

444 South 16th Street Mall
Omaha, NE 68102-2247

LIC-13-0046
April 11, 2013

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

- References:
1. Docket No. 50-285
 2. Letter from Omaha Public Power District (Louis P. Cortopassi) to NRC (Document Control Desk), *Request for One-Time Exemption from Requirements of 10 CFR 26.205(d)(7)*, dated October 10, 2012, (ML12284A344), (LIC-12-0145)
 3. Email from NRC (L. E. Wilkins) to OPPD (B. R. Hansher), *DRAFT: 2nd Round RAIs RE: Fort Calhoun Work Hour Exemption Request*, dated April 10, 2013 (ML13100A175)

SUBJECT: OPPD Response to NRC RAI Regarding Request for Work Hours Exemption

As requested in Reference 3, enclosed is a copy of Standing Order (SO)-G-52, "Plant Staff Working Hours." This document is provided to support our Exemption Request of Reference 2.

No regulatory commitments are contained in this submittal.

If you should have any questions, please contact Mr. Bill R. Hansher at (402) 533-6894.

Sincerely,

Terrence W. Simpkin
Manager-Site Regulatory Assurance

TWS/mle

Enclosure: SO-G-52, "Plant Staff Working Hours," Revision 11

SO-G-52

Plant Staff Working Hours

Revision 11

Safety Classification:

Non-Safety

Usage Level:

Information

Change No.:	EC 59575
Reason for Change:	Modifies direction to allow time to be entered into PeopleSoft on the next day worked for Maintenance based on analysis from CR 2012-20811 AI 6. Directs supervisors to save approved test time in EmpCenter. (CR 2012-20811 AI 5). Eliminates the WHR Steering committee as not part of the Exelon model and is not considered value added. Clarifies what constitutes incidental duties relative to scheduled or unscheduled calls or conference calls to off-duty covered workers. (CR 2012-18405) Modifies timekeeper and Fatigue Rule Compliance Lead duties and introduces Departmental Fatigue Rule Coordinator function. Provides contacts for testing time when a supervisor is unable to test a covered worker. (CR 2011-9438 AI 4)
Initiator:	Jessica Bock
Preparer:	Ron Shirley
Issued:	03-19-13 3:00 pm

Table of Contents

Section	Title	Page
1.0	PURPOSE AND SCOPE.....	3
2.0	DEFINITIONS	5
3.0	RESPONSIBILITIES	8
4.0	PROCEDURE	14
4.1	General.....	14
4.2	Work Hour Restrictions for ON-LINE Periods.....	15
4.3	Work Hour Restrictions for OUTAGE Periods	16
4.4	Calculating Work Hours.....	18
4.5	Directing Work.....	20
4.6	Work Hour Scheduling.....	23
4.7	Transitioning Between Shift Schedules	25
4.8	Transitioning from Uncovered Work to Covered Work	26
4.9	Transitioning To a Plant Outage, Security System Outage, or Increased Threat Condition	27
4.10	Call-Out Work Periods.....	27
4.11	Daylight Savings Time.....	27
4.12	Reset From Deviations	28
4.13	Waivers	29
4.14	Waiver Processing	31
5.0	REFERENCES AND COMMITMENTS	32
6.0	ATTACHMENTS	32
	Attachment 1 - Covered Work Determination	33

1.0 **PURPOSE AND SCOPE**

1.1 Purpose

1.1.1 The purpose of this standing order is to set forth requirements and expectations for controlling the work hours of Fort Calhoun Station plant staff in accordance with 10 CFR 26 Subpart I, Managing Fatigue. The requirements of this standing order are intended to provide reasonable assurance that worker fatigue will be avoided, that individuals will be able to safely perform their duties and that personnel are not assigned to duties while in a fatigued condition that could significantly reduce their mental alertness or their decision-making ability.

1.1.2 FCS complies with the maximum average work hours requirements in 10 CFR 26.206(d)(7).

1.2 Scope

1.2.1 This standing order establishes the following:

- A. The process for implementing the work hour controls for individuals performing work subject to 10 CFR 26.205, Work Hours.
- B. The process for managing fatigue when scheduling individual work hours.
- C. The process used to schedule, track, and calculate work hours.
- D. The process for approving work hour limit waiver requests.
- E. Responsibilities of personnel performing support activities.



1.3 Statement Of Applicability

1.3.1 This standing order applies to **ALL** OPPD employees, contractors, and vendors with unescorted access who perform or direct covered work at Fort Calhoun Station. Specifically, the following individuals:

- A. Operations personnel working on (or directing activities for) systems and components that are risk significant.
- B. Maintenance personnel working on (or directing activities for) systems and components that are risk significant.
- C. Radiation Protection or Chemistry personnel performing duties which are part of the on-site Emergency Response Organization minimum shift complement.

