning and controlling work activities is implemented so that safety is maintained. Work management is a deliberate process in which work is identified, selected, planned, scheduled, executed, closed and critiqued. The entire organization is involved in and fully supports the process.

# Personal Safety

#### Personal Protective Equipment (PPE)

- At a minimum, PPE shall include hardhat, safety glasses, gloves and appropriate footwear inside the Protected Area.
- Additional PPE will be identified during a Pre-Job Brief, Task Safety Analysis, Take A Minute or when an identified hazard could pose an injury to an employee, contractor or visitor.

#### **Dropped Items**

- Tool lanyard use is required when working outside the vertical plane of a platform or scaffold system.
- Platforms shall be covered to prevent items from falling through the grating or scaffold when feasible.
- Material shall be stored in canvas or plastic buckets to prevent items from falling from platforms or scaffolds.
- Barricade tape and barricade tags shall be erected when work is ongoing in the overhead.
- When staging material near the edge of a platform, ensure to install netting so that objects will not fall from their stored position.

#### Scaffolding / Ladders

- Scaffolds shall be inspected and have the appropriate scaffold safety tag near the point of access prior to employees accessing the scaffold.
- When ascending and descending ladders, ensure to maintain three-point contact.
- Temporary extension ladders shall be installed at a 4:1 ratio prior to accessing the ladder and must overlap by three rungs at minimum.
- Step ladders shall be installed on a stable foundation, fully opened and the user shall not access the top step or end cap.

#### Slips, Trips and Falls

- Keep travel paths, walkways and stairs clear of parts and materials.
- Elevate or cover hoses, cords and leads to eliminate tripping hazards.
- Prior to using harnesses, lanyards and safety lines, the user shall perform an inspection for signs of cuts, fraying, inservice loading or other damage that may cause failure during use.

#### **Material Handling**

- When manually lifting material, use proper lifting techniques.
- When using a material handling device ensure the rated capacity is clearly marked, has been inspected and the load is within the rated capacity prior to moving material.
- When staging material, ensure to maintain proper clearance around emergency equipment such as fire extinguishers, hose reels, safety showers and eyewash stations.
- When using a forklift, ensure the load is secured prior to moving.
- Accessing a flatbed truck, tractor trailer or trailer float requires the cognizant supervisor's approval prior to access and the use of a spotter is required.

### **Electrical Safety**

Refer to OPGP03-ZI-0021 "Electrical Safety" for information on electrical safety requirements and Flash Protection Boundaries.

- Metal jewelry shall be removed when working on or in reach of energized conductors.
- Proper clothing constructed of 100 percent natural fiber or fire retardant material SHALL be worn when there is a risk of electrical arc and resulting fire. Clothing made from the following material is

PROHIBITED: acetate, nylon, polyester, rayon and spandex or any blend thereof.

 If you are connecting a plug to a 480-volt welding receptacle, verify the equipment is in the off position prior to connecting plug. The minimum PPE when connecting a plug is leather gloves.

#### **Fire Protection**

Fire Impairments - 0PGP03-ZA-0514 Controlled System or Barrier Impairment

- Fire Protection (FP) Impairments are electronically generated via the ORACLE work management system.
- If a PMT is required to close out a FP Impairment, contact the Fire Protection Coordinator (FPC) at pager 0301.
- Fire protection equipment shall not be blocked or used without the prior approval of the FPC, pager 0301.

Transient Fire Loads - OPGP03-ZF-0019 Transient combustibles are any combustible materials (i.e., wood, paper, rags, plastic) liquids or gases which are temporarily brought into a safety-related structure. This does not include hand carried items directly under an individual's control, such as tool boxes, work documents or drawings.

- Transient Fire Loads amounts and limits as outlined in Appendix 3 & 4 of OPGP03-ZF-0019.
- Transient Fire Load (TFL) permits are elec-

tronic through the WMS system. Contact your planner or supervisor to initiate.

- Non-combustible materials shall be used when available.
  - NO plastic or wooden tables in safetyrelated areas.
  - NO plastic carts in safety-related areas.
  - NO plastic buckets unless supplied by the materials original manufacturer.

#### Fire Watches - 0PGP03-ZF-0001

- Hourly and continuous Fire Watches are utilized as outlined in a Fire Impairment Form or Hot Work Permit.
- Contact Fire Watch Lead, pager 0764, to have a compensatory fire watch for impaired fire system or barriers started.
- Craft personnel are responsible for providing Fire Watches for hot work being performed.

