**INFORMATION USE**

- Procedure should be available, but not necessarily at the work location.
- Procedure may be performed from memory.
- User remains responsible for procedure adherence.
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1.0 PURPOSE

1.1 Establish a vision of Human Performance Event Free Operations throughout the fleet.

1.2 Establish a program that promotes excellence in Human Performance (HU) through behaviors that support safe, reliable and predictable operation by reducing the frequency and severity of events caused by human errors, such as those caused by individual behavior, management/leadership practices, or organizational processes and values.

1.3 Establish the standards, measures, principles, and implementation methods of the Human Performance (HU) program.

1.4 Implement the Human Performance Improvement Program.

1.5 Guiding Principles of Human Performance Management:

The following principles, when applied to programs, processes, and interpersonal relationships, encourage excellent human performance throughout the organization cultivating behaviors practiced by individuals to protect the reactor core as well as the reliability of the physical plant:

- People are fallible and even the best make mistakes.
- Error-likely situations are predictable, manageable, and preventable.
- Individual behavior is influenced by organizational processes and values.
- People achieve high levels of performance based largely on the encouragement and reinforcement received from leaders, peers, and subordinates.
- Events can be avoided by understanding the reasons mistakes occur and application of the lessons learned from past events or errors.

2.0 APPLICABILITY

2.1 This procedure is applicable to all nuclear sites.
3.0 RESPONSIBILITIES

NOTE: Equivalent fleet level positions are shown in parentheses.

3.1 Site Vice President:
1. Overseeing and directing the Human Performance Program at the site.
2. Incorporating strategic human performance initiatives into the site operations plan (business plan).

3.2 Plant Manager:
1. Implementation of the Human Performance Program at the site.
2. Sponsor of the Human Performance Improvement Team.

3.3 Human Performance and Industrial Safety Manager/Coordinator:
1. Developing the Human Performance Improvement Plan with the Performance Assessment Review Board (PARB).
2. Coordinating with the Human Performance Coordinator to ensure that human performance issues are addressed appropriately.
3. Representing the site on the fleet Human Performance Peer group.
4. Coordinating the Human Performance activities provided to the PARB. The PARB Coordinator coordinates PARB meetings with assistance from the HU Coordinator for HU related agenda items.
5. Coordinating the Human Performance Improvement Team.

3.4 Communications Managers:
1. Assisting with the distribution of "Red", "Yellow" and "Green" sheets for site-wide communications as necessary.

3.5 Directors, Managers and Supervisors:
1. Ensuring the human performance team member(s) assigned from their department(s) has dedicated time to complete their duties and responsibilities concerning human performance.
2. Overseeing and directing the human performance program for their department.

3. Ensuring Human Performance event investigations and clock resets are thorough and completed promptly for their department.

4. Positively reinforcing personnel who exhibit desired behaviors through the company rewards and recognition program.

5. Identifying and eliminating latent organizational weaknesses and enhancing defenses including:
   - Placing high value on effective planning and scheduling of activities.
   - Simplifying work processes.
   - Eliminating work-arounds.
   - Improving procedures to eliminate latent errors.
   - Designing supervisor tasks and duties to provide adequate time in the field for on the spot coaching of activities and positive behavioral reinforcement.
   - Determining fundamental causes of performance problems.

6. Establishing a learning environment where self-critical, non-defensive behavior is standard. Whenever possible, asking “what and how” versus “who”.

7. Modeling the attributes and behaviors that support the "Picture of Xcellence" by acting as a positive role model.

8. Communicating HU issues to departments during shop or departmental meetings on a routine basis with emphasis on behaviors.

9. Coaching individuals through firsthand observation and by providing timely feedback.

### 3.6 All Individuals:

1. Communicating to create shared understanding of Human Performance and associated issues.

2. Anticipating error-likely situations and applying the appropriate error prevention tools.
3. Modeling the attributes and behaviors that support the Picture of Xcellence.

4. Ensuring the Enablers of Xcellence are utilized when performing a task.

5. Correcting undesired behaviors.

4.0 DEFINITIONS

NOTE: The following definitions supplement or expand on those contained in the Quality Assurance Manual, Appendix B, "Glossary of Terms."

4.1 Coaching - The process of observing behaviors, comparing them to desired behaviors and providing feedback by reinforcing desired behaviors and correcting those that do not meet expectations.