1.3.1 (continued)

- D. Individuals performing duties of a Fire Brigade Leader who are responsible for understanding the effects of fire and fire suppressants on safe shutdown capability.
- E. Individuals performing security duties as an armed Security Officer, Alarm Station Operator, Response Team Leader, or Watch Person.

	<u>CAUTION</u> Anyone who directs covered operations or maintenance work is considered a covered worker.	
---	--	---

1.3.2 The following individuals at Fort Calhoun Station are considered to be "covered workers" under normal circumstances:

A. Operations Staff

- Shift Managers
- Control Room Supervisor
- Licensed Operators
- Equipment Operators
- Shift Technical Advisors
- Fire Brigade Leaders

B. Maintenance Personnel

- Supervisors
- Crew Leaders
- Craft Persons
 - Steamfitters
 - Pipefitters
 - Boiler Makers
 - Electricians
 - I&C Technicians

C. Chemistry Personnel

- Shift Chemists (includes any qualified shift chemist who fills duty positions)

D. Radiation Protection Personnel

- Shift RP Technicians (includes any qualified shift RP technician who fills duty positions)

1.3.2 (continued)

E. Security Personnel

- Shift Security Supervisors
- Shift Lieutenants
- Alarm Station Operators
- Armed Security Officers
- Response Team Leaders
- Watch Persons

1.3.3 Information regarding individuals and activities not subject to work hour restrictions can be found in Step 4.1.2.

2.0 DEFINITIONS

- 2.1 Averaging Period: The duration over which the 54-hour average is calculated. This period may not exceed 6 weeks.
- 2.2 Break: An interval of time that falls between successive work periods, during which the individual does not perform any duties for Fort Calhoun Station other than one period of shift turnover at either the beginning or end of a shift but not both. This means that one period of shift turnover can be considered as part of the break.
- 2.3 Call-Out: Returning to the site when not normally scheduled for work.
- 2.4 Condition Adverse To Safety: Unforeseen conditions which, in the informed opinion of the Operations Shift Manager, could jeopardize the safety of the station.
- 2.5 Covered Worker: Any individual granted unescorted access to Fort Calhoun Station's Protected Area that performs covered work.
- 2.6 Covered Work includes the following activities:
- 2.6.1 Operating or on-site directing of the operation of systems and components that a risk-informed evaluation process has shown to be significant to public health and safety;
 - 2.6.2 Performing maintenance or on-site directing of the maintenance of structures, systems, and components (SSCs) that a risk-informed evaluation process has shown to be significant to public health and safety;
 - 2.6.3 Performing Health Physics or Chemistry duties required as a member of the on-site emergency response organization minimum shift complement;
 - 2.6.4 Performing the duties of a Fire Brigade Leader who is responsible for understanding the effects of fire and fire suppressants on safe shutdown capability; and

- 2.6.5 Performing security duties as an armed security force officer, alarm station operator, response team leader, or watch person, hereinafter referred to as Security personnel.
- 2.7 Day-off: A calendar day in which an individual does not start a work shift.
- 2.8 Deviation: A departure from the requirements included in 10 CFR Part 26 Subpart I which could be in violation of or lead to a violation of the fatigue management requirements.
- 2.9 Directing: The exercise of control over a work activity by an individual who is directly involved in the execution of the work activity, and either makes technical decisions for that activity without subsequent technical review, or is ultimately responsible for the correct performance of that work activity.
- 2.10 Excluded Time: Time spent on-site, but **NOT** counted as hours worked, because the time was spent :
- Performing activities not required by Fort Calhoun Station
 - In stand-by when provisions have been made for resting onsite
- 2.11 Excessive Overtime: Hours worked under an authorized waiver request and over the limits set forth by 10 CFR 26 Part I.
- 2.12 Fatigue: The degradation in an individual's cognitive and motor functioning resulting from inadequate rest.
- 2.12.1 Acute Fatigue: Fatigue from causes (e.g., restricted sleep, sustained wakefulness, task demands) occurring within the past 24 hours.
- 2.12.2 Cumulative Fatigue: The increase in fatigue over consecutive sleep-wake periods resulting from inadequate rest.
- 2.13 Fatigue Assessor: A supervisor or FFD Program personnel qualified to conduct fatigue assessments when required as per FFD-100, Managing Fatigue. Qualification status can be verified in PQD. Qualification Group - "FATIGUE". Qual number: FATIGUASSESS.
- 2.14 Incidental duties: Unscheduled work activities occasionally performed off-site (including phone calls and work required by supervisor to complete off-site) that are required by Fort Calhoun Station but do not exceed a nominal, cumulative 30 minutes in a single break period. Scheduled telephone calls or conference calls to covered workers shall count as covered work, even if under the nominal allowed 30 minutes.
- 2.15 Increased Threat Condition: An increase in protective measure level, relative to the lowest protective measure level applicable to the site during the previous 60 days, as promulgated by an NRC advisory.