# **Radiological Safety**

#### ALARA - As Low As Reasonably Achievable

All individuals working in the RCA are required to:

• Monitor dose periodically and maintain dose ALARA.

*If your EPD alarms, report immediately to Radiation Protection. Even if the alarm stops, you must still leave the area and report to Radiation Protection.* 

- Notify Radiation Protection (RP) personnel of all work scope changes.
- Adhere to RP instructions, radiological postings and barriers and other warning devices.
- Immediately exit the work area and inform RP if any of the following occur:
  - Any indication of an unexpected radiation exposure, e.g., if dosimeter alarms.
  - Any dosimetry device is lost or damaged.
  - An area radiation or air monitor is alarming.
- Clean up work areas upon completion of the job.

When working in the RCA:

- Review radiological surveys.
- Minimize radioactive waste:
  - Remove unnecessary packing.
  - The use of wood should be minimized.
- Tools/Equipment Available in the RCA should not be brought into the RCA.
- Place the Electronic Personal Dosimeter (EPD) and thermoluminescent dosimeter (TLD) outside your Protective Clothing (PC) where it can be read at all times.

Upon exiting a Contaminated Area, immediately perform a whole body frisk or process through the nearest Personnel Contamination Monitor (PCM).

- Place EPD in a plastic bag if entering a Contaminated Area.
- Maintain control of TLD and EPD (EPD cards/lanyards are suggested).
- Access to overhead areas greater than six feet must be approved by RP.
- Obtain all tools and equipment to perform the job prior to work area entry.
- Tools checked out from the Hot Tool Room are to be returned only to the Hot Tool Room.
- Other than personal items, notify RP of any tools/equipment that need to be released from the RCA.

What can I do to reduce Personnel Contamination Events (PCEs)?

Tips for working in contaminated areas:

- Check protective clothing for tears and gloves for holes.
- Do not cut holes in the protective clothing.
- When working on system internals, keep surfaces damp and wiped down.
- Keep your hands off of your face.
- Notify RP immediately of any spills.
- Properly package all material and tools being removed from a Contaminated Area.
- When transporting containers containing contaminated articles, make sure that the container has no holes or tears.
- When removing hoses or tubing used on contaminated systems, ensure that hoses

are emptied into the drain prior to removing the hose end from drain or container.

• Do not sit, lie or kneel in contaminated areas unless an additional barrier is placed between the contamination and the body.

Adherence To Radiological Postings:

- Radiological postings are required by federal law.
- Postings inform workers of the radiological conditions of areas.
- The Radiation Worker Permit (RWP) tells you what areas you can and cannot enter.
- Read the posting and compare to your RWP limitations.
- Only Radiation Protection personnel are authorized to place or remove postings.

# **Environmental Compliance**

Environmental Protection is an integral component of STP's operating policy and philosophy (Administrative Policy 414).

#### **Common Environmental Issues:**

Spills - If possible, stop the leak or discharge and prevent entry into waterways or drains. Clean up incidental releases immediately. Promptly report spills or unauthorized discharges to the Control Room.

Drains - Do not use floor drains for disposal of oils or chemicals. Do not route hoses to drains without prior approval.

Non-radioactive Waste Management -If guidance for accumulation or packaging of a particular waste material is not referenced in the procedure or on the chemical permit, contact Environmental for assistance.

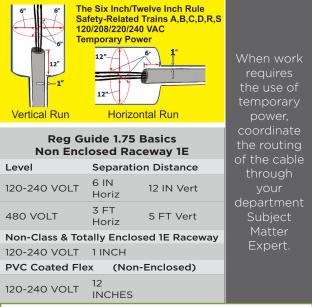
It is everyone's responsibility to minimize the amount of hazardous waste generated to the practical extent possible. Minimizing the generation of hazardous waste will reduce cost and help meet STPNOC hazardous waste generation goals.

Environmental personnel are on-call and available. Contact ext. 4507/ ext. 7880/ ext. 8573.

#### **Electrical Separation Criteria**

For Extension Cord Safety- Reg. Guide 1.75 Information, go to STP/Homepage/Business Links/Reg. Guide 1.75 Information for a:

- Complete list of Subject Matter Experts (SME)
- Extension Cord Configuration Chart
- Communication Bulletins



Get help from Electrical Maintenance when running a 480-volt cable (these are larger in diameter and come with a cord cap). Make sure you have a complete understanding of Reg. Guide 1.75 requirements in PMI-EM-ZM-0055 - if you do not, get help from your supervisor or a Subject Matter Expert.