4.2 Contact Time - The cumulative amount of time spent in the field with employees, observing and coaching their behaviors.

4.3 Defense (or Barrier) - Anything that protects a system or person from a hazard whether physical, administrative, or human in nature. A measure, including expected behavior that protects against various hazards or mitigates the consequences of a hazard.

4.4 Error (general definition) - Human error is an action that exceeds some standard or limit of acceptability. Human error is a behavior that is caused by a variety of conditions related not only to unacceptable individual behavior but also to unsuitable management and leadership practices and organizational weaknesses.

1. Active Error - Errors that change equipment, system, or plant state triggering immediate undesired consequences.

2. Latent Error - An error, act, or decision that results in organization-related weaknesses or equipment flaws that lie dormant until revealed either by normal operation and use, human error, testing, or self-assessment.

4.5 Error-Likely Situation - A work situation in which there is a greater opportunity for error when performing a specific action or task due to error precursors. An error-likely situation typically exists when task-related factors exceed the capability of the individual (mismatch) at the point of “touching” the physical or paper plant.
4.6 **Error Traps (Precursors)** - An unfavorable condition at the job site or a characteristic of the task or an individual that increases the probability for error during a specific action. Detailed descriptions of these error traps are provided in other Fleet documents.

4.7 **Event** - An error of significant consequence related to nuclear safety, personnel safety, radiological safety, or operational safety that exceeds established significance criteria.

4.8 **Human Performance** - A series of human behaviors executed to accomplish specific task objectives (results) according to some standard.

1. Human performance, at an individual level, is a series of behaviors executed to accomplish specific task objectives (results). Behavior is what people do. Results are achieved by behaviors, the mental and physical efforts to perform a task. Desired behaviors are the target for individual improvement efforts.

2. Human performance, at a systemic level, is a system of processes, influences, behaviors, and their ultimate results that eventually become manifest in the physical plant. This systematic perspective requires consideration of management, staff, supervision, and workers as a team that works together to achieve the mission of the plant.

4.9 **Human Performance Enhancement Day** - A scheduled day(s) on site that has time dedicated to promoting human performance.

4.10 **Human Performance Good Practice** - Desired human performance behaviors exhibited by personnel that prevented introduction of error into a job or prevented potential impact to personnel or the plant. Examples include, but are not limited to, identification of error traps prior to or during job performance that if not identified would have had the potential for undesired consequences.

4.11 **Human Performance Tools** - A collection of standard human error reduction tools intended to prevent events, reduce human errors and improve station performance.

4.12 **Latent Organizational Weakness** - Undetected deficiencies in the management control processes (e.g., strategy, policies, work control, training and resource allocation) or values (shared beliefs, attitudes, norms and assumptions) creating workplace conditions that can provoke errors (precursors) and degrade the integrity of defenses (flawed defenses).

4.13 **Performance Mode** - One of the three modes a human processes information based on one’s level of familiarity and attention given to execute a specific task.

1. **Skill-Based Task** - a task driven by stored patterns of pre-programmed instructions. When personnel make an error while performing familiar or well-practiced tasks, it is a skill-based error.
2. **Rule-Based Task** - A task performed following stored rules accumulated via experience and training. A rule-based error is made when a rule (from training, procedure, etc.) is misapplied or a shortcut is taken.

3. **Knowledge-Based Task** - A task with no pre-programmed instructions or rules. An example is problem solving. When an error is made in a situation where rules do not exist or are not known it is a knowledge-based error.

## 5.0 REQUIREMENTS

### 5.1 PARB - HUMAN PERFORMANCE REVIEW

1. See FP-PA-PAR-01 for information on PARB responsibilities for oversight of Human Performance.

### 5.2 HUMAN PERFORMANCE IMPROVEMENT TEAM

5.2.1 The Human Performance Improvement Team is a working level group that is responsible and accountable to the site PARB and consists of members from key departments that meet on a regular basis to discuss human performance trends and corrective actions, and monitors human error improvement efforts for the site and department. The team responsibilities are outlined in Attachment 1, Human Performance Improvement Team Charter.

### 5.3 HUMAN PERFORMANCE IMPROVEMENT PLAN

5.3.1 The Human Performance Improvement Team (HUIT) should prepare a Human Performance Improvement Plan. The Plan is then presented to PARB for approval.