- 2.16 Maintenance: Modification, surveillance, post-maintenance testing, and corrective, non-corrective, and preventive maintenance of SSCs that a risk informed evaluation process has shown to be significant to public health and safety.
- 2.17 Maintenance Personnel: Personnel who are responsible for the correct performance of maintenance, repair, modification, or calibration of safety-related structures, systems, or components, and who are personnel performing or immediately supervising the performance of such activities. This term applies to all personnel who are actually performing such functions, regardless of whether or not they are assigned to the shift crew.
- 2.18 Nap or Restorative Sleep: A brief opportunity with appropriate accommodations for restorative, uninterrupted sleep of at least one half-hour in a designated area.
- 2.19 Normal Shift Assignment: An eight, ten, or twelve hour shift for continuous service positions.
- 2.20 Off-site: Any area not considered on-site.
- 2.21 On-site: Within the Owner Controlled area of Fort Calhoun Station.
- 2.22 Protected Area: The area encompassed by physical barriers and to which access is controlled.
- 2.23 Risk Informed Evaluation Process: An evaluation based on a probabilistic risk analyses approach such as the Maintenance Rule (50.65(a)(4)) or other similar process.
- 2.24 Security Personnel: Shift Security Supervisor, Shift Lieutenant, armed security officer, alarm station operator, response team leader, or watch person.
- 2.25 Security System Outage: The loss of sufficient components and operational capabilities of the security system that impacts Security's ability to provide resources required for compensatory measures to comply with physical security and safeguards contingency plans. These planned or unplanned outages could be the result of equipment degradation/failure, adverse weather conditions, loss of power, or structural damage to the Security System.
- 2.26 Self-declaration of Fatigue: A formal statement by an individual to his or her supervisor that he or she is not fit to perform his or her duties for any part of a shift due to fatigue.
- 2.27 Shift Cycle: A series of consecutive work shifts and days off that is planned by the station to repeat regularly, thereby constituting a continuous shift schedule.

- 2.28 Shift Turnover: Those activities that are necessary to safely transfer information and responsibilities between two or more individuals in person between shifts. Shift turnover activities may include, but are not limited to, discussions of the status of plant equipment, and the status of ongoing activities, such as extended tests of safety systems and components. Thirty minutes of turnover time should be sufficient for turnover requirements and exceeding 30 minutes of turnover should be infrequent. Turnover time shall not exceed 60 minutes. Activities such as training and pre-job briefs are not considered to be shift turnover for the purposes of Part 26 Subpart I.
- 2.29 Shift Schedule: A measure of the average daily shift duration over a particular Shift Cycle.
- 2.30 Supplemental Personnel: Any individual not employed by OPPD that is performing work or providing services at Fort Calhoun Station, either by contract, purchase order, oral agreement, or other arrangement.
- 2.31 Tactical Exercise: A force-on-force simulation used to evaluate and demonstrate the capability to defend target sets against selected attributes and characteristics of an adversary. A force-on-force tactical exercise includes all key program elements of a station's protective strategy.
- 2.32 Turnover Time: Time spent when employees are required to report early or remain after their normal shift assignment to create an overlap with the adjacent shift for the purpose of conducting a shift turnover. Turnover time is only to be performed (and coded as such) at the start or end of work periods.
- 2.33 Unit Outage: A time when the unit is disconnected from the electrical grid up to a period of 60 days.
- 2.34 Unplanned Unit Outage: A unit outage to accommodate emergent equipment issues for which there was less than a 42-day planning period to adjust personnel work schedules.
- 2.35 Waiver: The process for approving and allowing an individual to exceed work hour limits as documented on Form FC-70.
- 2.36 Work Hours: The amount of time an individual performs duties for OPPD while authorized for unescorted access to Fort Calhoun Station.
- 2.37 Work Hour Controls: The regulatory requirements in 10 CFR 26.205, Work Hours.
- 3.0 RESPONSIBILITIES**
- 3.1 Plant Manager - Determines if a Waiver is necessary to mitigate or prevent a Condition Adverse To Safety or maintain site security.

3.2 Division Managers, Department Heads, and Superintendents of Covered Workers - Responsible for maintaining staffing at levels adequate to maintain shift coverage without routine overtime in excess of 10 CFR 26 Subpart I limits and arranging work schedules that keep working hours within limitations and avoid the use of overtime in excess of 10 CFR 26 Subpart I limits.

3.2.1 Maintenance, Security, Radiation Protection, Chemistry, and Operations departments shall designate an individual within their department to act as the Departmental Fatigue Rule Coordinator. This role can be filled by the timekeeper.