One Inch: Never let an extension cord (120V) come within one inch of any electrical conduit or any other electrical equipment. If you are

not clear on the difference between electrical conduit and other types of piping on site, get help.

One Foot: When using a common extension cord (120V), stay at least one foot away from all cable trays, free-air cable (cable which exits a conduit, raceway or equipment where the cable is exposed to air on all sides), PVC coated flex conduit and implosion hole openings in RCB electrical boxes. If it is not clear to you how to do this, stop the work and get help.

#### **Foreign Material Exclusion**

Foreign Material Exclusion (FME) is the processes and practices for preventing the introduction of Foreign Material (FM) into a system, equipment or component.

FMEA-1: A High Risk Area where the highest level of FME controls are necessary to protect the station and personnel against major consequences resulting from Foreign Material Intrusion.

FMEA-1: Controls:

• Must be employed when a final visual inspection of internal cleanliness before system or component closure is not possible

**It Happened Here:** 1RE16 - A faceshield dropped into the reactor vessel during onload activities was sucked into the 1C RHR pump resulting in significant outage delays. CR 11-6785

because of configuration, ALARA concerns or other circumstances.

• Should be applied based on risk to systems or equipment for which the introduction of FM could be irreversible.

FMEA-2: An area established for breaches that do not meet the requirements for a High Risk FME Area, but that need some form of FME boundaries and work practices applied.

FME worker responsibilities are:

- Have a thorough understanding of the FME Program requirements and associated good work practices.
- Adhere to all FMEA postings and boundaries.
- Comply with the requirements of the FME Program and utilize good FME Work Practices when working in an FME Area including:
  - Remove or secure of all exposed jewelry and unnecessary personal effects.
  - Inspect tools and equipment for loose or missing parts prior to entry and again upon exiting the FMEA to verify the as-found and as-left conditions match.

**It Happened Here:** 2F1302- Main Turbine Bearing #2 overheating was caused by not having a FME Recovery Plan after the Jan. 8, 2013 event that created pieces of babbitt foreign material. CR 13-4566

- Use lanyards and tethers to secure all Non Fail-Safe tools and equipment as appropriate.
- Ensure Hard Hats and Safety Glasses are properly secured prior to entry.
- Interface with the FME Monitor prior to entry into and upon exiting a FMEA-1 area to ensure all items are properly logged into and out of the FMEA.
- Assist the FME Monitor when appropriate to ensure tools and equipment are properly and accurately logged into and out of the FME Area.
- Report any observed violations of the FME Program and document them in the Corrective Action Program (CAP) database.
- Ensure all air and drain hoses, when not in use, are connected or covered with a cap or FME cover.

#### **Equipment Clearance Order Program**

The Equipment Clearance Order (ECO) program provides a level of personal safety to protect workers while performing work activities.



The ECO program utilizes three types of tags:

Danger Tag: (Red Tag) Prevents manipulation of a component or system to prevent personnel

injury or equipment damage. Danger Tags are normally hung on the main control points and boundary control points to isolate equipment from all sources of energy and permit work to be safely performed (e.g., close and tag suction/discharge valve, open and tag associated suction/ discharge valve breaker). NOTE: A component with a Danger Tag attached shall not be manipulated. This includes removing a component with a Danger Tag attached.



Caution Tag: (Yellow Tag) A tag that is placed on or near a component to provide temporary operating restrictions, temporary configuration control or information. This tag must

not be used where personnel injury or equipment damage could reasonably occur if the instructions on the tag were not followed (use Danger tag instead).



Test Tag: (Blue Tag with a Red Border) A tag placed on components when a position must be changed during the performance of troubleshooting, testing or maintenance activities.

A Test Tag should be treated as a Danger Tag for everyone except the person/work group to whom the tag was issued.

For worker protection, the ECO program utilizes the process where an Acceptor (an ECO-qualified individual for a specific work group) signs onto a job item on the ECO and all the workers being protected for that job are listed under the Acceptor.

The workers sign onto the ECO Worker Tracking Form (either in the ECO database or on a form contained in the work package). This allows the Acceptor to know who is being protected by the ECO and prevents the Acceptor from signing off the ECO job item until all workers say that work is complete and it is safe to sign off. All workers are responsible to ensure they are listed on the Worker Tracking Form if they are being protected by the ECO.