5.3.2 Site Human Performance Improvement Plans should contain the following elements:

1. Purpose section

2. List of key issues impacting human performance, including:
   - Problem or gap statement and supporting evidence
   - Action plan showing primary actions that will be taken to address the problem with owners, due dates, current status, and Passport tracking reference
   - Performance measures that will provide evidence of performance improvement
3. The Site Human Performance Improvement Plans should be updated quarterly.

4. Department Human Performance Improvement Plans should be included as part of the Department DRUM report – see FG-PA-DRUM-01 – or as attachments in the Site HU Improvement Plan.

5.4 ORGANIZATIONAL CULTURE / LEARNING ORGANIZATION – "DESIRE
   D STATE"

5.4.1 Human Performance is a system comprised of a network of elements that function together to produce an outcome.

5.4.2 Organizational culture is the sum of personal and professional values by which the members of the site conduct their daily business. It is the collective wisdom that determines what kind of behaviors should be approved or discouraged. Fundamental to any effort aimed at directing human behavior is an understanding of the role culture plays in shaping the beliefs and actions of the members of the organization.

5.4.3 Organizational processes and values support desired behaviors. The organizational goals, policies, and priorities should take human fallibility into account and encourage a pattern of shared understanding, processes, and values which support Event Free Performance.

5.4.4 The organization needs to aggressively remove challenges to the understanding that individuals are the last line of defense in protecting against an event. Examples of activities that encourage development of this error-reduction culture include the following:

1. Provide positive role models.

2. Establish a learning environment where self-critical, non-defensive behavior is standard. Whenever possible, ask "what and how" versus "who."

3. Facilitate effective communication at all levels, vertically and horizontally.

4. Establish and communicate high performance standards emphasizing application of fundamental knowledge and core skills.

5. Place high value on effective planning and scheduling of activities.


7. Eliminate work-arounds.
8. Improve procedures to ensure a clear, logical sequence of tasks that are presented in a format that makes them easy to use and understand.

9. Design supervisor tasks and duties to provide adequate time in the field for on-the-spot coaching of activities and positive behavioral reinforcement.

10. Incorporate site and industry operating experience (OE) into daily activities, such as leadership meetings, department meetings, D-15s and pre-job briefs.

5.4.5 The organization should support safe, reliable, and event free operation by providing positive reinforcement of key behaviors. All individuals within the organization must recognize that (1) critical evaluation of performance and (2) open, honest feedback are the two most effective tools for organization improvement and team building.

5.4.6 The organization should create a learning environment that promotes continuous improvement, while guarding against inadvertently creating new error traps.

5.4.7 The organization needs to understand and act appropriately on the extreme differences between human fallibility and willful negligence. In some cases, discipline may be required.

1. The disciplinary policy must be well communicated and understood by site personnel.

2. Actual discipline should be conducted in accordance with company policies.

3. In determining an individual’s culpability, the following should be considered:

   a. Were the actions intentional?
   b. Is it a Fitness for Duty issue?
   c. Is there a history of unsafe behaviors?
   d. Were mitigating factors such as training or employee selection involved?
   e. How would peers have performed under the same circumstances?
   f. Will discipline preclude recurrence of the event/error?
   g. Human Resources may be involved in the decision to implement the discipline procedure.
4. The organization should be integrated with the Corrective Action Program to provide tools that help supervisors and individuals resolve the unique problems associated with human error issues.

5.4.8 Organizational culture creates programs that should provide personnel the training for key human performance and error reduction skills and techniques.

5.4.9 The Picture of Xcellence represents our vision of long term excellent performance; it stresses the importance of the organization and individuals. All individuals are responsible for utilizing the concepts, principles, and attributes/behaviors that support the Picture of Xcellence.

5.5 ERROR PREVENTION

5.5.1 All levels of personnel (individuals, supervisors, managers and above) must actively support Event Free Operation through error prevention and by reducing the frequency and severity of errors and events.

5.5.2 Everyone should be trained and coached to use error prevention tools and techniques.

**NOTE:** Fleet Procedure FP-PA-HU-02, "Human Performance Tools," contains detailed discussions on error precursors, and human performance tools for individuals, leaders, and supervisors.

5.5.3 The desired Individual Performance Prevention Methods are:

1. Identify and understand conditions that create error-likely situations.

2. Understand proper human performance tool implementation and application to overcome error-likely situations and prevent errors.