3.3 Supervisors of Individuals Performing Covered Work - Maintain work hours within authorized limits by compliance with the following:

3.3.1 Identify employees and supplemental personnel that are performing covered work.

i	<u>NOTE</u>	i
	For new covered workers (employees and contractors), covered status shall be identified at the time of in-processing by marking the covered worker checkbox on the Personnel Requirements Form (FCSG-36, Attachment 12).	

3.3.2 Verify that covered workers are designated as such in PeopleSoft and EmpCenter. This can be done by contacting Fatigue Rule Compliance Lead or Departmental Fatigue Rule Coordinator. Requests for changes to covered/non-covered status should be submitted via FC-1419, Covered Status Change Request Form, or FC-1420, Short-Term Non-Cover Request Form.

3.3.3 Ensure that assigned individual work hours are managed with the objective of preventing impairment from fatigue due to the duration, frequency, or sequencing of successive shifts.

3.3.4 Verify that staffing levels are adequate to ensure individual work hours are managed with the objective of preventing impairment from fatigue due to the duration, frequency, or sequencing of successive shifts.

3.3.5 Monitor the work hours of subordinates and verify that they are within the limits authorized by this standing order.

3.3.6 Monitor the alertness, general health, physical condition, and degree of fatigue of their subordinates.

3.3.7 To the best of their ability, make changes to the work environment to alleviate situations adversely affecting fatigue of covered workers.

- 3.3.8 Initiate and process requests to exceed work hour restrictions in accordance with this standing order.
- 3.3.9 Ensure that all EmpCenter Notifications are resolved as soon as possible upon receipt.
- 3.3.10 Supervisors SHALL forecast ALL time in EmpCenter if covered workers are asked to work hours greater than scheduled or on scheduled days off. If the test time does not cause deviations and is likely to be worked, it should be saved into EmpCenter. If it is a departmental expectation, the worker should be notified that time has been tested and approved. Test time that causes deviations or is NOT worked should be deleted from EmpCenter.
- 3.3.11 Test time for approved hours shall be saved in EmpCenter.

i	<u>NOTE</u> In the event of a violation or near-miss, an audit may be performed. In order to demonstrate that time was tested for an individual, the test time must be SAVED in EmpCenter. Even after the time is deleted or overwritten, it will show on an audit report. Recalculating/reloading an EmpCenter timesheet will not show test time on an audit report.	i
----------	---	----------

- A. If a Supervisor is unable to test time for one of his/her covered workers, the Supervisor should attempt to contact the following in the order listed below to have time tested:
 - Department Fatigue Rule Coordinator
 - Other Supervisors in Your Work Group
 - Fatigue Rule Compliance Lead
 - Work Week Manager
 - Shift Security Supervisor
 - Shift Manager

- 3.3.12 Work with timekeeper to ensure that schedules in EmpCenter for themselves and their covered workers are accurate.
- 3.3.13 Inform timekeeper when schedules change for themselves and their covered workers via FC-1418, Schedule Change Request Form.
- 3.4 Shift Security Supervisors or in their absence, Shift Lieutenants - Determines if a Waiver is necessary to maintain site security.
- 3.5 Operations Shift Manager - Determines if a waiver is necessary to mitigate or prevent a Condition Adverse To Safety.

- 3.6 All badged individuals - Expected to be aware of their covered or non-covered status as defined in this standing order.

- 3.7 All Employees With Unescorted Access Who Perform Covered Work - Maintain working hours within the authorized limits by compliance with the following:
 - 3.7.1 SHALL ensure that any time outside scheduled time in EmpCenter is tested and approved by appropriate supervision.

 - 3.7.2 Ensure time worked is entered into time and labor system in accordance with department expectations.

 - 3.7.3 Monitor their alertness, general health, physical condition, and degree of fatigue and follow the self-declaration process in accordance with FFD-100, Appendix A, Managing Fatigue.

 - 3.7.4 If asked to work hours beyond their normal schedule, ensure time has been tested in EmpCenter.

3.8 Work Group Time Keepers

The Fatigue Rule Webpage identifies timekeepers for on-line and plant outage periods to support the following areas:

- Maintenance (EM, I&C, MM, MTE, SFM, FIN) (includes supplemental covered workers seconded to Maintenance)
- Radiation Protection
- Chemistry
- Security
- Operations
- Long-term contractor personnel (e.g., Kiewit)
- Project Management (includes supplemental covered workers not seconded to Maintenance)
- System Protection, Metering Services and Substation (when performing work at FCS)
- Central Maintenance (when performing work at FCS)

3.8.1 Duties of work group time keeper include:

- Assign Schedules in PeopleSoft and EmpCenter for both online and outage work as directed on FC-1418, Schedule Change Request Form
- Assist supervisors/managers with entering test time into EmpCenter for additional hours outside of an employee's schedule
- Ensure that time for contractors who are assigned to their work group is entered in accordance with department expectations.
- Run the Deviation Report daily and take action to ensure that no violations occur.
- Run the Exception Report daily and take action to ensure that errors for covered workers are corrected.
- Run the Test Time Report periodically and ensure that old test time is removed from EmpCenter.
- In Security, the timekeeper will also validate any changes made on the weekly schedule that is published by the Security Coordinator.

