

- Pursue additional skills to broaden qualifications and enhance professional development.

13. Intolerance for Unexpected Equipment Failure

- Champion initiatives that promote material condition excellence.
- Proactively identify degraded equipment condition and system performance.
- Initiate work requests.
- Determine impact of degraded equipment and set plant priorities to ensure timely repairs. Drive problem resolutions.
- Develop, execute and document thorough troubleshooting plans.
- Collect, preserve and document all physical evidence resulting from an equipment failure.
- Develop operating contingencies for degraded or out of service equipment.
- Perform Preventive Maintenance (PM) as scheduled. Document feedback to improve PM program effectiveness and record failure history.
- Take immediate action to resolve unexpected or unacceptable performance of equipment if it occurs.

14. Shift Turnover

- Maintain an accurate turnover log.
- Review the turnover log and walk down the work area.
- Discuss the information face to face.
- Evaluate your relief for excess fatigue or fitness for duty concerns.
- Verify properly certified and/or qualified employees prior to assuming duties.
- Read and review logs status sheets and supporting documentation.
- Actively communicate:
 - ✓ Status of ongoing activities
 - ✓ Out of specification parameters and abnormal line ups
 - ✓ Degraded conditions and required monitoring and/or contingency plans
- Transfer responsibility.

15. Control Board Awareness

- Monitor indications frequently and closely with emphasis on trending.
- Maintain continuous awareness of major plant parameters.
- Be alert for changing critical parameters, alarms and trends.
- Complete walk down of unit every 60 minutes; log critical parameters as required.
- Shift Supervisors walk down unit every 4 hours.
- Use multiple indication for verification of plant and component

status.

- Identify and document deficiencies in main control board indication and/or control.

16. Operator Rounds

- Document major evolutions and abnormal conditions and their causes.
- Perform general area checks: housekeeping, safety concerns, local panel status, protective relay status, area temperatures, plant labelling.
- Perform equipment checks: motor and pump performance, fluid leakage, component operating parameters, system flow path line ups.
- Challenge work request tags.
- Report abnormal conditions to supervision in a timely manner.
- Highlight out of tolerance readings and notify control room Shift Supervisor immediately.
- Conduct minor cleanup and storage.

17. Log Keeping

- Document shift activities in a timely manner.
- Make log entries legible, accurate, complete, factual and understandable.
- Provide adequate detail to support equipment operability or availability status determinations.
- Ensure logs allow for reconstruction of activities and events by third parties.
- Sign you logs once verified at completion of shift.

18. Regulatory Compliance

- Understand Tech Specs, ODCM and other license and permit requirements.
- Ensure Tech Specs, TRM, ODCM and other licenses and permit requirement are integrated with scheduling process.
- Prevent missed or overdue surveillances.
- Peer Review regulatory compliance decisions as time permits.
- Use the basis document when verifying compliance.

19. Clearance and Tagging

- Provide a safe zone of personnel and equipment protection
- Evaluate impact to systems/components outside clearance boundary
- Document all component manipulations to maintain configuration control
- Support work schedule to optimize equipment availability
- Process work clearance paperwork accurately

20. Teamwork

- Share insights and experience with others.
- Solicit and respect different views and ideas to strengthen decision-making.
- Solve problems by involving others.
- Make additional effort to work across cultural barriers.
- Align to the team's shared goals and objectives.
- Accept actions and complete on time.
- Conduct team critiques - learn and improve.
- Achieve team goals and meet individual expectations.

21. Work Management

- Participate in Nawah work control process.
- Come to meetings on time, prepared and ready to provide input and answer questions.
- Review schedule for conflicts; challenge job duration, preparations and interfaces.
- Identify and remove unnecessary barriers.
- Perform pre-job walk downs to verify required support, preparation and equipment staging.
- Verify equipment is properly taken out of service and isolated.
- Work to the schedule – start and complete each job on time.
- Notify supervision of a schedule job delay greater than 10 minutes.
- Notify the Work Week Manager (WWM) or Outage Control Center (OCC) of a schedule job delay greater than 30 minutes.
- Incorporate Lessons Learned to improve future job performance.
- Critique your work to identify Areas for Improvement (AFIs).

22. Self-Assessment & Continuous Improvement

- Be self-critical.
- Prevent complacency; identify opportunities for improvement.
- Reinforce desired behaviors and correct weaknesses.
- Perform self-assessments and benchmarking.
- Monitor for and take actions on adverse performance trends.
- Identify, document, share and act to improve upon Lessons Learned.
- Do things right the first time.



1. Reactor Safety

- Maintain plant parameters within operating limits.
- Operate and maintain the plant in accordance with procedures.
- Recognize and adhere to all regulatory requirements and environmental permits.
- Practice conservative decision making consistent with WANO guidelines.
- Understand plant consequences of every action taken.
- Believe instrument response and indication unless proven otherwise.
- Maintain a questioning attitude; ask “why?”.
- Raise safety concerns to your supervisors.
- Maintain qualification and proficiency in assigned emergency response role.
- Ensure fire doors are latched after use.

2. Reactivity Management

- Acknowledge that Operations owns reactivity management.
- Notify Reactor Engineer (RE) of any planned major reactivity changes and any unexpected changes.
- Plan and brief all reactivity changes prior to execution.
- Obtain Shift Manager’s concurrence for all planned reactivity changes.
- Obtain Shift Supervisor’s review, approval and oversight of all planned reactivity changes.
- Ensure Main Control Room (MCR) activities do not distract from the proper monitoring of core parameters.
- Do not rely on the reactor-protection system (RPS) to protect the reactor during reactivity events.
- Respond conservatively in the face of prolonged uncertainty or unusual reactor behavior such as; rod insertion or a reactor scram.
- Ensure trainees manipulating reactivity controls are in an approved training program and directly supervised by a certified operator.
- Monitor nuclear instrumentation during core alterations.