3. Implement the Fleet Human Performance Observation Program (FP-PA-HU-03) to reinforce desired behaviors.
   a. Provide on-the-spot intervention of undesired behaviors.
   b. Provide on-the-spot reinforcement of desired behaviors
   c. Document results/comments in the Observation database.

4. Periodic Human Performance Enhancement Days should be conducted at each site. These days will provide a focus on human performance across the station and may include the following:
a. Fleet/Site and Industry Human Performance events.

b. Human Performance trends for the fleet/site.

c. Methods to avoid adverse trends in traps and ineffective use of tools.

d. Reinforce lessons learned from fleet/site operating experience.

e. Presented in the context of the Picture of Xcellence.

5.6 HUMAN PERFORMANCE EVENT IDENTIFICATION & INVESTIGATION

5.6.1 When a human performance error occurs, the event or condition should be entered into the NSPM Nuclear Department Fleet corrective action program per FP-PA-ARP-01.

5.6.2 The threshold for evaluating human performance events should be whenever the department leadership sees a learning opportunity (i.e., do not wait for clock resets or consequences, but look at behaviors).

Investigation of a Human Performance related events should be conducted promptly (e.g., within 2 business days) using QF-0428 to obtain accurate information so that lessons learned can be identified and communicated.

For events that involve multiple departments, the Human Performance Event Review Committee per FG-PA-HU-01 may be utilized.

5.6.3 Lessons learned from HUIE investigations should be shared within the department and/or site at a D-15 or staff meeting.

5.6.4 The CAP Screen Team and the Department Manager should categorize the Human Performance Error based on the criteria listed in Attachment 2, “Site Human Performance Clock Reset Criteria,” Attachment 3, “Department Human Performance Clock Reset Criteria,” and Attachment 7, “HU Event Clock Reset and Good Practice Reporting Flowchart.”

1. Site HU Event Clock resets should be declared by the Site Vice President, Director, Site Operations, or the Plant Manager (Fleet VP Operations Support, or Fleet Director Operations Standards).

2. Department HU Event Clock resets should be declared by the Department Manager for the respective department.

3. Clock reset preparation should be preceded with analysis and conclusions developed from the HUEI (QF-0428).
4. When a Site or Department HU Event Clock reset is identified the responsible department should develop a "Red Sheet" (Site Event Clock Reset) or "Yellow Sheet" per QF-0414, “Human Performance and Site Clock Reset Notification (Red/Yellow) Sheet” (Department Event Clock Reset) within (5) five working days for communication of the event and lessons learned.

5. Peer Group Leads will review department clock resets associated with their area, monthly, and determine whether a fleet department clock reset is appropriate. **IF** a fleet department clock reset is identified, **THEN** the Peer Group Lead will develop the QF-0414 yellow sheet and communicate it to the fleet organization. A HUEI is not required unless the fleet failure can be attributed to a distinct human performance failure.

5.6.5 Following the investigation, attach the HUEI and/or clock reset to the CAP.

5.7 **HUMAN PERFORMANCE COMMUNICATION**

5.7.1 Communicate, as necessary, resolution of human performance adverse trends and clock resets

5.7.2 Methods used to communicate adverse trends or clock resets are:

1. Stand-downs.


4. Communication by the Human Performance Improvement Team or any member of a HU team.

5. Bulletins, speaking points for first line supervisors, Team Notes articles.

6. Training.

5.8 **RECOGNIZING GOOD HUMAN PERFORMANCE PRACTICES**

5.8.1 **IF** an individual is observed displaying or documentation in a CAP indicates that good Human Performance practices were used:

1. Ensure individuals who demonstrated the good practices are given appropriate positive reinforcement for those behaviors.
2. Responsible department may develop a “Green Sheet” for communication of the observation and the positive lessons to be learned using the “Green Sheet” template contained in Attachment 5, QF-0415, “Human Performance Green Sheet.”

3. Notify and provide the Human Performance Coordinator with the draft "Green Sheet" for review and input prior to final approval. Refer to Attachment 7, "HU Event Clock Reset and Good Practice Reporting Flowchart."