3.9 Departmental Fatigue Rule Coordinator

This individual is designated by their department management to perform “higher level” tasks related to maintaining Fatigue Rule compliance within their departments, such as:

- Assist timekeeper with generating and clearing EmpCenter Reports when necessary.
- Designate time worked as non-covered in EmpCenter when justified in writing by a Supervisor or Manager.
- Change employee status to/from covered/non-covered as necessary. Ensure that FC-1419 or FC-1420 is obtained for status coverage changes.
- Report violations and Condition Report numbers for violations to the Fatigue Rule Compliance Lead no later than the 5th of each month for inclusion in the Work Hour Performance Indicators.
- Provide data as requested by the Fitness for Duty Coordinator for the Annual Program Effectiveness Review Report.
- Assist supervisors/managers/timekeepers in resolving pending deviations and in determining the best course of action to avoid violations.

3.10 Fatigue Rule Compliance Lead

Duties of the Fatigue Rule Compliance Lead include:

- Subject Matter Expert on 10 CFR 26, Subpart I, SO-G-52, and EmpCenter.
- Assist supervisors/managers/timekeepers in resolving pending deviations when Departmental Fatigue Rule Coordinator is unable to.
- Assist supervisors/managers/timekeepers in determining the best course of action to avoid violations when Departmental Fatigue Rule Coordinator is unable to.
- Perform benchmarking (formal & informal), participate in peer groups, and attend industry conferences to ensure FCS remains up-to-date on industry best practices.
- Complete Work Hour Rule Performance Indicators.
- Coordinate upgrades and changes to EmpCenter and PeopleSoft.
- Notify timekeepers and Departmental Fatigue Rule Coordinators of new covered workers.
- Maintain Fatigue Rule intranet page.
- Prepare training materials and conduct training.

3.11 An annual program effectiveness review is required to be performed within 30 days of the end of each year. This review is normally conducted by the FFD Coordinator with the Departmental Fatigue Rule Coordinators responsible for providing data as requested by the FFD Coordinator. Results shall be forwarded to appropriate station management. Reviews shall cover the requirements of 10 CFR 26.205(e) and NEI-06-011 Section 15 and RG 5.73 Regulatory Position 14.

3.12 Training

3.12.1 Biennial refresher will be conducted for covered worker supervisors. Refresher will include:

- Significant changes to SO-G-52 or the controlling compliance software
- Recent station and industry problems (OE) pertaining to work hour rule compliance and implementation

3.13 In-Processing

3.13.1 It is the responsibility of the Supervisor to identify covered workers at the time of in-processing. See Step 3.3.1.

4.0 **PROCEDURE**

4.1 General

4.1.1 Work hour restrictions apply only to personnel that are currently authorized un-escorted access and who are performing Covered Work.

4.1.2 Work hour restrictions specifically do not apply to the following individuals and activities:

- A. Maintenance activities performed on systems, structures, and components that are located off site;
- B. Nuclear Oversight inspections and activities;
- C. Predictive maintenance activities that do not result in a change of condition or state of a structure, system, or component (SSC). Predictive maintenance activities that may be excluded if they do not change the state or condition of an SSC include, but are not limited to, nondestructive examination (NDE), thermography, vibration analysis, and data collection and analysis.
- D. Workers who perform non-intrusive predictive maintenance or other data collection on risk significant SSCs are not covered workers as long as they are not operating or maintaining the SSC as part of the predictive maintenance activity.

4.1.2 (continued)

- E. Activities supporting covered maintenance and operations functions must be evaluated separately to determine if they are covered work per Attachment 1. Examples of supporting activities that are not considered to be covered work include the following:
- Scaffold erection and removal
 - FME monitoring
 - Confined space monitoring
 - Quality inspections
 - Engineering reviews
 - Painting (with the exception of Qualified Coatings)
- F. Supplemental personnel (vendors/contractors) who are not granted unescorted access (i.e., the individual(s) are escorted), but are conducting work on a risk significant system, structure, or component. In such cases, the OPPD person responsible for oversight of the supplemental worker shall ensure that work hour limits are set for the task performed and oversight is provided to ensure performance is not impacted by worker fatigue.
- G. Emergency response personnel who DO NOT perform health physics or chemistry duties required as a member of the onsite Emergency Response Organization minimum shift complement.