#### **Chemical Control Program**

The Chemical Control Program (CCP) provides instructions on how to approve, label, use, store and dispose of chemicals on site. The program also establishes administrative controls for expendable materials that may have an adverse effect on plant systems.

Chemicals controlled under the CCP will have a Chemical Permit associated with them and should be labeled in accordance with the CCP procedure. The Chemical Permit provides usage and storage instructions, restrictions, disposal and safety instructions. The Chemical Control Program label will contain applicable hazard

information and also usage and storage codes to assist the end user. The Chemical Permit and Safety Datasheet (SDS) for a chemical can be found in SiteHawk (vendor software for SDS management at STP).

Instructions for viewing an SDS and Chemical Permits as well as other pertinent information related to chemical control can be found on the CCP Wiki site. The CCP Wiki site can be accessed through the STP intranet Homepage by clicking on "Business Links" and "Chemical Control Program."

All Chemicals (including expendable materials) coming on site must be evaluated to determine if they fall within the bounds of the CCP. Chemicals which are exempt from the CCP need to have their SDS loaded into SiteHawk. Chemicals which are not exempt should be evaluated for use by submitting an electronic request for a Chemical Permit through SiteHawk.

#### Security

Security is part of our commitment to protect the health and safety of the public and our employees. If you observe something unusual or questionable that may pose a security risk or threat to the plant or our employees, contact Security immediately at ext. 7143.

#### Access:

• Do not introduce material into the Protected Area by passing it through the EXIT

turnstiles. In addition, throwing material over the Protected Area barrier is strictly forbidden.

- Do not enter into an area for which you have not been appropriately authorized (tailgating). Verify you receive a "steady" green light. If a momentary green light followed by a red and green flashing light is displayed, this signifies you are NOT authorized to enter the area in which you were about to enter. If this occurs, contact Security at ext. 7143.
- Ensure any and all security gates secured by chains and screw links are re-secured after ingress or egress. Never leave a gate that was previously secured in an open position.
- When entering or exiting a Security controlled door, ensure the door is physically secure after entry or exit by pushing AND pulling on the handle or lever. DO NOT turn the door knob. This causes an alarm and security response.

#### Vehicles:

 Designated Vehicle and Non-Designated Vehicle keys are required to be positively controlled to ensure only authorized personnel operate a vehicle and the vehicle is used for an authorized purpose. When operating a vehicle, the lanyard on the

key ring is required to be attached to the vehicle operator. When leaving the vehicle, take the keys with you and secure them on your person. Do not leave keys unattended/uncontrolled.

#### **Severe Weather Instructions**

If a Tornado Warning is communicated by your supervisor, over the Site Public Address System, or Department Severe Weather Coordinator, take shelter immediately in a Severe Weather Refuge Area, which is any building structure or designated area that has been designed to withstand the effects of a tornado and adequately protect its occupants.

- Signs are posted indicating "THIS IS A SE-VERE WEATHER REFUGE AREA."
- Signs are also posted in structures not to be used as a severe weather refuge area "THIS IS NOT A SEVERE WEATHER REF-UGE AREA."

#### Reference: 0PGP03-ZV-0001

Tornado Watch - When conditions are favorable for tornado development:

- Continue with normal work in your assigned work area.
- Listen for severe weather instructions over the public address system.

Tornado Warning - Weather radar indicates tornado activity that may impact the site or a

tornado has been sighted in the area:

- Listen to and follow public address instructions.
- Immediately move to a designated severe weather refuge area or Mechanical/Electrical Auxiliary Building.
- Remain in a designated severe weather refuge area until an announcement is made that the site is no longer under a tornado warning. The Shift Manager directs this announcement over the public address system.

#### **Emergency Medical Care**

#### First Aid Treatment

- The Health Services Team is located on the first floor of the NSC, room 1525, Monday through Thursday, 0700 to 1730.
- Teammates are expected to use the onsite Medical Facility for treatment of non-life threatening work-related injuries/illness.
- All work-related injuries/illnesses should be coordinated with your immediate supervisor.

#### After-hours First Aid Treatment

- Call 911 for the onsite Emergency Medical Technicians (EMTs).
- For non-life threatening injuries that require further evaluation based on the EMTs'

assessment, call U.S. Healthworks, (979) 233-6571.

#### Supervisor Responsibilities

- Ensure teammates seek necessary first aid or medical treatment.
- In the event a teammate requires off-site treatment, report to the medical facility where the teammate is being taken.
- For life threatening injuries/illnesses, transport to Matagorda Regional Medical Center.
- Provide continuous support of teammate following an injury/illness and continually monitor progress of recovery.
- Ensure all injuries/illnesses are reported and documented in a condition report during the shift that the incident occurred.