6.0 RECORDS

None

7.0 REFERENCES

7.1 SOURCE DOCUMENTS


7.1.2 NSPM Nuclear Department, CD 3.3, “Performance Assessment Program”


7.1.4 INPO document, “Principles for Enhancing Professionalism of Nuclear Personnel”, March 1989


7.1.7 INPO 08-004, Human Performance Key Performance Indicators, June 2008

7.2 REFERENCE DOCUMENTS

7.2.1 FP-PA-HU-02, “Human Performance Tools”

7.2.2 FP-PA-ARP-01, “Action Request Process”

7.2.3 FP-PA-HU-03, “Human Performance Observation Program”

7.2.4 CD 3.4, “Picture of Xcellence”
7.2.5 FP-PA-PAR-01, “Performance Assessment Review Board”

7.2.6 FG-PA-HU-01, “Human Performance Event Review Committee”

7.2.7 FP-G-BUS-01, “Picture of Xcellence Review Group and Site Excellence Plans”

7.2.8 FG-PA-DRUM-01, “Department Roll-Up Meeting (DRUM) Manual, Department Performance Trending”

7.2.9 QF-0414, “Human Performance Department and Site Clock Reset Notification (Red/Yellow) Sheet Instructions”

7.2.10 QF-0415, “Human Performance Green Sheet Instructions”

7.2.11 QF-0428, “Human Performance Event Investigation Tool”

7.3 COMMITMENTS

None

8.0 REVISION SUMMARY

8.1 Section 3.0 – streamlined the responsibilities information

8.2 Attachment 1 – upgraded the standards of the HU Improvement Team Charter, including membership, quorum, and Liaison/team duties and training.
9.0 ATTACHMENTS

9.1 Attachment 1, Human Performance Improvement Team Charter

9.2 Attachment 2, Site Human Performance Event Clock Reset Criteria

9.3 Attachment 3, Department Human Performance Event Clock Reset Criteria

9.4 Attachment 4, QF-0414, “Human Performance Department and Site Clock Reset Notification (Red/Yellow) Sheet Instructions”

9.5 Attachment 5, QF-0415, “Human Performance Green Sheet Instructions”

9.6 Attachment 6, (DELETED)

9.7 Attachment 7, HU Event Clock Reset and Good Practice Reporting Flowchart

9.8 Attachment 8, QF-0428, “Human Performance Event Investigation Tool”
ATTACHMENT 1
HUMAN PERFORMANCE IMPROVEMENT TEAM CHARTER

Vision: To have all workers attain individual excellence by instinctively and rigorously implementing human performance practices and principles while preparing, planning and conducting work to achieve positive ACEMAN results aligned with our Picture of Xcellence.

Mission: Effectively initiate, implement and integrate human performance improvement initiatives throughout the site.

Sponsor: Plant Manager

Chair: Human Performance and Industrial Safety Manager

Objectives:

- Implement human performance initiatives. Provide oversight to ensure consistency with common philosophy and monitor to ensure effective implementation.

- Review emerging human performance issues within departments/groups and evaluate for site-wide implications.

- Search for and eliminate latent organizational weaknesses.

- Elevate site-wide issues to the site PARB and/or appropriate managers.

- Provide two-way communication related to human performance.

- Support human performance training initiatives.

Required Team Membership:

Membership includes the Human Performance and Industrial Safety Manager and the HU Liaisons from the following departments:

- Chemistry
- Engineering
- Maintenance
- Operations
- Radiation Protection

- Production Planning
- Projects
- Security
- Training
- Business Support
ATTACHMENT 1
HUMAN PERFORMANCE IMPROVEMENT TEAM CHARTER
(Continued)

Quorum and meeting frequency:

1. A quorum consists of the Chair, HU Liaisons from operations, maintenance, and engineering, and 4 of the 7 remaining departments.
2. Team meetings should be held at least monthly, except during outages.

HU Liaison Responsibilities:

- Serve as the HU SME and Champion for the department.
- Maintain awareness of current department work activities with a forward looking approach. Identify error likely and risk significant situations and ensure the correct HU mindset exists for the work. Assist with critical task identification on procedures.
- Perform field observations at a frequency determined by the department manager (purpose is to remain knowledgeable of the observation process and maintain a field awareness).
- Weekly review CAPs, HUEIs, and work observations related to department work. Perform trend analysis of information.
- Monthly prepare summary report of department HU trends, using QF-0448. Initiate CAPs as needed, and communicate learnings to department. Report is used as input to DRUM.
- Review or perform department HUEIs, clock resets, and performance analyses.
- Participate in CRCs
- Participate in DRUM meetings
- Department representative on the site HU Improvement Team
- Assist department manager in the development and maintenance of the department’s HU improvement plan

Personnel filling the HU Liaison role are required to complete JFG FL-PAS-HUF-001G.