4.1.3 Security personnel need not meet the work hour restrictions of 10 CFR 26 Subpart I when informed, in writing by the NRC, that these requirements, or any subset thereof, are waived for security personnel in order to assure the common defense and security, for the duration of the period defined by the NRC.

4.1.4 Emergency response personnel need not meet work hour restriction requirements during declared emergencies, as defined in the FCS Emergency Plan.

4.2 Work Hour Restrictions for **ON-LINE** Periods

4.2.1 FCS adheres to the Online Averaging requirements in 10 CFR 26.205(d)(7). |

4.2.2 When practical, maintain a forty-hour week during normal plant operation. **AVOID** the use of overtime to meet routine operational requirements. If overtime is necessary, the use of overtime shall be considered on an individual basis and not for the entire work group.

4.2.3 Overtime **SHALL** be tested in EmpCenter prior to being worked.

- 4.2.4 The averaging period starts rolling after a work history has been established for a worker equal to the length of the averaging period. This period of establishing a work history is also referred to as a fixed period.
- 4.2.5 The averaging period advances by 7 consecutive calendar days at the finish of every averaging period. This advancing is referred to as rolling.
- 4.2.6 FCS has established that the week begins on Sunday at 0000 and ends the following Sunday at 0000. When an individual's work shift starts on one calendar day and concludes the next calendar day, the hours will be attributed to the calendar days on which the hours are actually worked.

4.2.7 Individuals **SHALL NOT**:

- Work more than 16 hours in any rolling 24 hour period
- Work more than 26 hours in any rolling 48 hour period
- Work more than 72 hours in any rolling 7 day period

AND

Individuals **SHALL** have a continuous 10 hour break between successive work periods. For exceptions, see note in Section 4.7.

AND

Individuals **SHALL** have a continuous 34 hour break in any rolling nine-day period.

- 4.2.8 In addition to the limits established above, individuals **SHALL NOT** work more than a weekly average of 54 hours, calculated using an averaging period of up to six (6) weeks, which advances by 7 consecutive calendar days at the finish of every averaging period.

4.3 Work Hour Restrictions for **OUTAGE** Periods

- 4.3.1 When entering an unplanned outage, unplanned security system outage, or increased threat condition, individuals will be considered to be in compliance with this standing order if the schedule for the shift cycle would have met the 54 hour calculated averaging period in 10 CFR 26.205(d)(7).
- 4.3.2 For security personnel, during the first 60 days of an unplanned security system outage or increased threat condition, the MDO requirements do not apply.

i	NOTE	i
	The 60-day period may be extended for an individual in seven-day increments for each non-overlapping seven-day period in which the individual has worked not more than 48 hours during the unit or security system outage or increased threat conditions as applicable.	

- 4.3.3 An outage is defined as the time period when the unit is disconnected from the electrical grid up to a period of 60 days.
- 4.3.4 Security personnel MDO requirements are considered more conservative than Operations personnel MDO requirements which, in turn, are considered more conservative than Maintenance personnel MDO requirements. When an individual may be performing multiple functions, they should be assigned to the most conservative MDO requirement and not attempt to change back and forth between MDO requirements.
- 4.3.5 During an outage, individuals **SHALL NOT**:
- Work more than 16 hours in any rolling 24 hour period.
 - Work more than 26 hours in any rolling 48 hour period.
 - Work more than 72 hours in any rolling 7 day period.

AND

Individuals **SHALL** have a continuous 10 hour break between successive work periods. For exceptions, see not in Section 4.7.

AND

Individuals **SHALL** have a continuous 34 hour break in any rolling nine-day period.

i	NOTE	i
For the purposes of calculating OUTAGE MDO requirements, the 15 day periods are fixed and not rolling.		

4.3.6 In addition to the work hour limits, an individual worker **SHALL** meet the Minimum Day Off (MDO) requirements as listed in the table below.

OUTAGE Minimum Days Off (MDO) Requirements			
Group	8 Hour Shifts	10 Hour Shifts	12 Hour Shifts
Maintenance	1 day/week	1 day/week	1 day/week
Operations, RP, Chemistry	3 days off in each 15 day period	3 days off in each 15 day period	3 days off in each 15 day period
Security	4 days off in each 15 day period	4 days off in each 15 day period	4 days off in each 15 day period

4.4 Calculating Work Hours

4.4.1 Work hours for covered workers **SHALL** be calculated based on the amount of time the individual is performing duties for OPPD while the individual is authorized unescorted access at Fort Calhoun Station.



4.4.2 Work periods of less than one week, typically applicable to short term supplemental personnel, are insufficient to calculate the work hour average. Application of other portions of this standing order are sufficient to ensure well rested workers in those cases.

4.4.3 The calculated work hours **SHALL** include all time spent performing duties for OPPD, including performing covered and non-covered work, all within-shift break times, meal breaks, and rest periods during which there are no reasonable opportunities or accommodations appropriate for restorative sleep.