#### **On-Site Health Services Team**

Lisa Matula	(361) 972-7444
Connie Milliff	(361) 972-8125
Rhonda Bates	(361) 972-8010
Safety Group	
Nathan Cashion	(979) 216-6365
Nathan Cashion Martin Medina	(979) 216-6365 (979) 318-6601
Martin Medina	(979) 318-6601

## Performance Improvement Error Prevention Tools

Fundamental questions to be answered for tasks/activities/actions – even the most routine:

- Am I ready for the plant?
- Is the plant ready for me?
- Do I understand the expected results of my actions?

We should be able to say to ourselves: When I touch this or do this...

- I know what is going to happen.
- I know this is safe.
- I am sure of it!

#### Take a Minute

- Why
  - Focuses attention and thinking before proceeding.
- When
  - When you first arrive at the work location.
  - When you first return from break.
  - When directed by a supervisor or department conduct of operations.
- How
  - Pause at access to work area and scan area.

- Look for conditions such as:
  - > Differences from the pre-job brief.
  - Industrial safety, radiological and environmental hazards.
  - Sensitive equipment in the area (breakers, ball valves, etc.).
- Mitigate
  - > Eliminate hazards or develop contingencies before proceeding.

#### **Questioning Attitude**

#### • Why

- Promotes facts over assumptions.
- Challenges pre-conceptions and assumptions.
- Stimulates and maintains a healthy skepticism regarding processes and procedures.

#### When

- Planning.
- Preparing.
- Performing work that affects plant systems, structures or components.

#### • How

- Don't expect that success is assured.
- Voice your concerns.
- Challenge assumptions.
- Stop when uncertain.

#### **Peer Checking**

#### • Why

- To verify actions to be performed are correct by involving a knowledgeable co-worker.
- When
  - When there is a history of error with a particular action.
  - When agreed to as a defense in the prejob brief.
  - When the action is high risk.
- How
  - Performer explains his intended action to the peer; peer reviews the work document, considers current conditions and either agrees or disagrees with appropriateness of the intention.
  - Performer and peer individually STAR (see STAR, page 55) the correct component.
  - Peer stands by, ready to intervene as the performer performs the agreed action.
  - The performer and peer confirm the action produced the expected results.

#### **Procedure Use and Adherence**

- Why
  - Maintain positive control of the work activity.
  - What is intended to happen is what happens and that is all that happens.
  - Maintain plant configuration within its safety analyses and licensing requirements.
- When
  - For activities that involve manipulation, monitoring or analysis of plant equipment, physical work in the plant or when required by Technical Specifications.
  - When and as described in OPGP03-ZA-0010, 'Performing and Verifying Station Activities.'
- How
  - Verify you have the latest revision.
  - Comply with the usage level (In-Hand, Referenced, Available, In-Hand Controlling).
  - Before beginning work, make sure you understand the intent of the procedure or work instructions.
  - Take time to get your questions answered.
  - If the procedure will not work as written, stop and tell your supervisor.

 If you do not achieve the anticipated results, stop and contact your supervisor.

#### Placekeeping

- Why
  - To avoid skipping, repeating or partially completing a step.
- When
  - When performing tasks governed by procedure or work instruction, which requires the steps to be performed in sequential order.
- How
  - For page numbers use Circle/Slash.
  - For steps utilize the placekeeping method available:
    - Signature or initial in an available blank.
    - > Check mark in an available blank.
    - Data entry can be used to indicate that a step has been completed.
    - Marking through the step number or Circle/Slash are appropriate placekeeping tools if no other method is provided.

#### **Three-Way Communication**

- Why
  - Ensures a mutual understanding between two or more individuals.

#### When

- Communicating changes to physical plant equipment, such as:
  - » Status of plant systems, structures, or components.
  - » Direction to perform action(s) on plant equipment.
  - » Work instructions, limitations and cautions.
  - » When directed by a supervisor or when called for in department Conduct of Operations.

#### • How

- Using the person's name to establish contact with the receiver, the sender states the message.
- The receiver acknowledges the sender by paraphrasing the message in his/her own words, repeating back equipment name and identifier verbatim.
- The sender acknowledges that the receiver's response is correct, or corrects and repeats the process.
- Use Phonetic Alphabet for train designator Alpha, Bravo, Charlie, Delta.