Team Responsibilities:

- Review department HU Liaison monthly reports. Perform trend analysis for site wide trends including latent organizational weaknesses and accountability attributes. Prepare roll-up report using QF-0448.
ATTACHMENT 1
HUMAN PERFORMANCE IMPROVEMENT TEAM CHARTER
(Continued)

- Develop and maintain the site HU Improvement Plan. Revise plan as needed based on conclusions from monthly report.
- Promote HU success stories and site wide learning (green sheets)
- Review, develop, or assist with Human Performance Stand-Downs or Enhancement Days.
# ATTACHMENT 2
## SITE HUMAN PERFORMANCE EVENT CLOCK RESET CRITERIA

### NOTE:
The Site HU Event Clock should be reset if a human error causes an event of **significant** consequence related to the following criteria.

### Site Reset Criteria

<table>
<thead>
<tr>
<th>Category</th>
<th>Criteria</th>
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<tbody>
<tr>
<td><strong>A – Accident Free</strong></td>
<td>Switching/tagging/wrong component error that results in one of the following:</td>
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<tr>
<td></td>
<td>• Work being released to the field and clearance verified by the performing department</td>
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<td></td>
<td>• Work performed without adequate equipment or personnel protection</td>
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<td></td>
<td>An occupational fatality, lost-time accident, or injury resulting in restricted duty</td>
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<tr>
<td><strong>C – Control Dose</strong></td>
<td>Loss of radiological control:</td>
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<td></td>
<td>• A loss of radioactive material that creates a measurable exposure rate at 30 centimeters outside the protected area</td>
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<td></td>
<td>• NRC PI impact per NEI 99-02</td>
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<td></td>
<td>• A radiological effluent technical specification or off-site dose calculation manual effluent occurrence</td>
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<td></td>
<td>• Significant contamination event within the RCA (e.g., 100,000 dpm/100cm², 1000 ft², 100 millirem decon dose, and/or multiple personnel contaminations). (Not INPO KPI criteria)</td>
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<tr>
<td><strong>E – Event Free</strong></td>
<td>Misoperation, misposition, or improper configuration of equipment that results in power reduction &gt;10%</td>
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<td></td>
<td>• An unplanned or unscheduled reactor trip or turbine trip</td>
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<td></td>
<td>• Property damage in excess of $100,000</td>
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<td></td>
<td>• Event requiring emergency plan activation</td>
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<tr>
<td></td>
<td>• Unplanned mode change</td>
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<td></td>
<td>• Unexpected/unplanned reactivity change ≥3% power</td>
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<tr>
<td></td>
<td>• Unplanned entry into a technical specification shutdown action statement &lt;72 hours</td>
</tr>
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<td></td>
<td>• Errors resulting in a damaged fuel bundle or a misplaced, ungrappled bundle</td>
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<tr>
<td></td>
<td>• Unplanned increase to either of the two highest on-line or shutdown risk threshold colors/numbers</td>
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<tr>
<td></td>
<td>• Misoperation, misposition, or improper configuration of equipment needed for nuclear safety, such that it would not perform its design function</td>
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## ATTACHMENT 2
### SITE HUMAN PERFORMANCE EVENT CLOCK RESET CRITERIA
(CONTINUED)

| E – Event Free (cont.) | • Significant programmatic failure or adverse trend in fatigue rule implementation (e.g., several rule violations involving more than one department on the same job). (Not INPO KPI criteria)  
| | • Inadequate Fleet Governance or Oversight that had a significant role in allowing a Site Clock Reset Event to occur (Not INPO KPI criteria) |
| M – Meet Commitments | • National Pollution Discharge Elimination System (NPDES), Occupational Safety and Health Administration (OSHA), or Environmental Protection Agency (EPA) noncompliance that requires a report in less than 30 days  
| | • Security report per 10CFR73.71 (excluding loggable events)  
| | • Report per 10CFR50.72 parts (b)(3)(v) through (b)(3)(xiii) or report per 10CFR50.73 parts (a)(2)(v) through (a)(2)(x)  
| | • NRC Finding >Green, if the issue has not previously reset the clock based on other reset criteria |
| A – Attend Training | • Significant area for improvement identified by industry peers (i.e. NRC/INPO/Etc.) (Not INPO KPI criteria) |
| N – No Rework | • Significant rework which has an adverse impact on plant operations (Not INPO KPI criteria)  
| | • Missed accruals of $100K or financial reporting issues which cause plant wide impact as determined by Plant Manager or Site Vice President (Not INPO KPI criteria) |
# ATTACHMENT 3
## DEPARTMENT HUMAN PERFORMANCE EVENT CLOCK RESET CRITERIA