3. Industrial Safety

- Be responsible for your own safety.
- Review Lessons Learned and applicable Operating Experience (OE) when planning work.
- Adhere to safety postings and barriers.
- Use the appropriate Personal Protective Equipment (PPE) for work to be performed.
- Ensure your equipment is in a safe condition prior to beginning work.

- Know your personal limits; both physically and mentally.
- Use installed safety equipment.
- Do not bypass required equipment safeguards.
- Comply with chemical Material Safety Data Sheet (MSDS) requirements.
- Stop and correct any unsafe behaviors or conditions.
- Be alert for changing conditions.
- Maintain a safe and clean work area.
- Report all injuries; big or small.

4. Radiological Safety

- Ensure you are on the correct Radiological Work Permit (RWP).
- Maintain strict compliance with all RWPs.
- Know the work area dose rates and contamination levels.
- Know your accumulated dose – do not exceed limits.
- Adhere to radiological boundaries; do not alter.
- Practice As Low As Reasonably Achievable (ALARA):
 - ✓ Pre-plan work to minimize dose.
 - ✓ Move work to low dose areas if possible.
 - ✓ Use low dose waiting areas – do not loiter.
 - ✓ Use minimum number of workers to safely perform job.
 - ✓ Use remote-handling tools; if possible.
 - ✓ Maximize distance between you and any radiation sources.
 - ✓ Avoid radiation hot spots.
- Be proactive in identifying potential dose reduction opportunities.
- Practice good housekeeping at all times.

5. Security

- Follow directions given by Nuclear Security Force personnel.
- Understand that all individual, materials and vehicles on company property are subject to be searched for prohibited material.
- Properly display and control your security badge.
- Immediately notify security of a lost badge within protected or vital areas.
- Ensure security doors are latched after use.
- Remove ignition keys from vehicles within the protected area; when not in use.
- Maintain positive control of visitors at all time.
- Immediately report any security or fitness for duty violations.
- Adhere to security postings and barriers.

6. Human Performance (HU)

- Understand and properly use the applicable HU tools for tasks.
- Use Self-Check/STAR and Point-Touch-Verbalize for component identification and equipment manipulation.

- Use Peer Check (PC) for main control room manipulations and when requested.
- Use Independent Verification (IV) and Concurrent Verification (CV) as required by procedure.
- Use Three-Way Communication when providing direction or exchanging critical information.
- Use the Phonetic Alphabet when communicating alphanumeric information.
- Use Flagging to enhance component identification techniques.
- Identify and eliminate error-likely situations.

7. Procedure Use and Adherence (PU&A)

- Verify correct procedure revision.
- Ensure the procedure is appropriate to accomplish desired task.
- Use procedures according to designated level of use.
- Obtain clarification on procedures steps, to ensure your understanding, prior to taking action.
- Adhere to procedures as written.
- Stop and revise identified procedure errors prior to continuing use.
- Use Placekeeping. Designate step completion using circle/slash.
- Re-verify conditions prior to continuing a suspended evolution.
- Take ownership for procedure quality.

8. Briefs

- Prepare and review material prior to conducting briefs.
- Use Shift Briefs to cover:
 - ✓ Safety moment and related topics.
 - ✓ Plant status; including abnormal plant conditions and line ups.
 - ✓ Increased monitoring requirements for adverse conditions.
 - ✓ Important scheduled and in-progress work.
- Conduct the appropriate type of Pre-Job Brief (PJB) by considering the task and level of risk associated with it.
- Review Operating Experience (OE).
- Ensure “positive engagement” of all personnel.
- Conduct Post-Job Debriefs to identify follow up actions and Lessons Learned.

9. Accountability

- Own your performance - results and behaviors.
- Report to work on time and fit for duty.
- Maintain safe and professional dress.
- Meet or exceed minimum work hour expectations.
- Expect and be receptive to feedback and coaching.
- Review your work and sign to verify quality and content.

- Know your development areas and take actions to improve.
- Report problems to your supervisor.
- Verify that your personal working file reflects your performance.
- Ensure you receive routine formal appraisals.

10. Integrity and Transparency

- Use independent effort when being tested.
- Speak up and tell people the facts.
- Know what your signature means – read, understand, and agree.
- Always honor your commitments.
- Follow the Nawah rules and standards at all times.
- Be open and honest during investigations.
- Own mistakes made and events incurred; share Lessons Learned.
- Ask “why?” Raise concerns.

11. Condition Reporting and Resolution

- Initiate Condition Reports (CRs) for problems, errors made or found, and concerns.
- Perform thorough and insightful apparent, common and root cause evaluations.
- Identify and implement timely corrective actions to prevent recurrence.
- Verify effectiveness of corrective actions.
- Review sources of nuclear event reporting and take appropriate actions.

12. Training and Qualification

- Participate in training – “Come to learn”.
- Report for training by the scheduled starting time and return from breaks on time.
- Be accountable for your training performance and professional conduct.
- Wear appropriate PPE in training laboratories.
- Learn the fundamentals.
- Use critique checklists to identify individual and crew strengths and areas for improvement.
- Practice to gain proficiency.
- Provide mentoring to those in need.
- Provide meaningful feedback on the quality of training.
- Own and maintain your current certification and qualifications.
- Track individual and crew performance, as well as improvement plans in crew notebooks.
- Verify qualifications prior to performance of work tasks.
- Identify training needs to improve performance.