Acknowledges

Speaks Message

Phonetic Alphabet				
A	Alpha	N	November	
В	Bravo	0	Oscar	
C	Charlie	Ρ	Papa	
D	Delta	Q	Quebec	
E	Echo	R	Romeo	
F	Foxtrot	S	Sierra	
G	Golf	T	Tango	
Н	Hotel	U	Uniform	
I	India	V	Victor	
J	Juliet	W	Whiskey	
K	Kilo	X	X-ray	
L	Lima	Y	Yankee	
Μ	Mike	Z	Zulu	

#### **Pre-Job Briefs and Post Job Reviews**

#### • Why

- Pre-Job Brief Ensures understanding of task scope, roles and responsibilities and risk associated with the task.
- Post Job Review Identify and capture operating experience and lessons learned to improve future task performance.
- When
  - Infrequently performed, risky or complex tasks.
  - Jobs controlled in accordance with the Work Process Program.
  - Jobs that involve two or more departments.
  - Jobs that involve risk to personal safety or to the station.
  - When directed by a supervisor.
- How
  - Understand what we want to do and what we want to avoid.
  - Clarify Scope, Roles, Rules and Critical Steps.
  - Agree on specific measures we will take to neutralize the hazards.
  - Take a few minutes after the job to compare notes and feedback, plus/deltas for the next time.

#### Self-Checking

- Why
  - Focuses attention on thinking before proceeding.
- When
  - When verifying correct unit, train and component.
  - During performance of critical steps.
  - During manipulation of a plant control or component as directed by a plant procedure or work instruction.
  - When lifting/landing leads, positioning breakers or installing/removing jumpers.
- How (STAR)

**Stop** - Pause before performing the operation or manipulation.

**Think** - Focus attention on the action to be performed. Verify the action is appropriate for equipment/system status. Think about expected results. Consider contingencies.

Act - Touch the component, compare label with the work document, state the component name without losing contact, perform the action.

**Review** - Verify the expected result is obtained.

## Performance Improvement Corrective Action Program

The Corrective Action Program (CAP) provides a means to report issues, track them to resolution and document how they were solved. Our responsibilities are to identify conditions, resolve issues through the CAP and contact Plant Protection where security concerns are obvious or perceived.

Anyone can initiate a Condition Report.

Ways to generate Condition Reports:

- Direct entry into the CAP database if you have completed CAP User training.
- Seek assistance from someone with access to the CAP Database to directly enter the condition/problem for you.
- Seek assistance from your Department Performance Improvement Coordinator, if assigned.
- Fill out a hard copy of the Condition Report Form 1 in OPGP03-ZX-0002A, Condition Reporting Process Implementation procedure and submit to your supervisor or foreman (forms are available in the One Stop Shop).

#### **Corrective Action Program Expectations:**

- Promptly initiate Condition Reports (before you go home).
- Document Condition Reports for:

- Conditions with risk to safe operation of the plant or personnel.
- Condition is a material deficiency.
- An abnormal or unexpected condition.
- Non-consequential human performance events that need further evaluation.
- As required by other station processes or procedures.
- Provide good problem descriptions (clear statement of the problem and impact on personnel or plant safety).
- Perform timely screening of Condition Reports (before the end of the next shift).
- Perform timely implementation of compensatory actions, as needed (take temporary measures until Corrective Actions can be implemented; e.g., work stoppage, temporary barriers/signs and briefings).
- Use OPGP03-ZX-0002A for CR Level classification and processing.
- We strive to have a low threshold for initiating CRs.
- CRs may be "closed to trend" if actions to correct the identified condition have been completed and documented in the CR comments.

For questions, contact Performance Improvement at ext. 7431.

## Performance Improvement Must-Know Operating Experience

Must-Know Operating Experience (OE) consists of the most important lessons learned from OE documents issued by INPO since 1980. These lessons were selected from Significant Operating Event Reports (SOER) and Level 1 INPO Event Reports (IER).

SOER 10-2, Engaged, Thinking Organizations, Recommendation 2 identifies that Managers and Supervisors are expected to review and be familiar with Must-Know OE and Must-Know Lessons Learned.

Additionally, individuals are expected to review and be familiar with Must-Know Lessons Learned. Below are the Must-Know Lessons Learned for your convenience.