**NOTE:**
- A Department’s Human Performance Event Clock is reset whenever an event occurs due to human error and it meets one of the criteria below.
- When the Site HU Event Clock is reset, the department responsible for the event also automatically resets the Department HU Event Clock although a separate Yellow Sheet is not required (the Red Sheet documents the failure and associated learnings).

## COMMON DEPARTMENT RESET CRITERIA

| A – Accident Free | • O.S.H.A. recordable injury  
|                   | • Near miss (An accident resulting in no property/equipment damage, no environmental issues, no injury or fatality, but could have) |
| C – Control Dose  | • RWP non-compliance  
|                   | • Improper RWP used for a job  
|                   | • Less than adequate Human Performance that causes:  
|                   |   o Personnel Contamination Incident  
|                   |   o Spill or spread of contamination  
|                   |   o Unplanned dose on a job  
|                   |   o Loss of key control  
|                   |   o Instrument/dosimetry human error causing additional dose or loss of data for Radiation Protection personnel |
| E – Event Free    | • Missed regulatory commitment and/or notification  
|                   | • Violation of Federal Law  
|                   | • Violation of Administrative TS that does not require a License Event Report (LER)  
|                   | • Unplanned change (less conservative) in Probabilistic Risk Assessment (PRA/PSA)  
|                   | • Reactivity Management Event (Level 3 or 4)  
|                   | • Inadequate procedure/work package quality or adherence that results in an operational or regulatory challenge  
|                   | • Department Director / Manager discretion*  
|                   | • Department employee input with department manager / director agreement  
|                   | • Foreign Material in a system that results in an operational or regulatory challenge.  
|                   | • Inadequate internal or external communication that results in an operational or regulatory challenge |
### ATTACHMENT 3  
DEPARTMENT HUMAN PERFORMANCE EVENT CLOCK RESET CRITERIA 
(CONTINUED)

<table>
<thead>
<tr>
<th>E – Event Free (Continued)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Procedure error</strong></td>
<td>previously identified or undetected latent error resulting in an operational or regulatory challenge (e.g. component mis-positioned, unplanned reactivity change or power reduction, reactor trip, etc.)</td>
</tr>
<tr>
<td><strong>Incorrect classification and notification</strong></td>
<td>including licensed operator requalification training (LOR) Drill and Exercise Performance (DEP) opportunities</td>
</tr>
<tr>
<td><strong>Failed emergency plan drill objective</strong></td>
<td>during full scale drills/exercises and facility mini-drills related to a risk significant planning standard</td>
</tr>
<tr>
<td><strong>Inappropriate action</strong></td>
<td>resulting in an undesired consequential event</td>
</tr>
<tr>
<td><strong>Mis-positioning, switching/tagging, sampling or valving issue/deficiency</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Unplanned entry into an LCO</strong></td>
<td>(Tech Spec or non-Tech Spec)</td>
</tr>
<tr>
<td><strong>Any security violation caused by human error</strong></td>
<td>that results in an NRC Security Loggable Event (e.g. Lost Security Badge; Vital Area door alarm)</td>
</tr>
<tr>
<td><strong>Inadequate Fleet Governance or Oversight</strong></td>
<td>that had a significant role in allowing a Department Clock Reset Event to occur</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M – Meet Commitments</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Unsatisfactory Effectiveness Review (EFR)</strong></td>
<td>for a Corrective Action to Prevent Recurrence (CAPR). Overdue Root Cause (RCE) or Apparent Cause (ACE) evaluation or repeated failures (&gt; 1) of ACE or RCE grading.</td>
</tr>
<tr>
<td><strong>Exceeding a scheduled Technical Specification Required Action Completion Time</strong></td>
<td>by 50%</td>
</tr>
<tr>
<td><strong>External commitment</strong></td>
<td>not met or late or inaccurate data in a submittal (NRC/INPO/WANO) requiring re-submittal</td>
</tr>
<tr>
<td><strong>Significant schedule impact</strong></td>
<td>due to inadequate scheduling of activities that results in a operational or regulatory challenge</td>
</tr>
<tr>
<td><strong>Procedure, work plan, or process</strong></td>
<td>that is not adhered to, not accurate, or not up-to-date, which results in a consequential event</td>
</tr>
<tr>
<td><strong>Unable to locate parts or material provided</strong></td>
<td>doesn’t comply with customer’s request, found to have damage, has an expired shelf-life, or an incorrect part is discovered at time of request and results in a work delay</td>
</tr>
<tr>
<td><strong>Violation of the work hour control requirements</strong></td>
<td>as defined in 10 CFR 26.205.</td>
</tr>
</tbody>
</table>
### ATTACHMENT 3
**DEPARTMENT HUMAN PERFORMANCE EVENT CLOCK RESET CRITERIA (CONTINUED)**