4.4.4 Work hours include:

- A. Holding over at end of shift to cover for late arrival of incoming shift members.
- B. Early arrival or holding over by individuals for required meetings, training, or pre-shift briefings for special evolutions. These activities are **NOT** considered shift turnover activities.
- C. Holding over or early arrival for interviews needed for event investigations or other required OPPD business.

4.4.4 (continued)

	<u>CAUTION</u>	
	A call-out before a worker has been provided a full 10-hour break may result in not meeting the 16 hours in 24 hour period requirement.	

- D. For call-out work periods, the time between leaving the station and the call-out work period is also included if the worker was not provided a full 10 hour break.
- E. Hours worked during turnovers between individuals within a shift period due to rotations or relief within a shift.

	<u>NOTE</u>	
	Off-site work hours for OPPD, such as business trips or vendor visits, off-site training, and company required professional development, although not covered work, SHALL be considered as worked hours. Personal time away from work, at the employee's choice, to study training materials or to attend meetings, seminars, or training is not considered work hours.	

- F. Hours worked off-site at the specific direction of an individual's supervisor are considered worked hours and **SHALL** be reported to the supervisor upon returning on-site.
- G. Hours worked on-site at the discretion of the individual **SHALL** be considered work hours (e.g., time spent by a maintenance supervisor who comes to work on a weekend to "catch up" on work activities).

4.4.5 It is the individual's responsibility to be aware of work hour restrictions and accurately report all hours worked. Time spent in shift turnovers **MAY** be excluded from the calculation of an individual's work hours. Shift turnover includes only those activities that are necessary to safely transfer information and responsibilities between two or more individuals between shifts. Shift turnover activities may include, but are not limited to, discussions of the status of plant equipment and the status of ongoing activities, such as extended tests of safety systems and components.

4.4.6 Time spent on a break or rest period **MAY** be excluded from the calculation of an individual's work hours if there is a reasonable opportunity and accommodations for restorative sleep (e.g., a nap).

- 4.4.7 If an individual begins or resumes performing covered work during the calculation period, all work hours worked for OPPD, including hours worked performing duties that are not considered covered work, **SHALL** be included in the calculation of hours worked.
- 4.4.8 Time spent participating in the actual conduct of an **UNANNOUNCED** emergency preparedness exercise or drill **MAY** be excluded from the calculation of an individual's work hours.
- 4.4.9 Time spent performing unscheduled work off site (e.g., technical assistance provided by telephone from an individual's home) **MAY** be excluded from calculation of an individual's work hours provided the total duration of the work does not exceed a nominal 30 minutes during any single break period. For the purposes of compliance with the minimum break requirements and the minimum day off requirements, such duties do not constitute work periods or work shifts.
- 4.4.10 Shifts worked by security personnel during the actual conduct of force-on-force tactical exercises evaluated by the NRC **MAY** be excluded from calculation of hours worked. Only those hours worked in excess of 54 during the week of the exercise may be excluded.