The full text of the Must-Know OE may be found in the following documents:

- Maintenance
  - > SOER 09-1, Shutdown Safety
  - SOER 06-1, Rigging, Lifting, and Material Handling
  - SOER 99-1 Addendum), Loss of Grid Addendum
  - SOER 95-1), Reducing Events Resulting
    From Foreign Material Intrusion

### Chemistry

- SOER 07-2, Intake Cooling Water Blockage
- SOER 03-2, Managing Core Design Changes
- SOER 94-2, Boron Dilution Events in Pressurized Water Reactors
- SOER 93-1, Diagnosis and Mitigation of Reactor Coolant System Leakage Including Steam Generator Tube Ruptures
- SOER 88-1, Instrument Air System Failures
- SOER 87-3, Pipe failures in High Energy Systems Due to Erosion/Corrosion (Wet Steam Systems)
- SOER 84-1, Cooling Water system Degradation Due to Aquatic Life
- SOER 82-13, Intrusion of Resin, Lubricating Oil, and Organic Chemicals into Reactor Coolant Water
- SOER 80-4, Loss of Emergency Diesel Resulting From Leak in Lube Oil Cooler
- Operations
  - IER L1-11-3, Weaknesses in Operator Fundamentals
  - > SOER 07-1, Reactivity Management
  - SOER 96-1, Control Room Supervision, Operational Decision-Making, and Teamwork

- SOER 94-1, Revision 1, Nonconservative Decisions and Equipment Performance Problems Result in a Reactor Scram, Two Safety Injections, and Water-Solid Conditions
- SOER 88-2, Premature Criticality Events
  During Reactor Startup
- SOER 87-1, Core Damaging Accident Following an Improperly Conducted Test
- Radiological Protection
  - SOER 01-1, Unplanned Radiation Exposures
  - SOER 85-3, Excessive Personnel Radiation Exposures
- Engineering
  - IER L1-11-4, Near-Term Actions to Address the Effects of an Extended Loss of All AC Power in response to the Fukushima Daiichi Event
  - IER L1-11-1, Supplement 1, Fukushima
    Daiichi Nuclear Station Fuel Damage
    Caused by Earthquake and Tsunami
  - SOER 10-1, Large Power Transformer Reliability
  - SOER 07-2, Intake Cooling Water Blockage
  - SOER 03-2, Managing Core Design Changes

- SOER 03-1, Emergency Power Reliability
- SOER 02-4, Reactor Pressure Vessel Head Degradation at Davis-Besse Nuclear Power Station
- > SOER 02-1, Severe Weather
- > SOER 99-1, Addendum Loss of Grid
- > SOER 98-2, Circuit Breaker Reliability
- SOER 97-1, Potential Loss of High Pressure Injection and Charging Capability from Gas Intrusion
- SOER 96-2, Design and Operating Considerations for Reactor Cores
- SOER 89-1, Testing of Steam Turbine/
  Pump Overspeed Trip Devices
- SOER 87-3, Pipe Failures in High-Energy Systems due to Erosion/Corrosion
- SOER 87-1, Core Damaging Accident Following an Improperly Conducted Test
- SOER 84-6, Reactor Trips Caused by Turbine Control and Protection System Failures
- SOER 83-8, Reactor Trip Breaker Failures
- SOER 83-5, 1983, DC Power System Failures

Training drives the skills and knowledge needed for safe, effective job performance. We all own training.

Everyone is responsible for providing candid, honest feedback in an effort to continually improve our training programs.

What can you do?

- Own your training and qualifications. It plays a key role in performing your assigned tasks.
- Attend scheduled training with the right attitude and provide feedback for continuous improvement.
- Actively participate in post-training surveys and feedback forms and, when asked, participate on self-assessment teams.
- 4. Know your Curriculum Review Committee and Training Advisory Committee representatives and provide feedback or input.
- 5. Recognize and demonstrate that training is a core business practice at STP.

## **Nuclear Training Objectives**

Objective 1: Training for Performance Improvement – Training is used as a strategic tool to provide highly skilled and knowledgeable personnel for safe, reliable operations and to support performance improvement.

Objective 2: Management of Training Processes and Resources – Management is committed to and accountable for developing and sustaining training programs that meet station needs. Resources and an infrastructure of training processes are applied consistent with these needs to support training program sustainability.

Objective 3: Initial Training and Qualification – The initial training program uses a systematic approach to training to provide personnel with the necessary knowledge and skills to perform their job assignments independently.

Objective 4: Continuing Training – Continuing training uses a systematic approach to training to refresh and improve the application of knowledge and job-related skills and to meet management expectations for personnel and plant performance.