| A – Attend Training | • Task performed without proper qualifications  
|                     | • Consequential event caused by a lack of worker skill or knowledge  
|                     | • Failure to maintain emergency plan qualifications  
|                     | • Teaching or re-training due to unapproved material or incorrect information distribution  
|                     | • Cancellation or re-scheduling of training within 24 hours of scheduled start time  
|                     | • Significant (>25%) number of written or simulator exam failures  
|                     | • Significant (>10%) changes to questions on an exam after it is administered  
|                     | • Repeated unexcused absences from scheduled training (>2/year) |

| N – No Rework | • Repeat event due to ineffective corrective action or failure to incorporate internal OE.  
|               | • Department monthly financial performance results greater than 5% variance between actual and forecast due to human error  
|               | • Need to reschedule risk significant work within two (2) weeks of scheduled date due to lack of readiness  
|               | • Lack of scheduled support causing rework, equipment issues, significant work delays, or work stoppage (Manager Discretion)  
|               | • Lack of contingency planning resulting in unanticipated problems  
|               | • Rework that has future schedule or cost impacts  
|               | • Change to a Procedure/Process/Report/etc that needs to be redacted due to ineffective change management |

A Manager Discretionary Event is defined as any human performance or industrial safety issue determined to be a near miss to any of the criteria in Attachment 2 or 3. Key to this determination is the extent that the defense in depth failed and what Barriers remained in place to mitigate the consequences. As a general rule to classify a less consequential incident as an event is when only one barrier remained that prevented an event or good fortune in timing, geographical separation, etc.

A proactive approach to identify trends prior to a Department Human Performance Event Clock Reset occurring is to identify error-precursors. An example of these precursors (defined by each Barrier for Excellence) is listed in the Fleet Picture of Xcellence directive.
ATTACHMENT 4
(Human Performance RED/YELLOW Sheet Instructions – See QF–0414)
ATTACHMENT 5
(Human Performance GREEN Sheet Instructions – see QF-0415)
ATTACHMENT 7

HU EVENT CLOCK RESET AND GOOD PRACTICE FLOWCHART

HU Event / Problem documented in Action Request (AR) → CAP AR

Screening Team/ Dept Manager Determines Category of HU event

Site HU Clock Reset per Att. 2 → No

No further action

HU Good Practice

Yes

Complete GREEN SHEET per QF-0415

Department MGR or Supervisor approve GREEN SHEET

No

No further action

Dept HU Clock Reset per Att. 3 → No

No further action

HU Event / Problem documented in Action Request (AR) → CAP AR

Screening Team/ Dept Manager Determines Category of HU event

Assign a Sr. Mgmt Sponsor and assemble a team to evaluate the event.

Complete RED SHEET per QF-0414

Sr. Mgmt Sponsor and Plant Manager approve RED SHEET

Communicate event (RED or YELLOW sheet) to affected departments

Provide completed investigation to OE coordinator for fleet-wide distribution

Plant Manager coordinate Fleet Challenge Board

Complete YELLOW SHEET per QF-0414

Department MGR or Supervisor approve YELLOW SHEET

Assign an owner to evaluate the event.

Complete YELLOW SHEET per QF-0414

Assign an owner to evaluate the event.
ATTACHMENT 8
(Human Performance Event Investigation Tool – see QF-0428)