Objective 5: Conduct of Training and Trainee Evaluation – Training is conducted using methods and settings that support trainee attainment of job-related knowledge and skills. Achievement of learning is confirmed with reliable and valid evaluation methods.

Objective 6: Training Effectiveness Evaluation – Evaluation methods are used systematically to assess training effectiveness and modify

training to improve personnel and plant performance.

These objectives provide the basis for self-evaluation, accreditation team review, accrediting board review and are the expected results of an effective, well-managed training program.

## **Qualification of Plant Personnel**

Station procedure OPGP03-ZA-0065 (Qualification of Plant Staff Personnel) contains the requirements for personnel to maintain and verify qualifications. The essential elements include what can be characterized as 200 percent accountability:

- Each supervisor is responsible to verify that personnel meet qualification requirements when assigning them tasks or positions.
- Individual workers are responsible to ensure they meet the qualification requirements for all tasks or positions assigned to them.

The standard for verifying qualifications is the QualKing database. While some organizations have access to specialty tools (i.e. validated computer reports, Operations narrative log application), even these are products of the QualKing application.

QualKing is the only source for verifying qualifications because it contains and verifies all contributors to the qualification or certification of interest.

## **Training Attendance**

It is the individual's responsibility to know and comply with their own training schedule. Consistent with the importance of training, an individual's failure to report to training on time will be evaluated as a personal performance shortfall.

### Notes: \_\_\_\_\_


## Reference

## Procedures

Activities at STP are performed using approved written procedures. The following list contains some commonly referenced procedures that may be important for the performance of work activities.

0PAP01-ZA-0102	Plant Procedures
0PGP03-HU-0001	Human Performance (HU) Program
0PGP03-ZA-0010	Performing and Verifying Station Activities
0PGP03-ZA-0014	Foreign Material Exclusion Program
0PGP03-ZA-0114	Fatigue Rule Program
0PGP03-ZA-0141	Chemical Control Program
0PGP03-ZA-0504	Concerns Program
0PGP03-ZA-0514	Controlled System or Bar- rier Impairment
0PGP03-ZF-0001	Fire Protection Program
0PGP03-ZF-0019	Control of Transient Fire Loads and Use of Com- bustible and Flammable Liquids and Gases
0PGP03-ZH-0006	Non-Radioactive Spill Response, Cleanup, and Reporting
0PGP03-ZI-0001	Personal Safety Program
0PGP03-ZI-0003	Personal Protective Equip- ment
0PGP03-ZI-0021	Electrical Safety
0PGP03-ZI-0026	Lifting, Rigging and Mate- rial Handling
0PGP03-ZI-0032	Miscellaneous Safety
0PGP03-ZO-0025	Site Environmental Com- pliance

## Reference

0PGP03-ZO-ECO1	Equipment Clearance Or- der Program
0PGP03-ZO-ECO1A	Equipment Clearance Or- der Instructions
0PGP03-ZR-0050	Radiation Protection Pro- gram
0PGP03-ZV-0001	Severe Weather Plan
STP-722	Budget Management Pro- cess
STP-0203	Overtime Status & Pay
STP-0204	Compensation Guidelines for NonExempt, Non- Bargaining Unit Bi-weekly Payroll Employees
STP-0411	Reporting of Safety-Related or Quality Concerns
STP-0414	Interactions with the Nuclear Regulatory Com- mission
STP-0702	Quality Assurance Pro- gram

## Reference

## **Contact Information**

## A complete list of telephone numbers is available in the online STP Directory

Communication/Phone Service
Control Room, U1 Unit Supervisor8610
Control Room, U2 Unit Supervisor
Emergency regardless of your location on site911
Employee Concerns Program 7100
Ethics & Compliance Helpline (24 hours, 7 days a
week)
Facilities Management, Janitorial/Grounds/House-
keeping 7580, Pager 1417
First Aid/Medical8125
Fire Protection Pager 0301
Paging, on site8367
Paging, offsite
Radiation Protection, 41' HP Office U16347
Radiation Protection, 41' HP Office U26339
Radiation Protection, Dosimetry6911
Security Force Supervisor7143
Technical Assistance Center (HelpDesk)
Employees with a 7000, 8000, or 4000 series extension may be contacted directly from offsite. Customers at- tempting to contact employees with a 6000 series exten- sion must dial 361-972-3611. You will reach the automated

attendant who will prompt you to enter the 6000 series extension at that time or select the spell by name option.