4.5 Directing Work

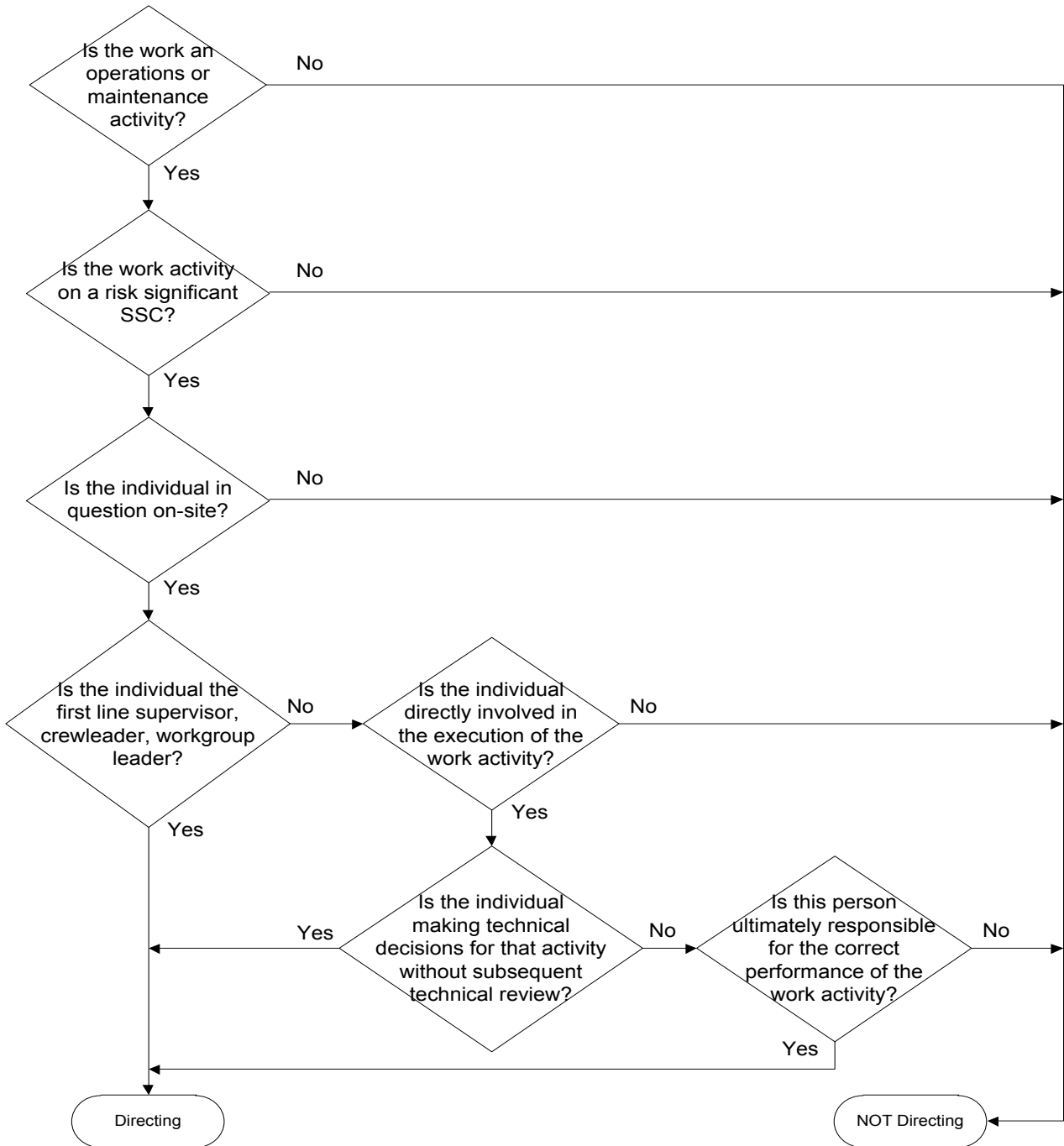
- 4.5.1 For the purpose of compliance with this standing order, directing **ONLY** applies to Operations and Maintenance activities. Directing is defined as the exercise of control over a work activity by an individual who is directly involved in the execution of the work activity, and either makes technical decisions for that activity without subsequent technical review, or is ultimately responsible for the correct performance of that work activity.
- 4.5.2 Individuals who provide specific communication to a front-line covered operations or maintenance worker without review by cognizant line supervision concerning **WHAT** the worker should do, **HOW** the worker should do it, or **WHEN** the worker should perform the task are considered to be directing work.

4.5.3 Considerations should include all of the following when determining if an individual is directing an operation or maintenance activity:

- Is the individual on-site?
- Is the individual the first-line supervisor, crewleader, or designated workgroup leader?
- Is the individual directly involved in the execution of the work activity?
- Is the individual making technical decisions for that activity without subsequent technical review?
- Is the individual ultimately responsible for the correct performance of the work activity?

The figure below provides guidance on determining if the activity is directing or not directing.

Figure 1 - Determination of Directing Work



4.5.4 The following tasks are specific examples that are **NOT** considered directing work:

A. Engineering tasks:

1. Providing technical data including setpoints, dimensions, reference values, or other information available in approved documents.
2. Sign-off on engineering hold points.
3. Data gathering and analysis.

B. Supervision at the superintendent or manager level (2nd level or higher).

C. Conducting work control documentation activities.

D. Writing a work procedure.

E. Preparing a Maintenance Work Order or Construction Work Order.

F. Management review of work plans.

G. Training of personnel during which time the trainee is not operating plant equipment or performing maintenance activities.

H. Vendors and engineers providing recommendations on test performance, component and system operation, or other similar technical inputs.

I. Review and approval of documents.

4.6 Work Hour Scheduling

4.6.1 When establishing work schedules, the following criteria **SHALL** be considered and applied in a manner consistent with the performance objective of preventing impairment from fatigue due to the duration, frequency, or sequencing of successive shifts:

A. Duration of scheduled work period.

B. Duration of break periods.

C. Consistent start times for work periods.

D. Start times consistent with circadian factors.

E. Consistent stop times for work periods.

4.6.1 (continued)

- F. Consistent rotation from days to nights.
- G. Stable 24-hour rotation.
- H. Impact of backward shift rotation.
- I. Rotating schedules provide suitable transition between shifts.
- J. Long range predictability is a key aspect of fatigue mitigation.
- K. Circadian factors - fixed versus rotating shifts.
- L. Training requirements.
- M. Vacation scheduling.
- N. Impact of unscheduled overtime.

4.6.2 The averaging period over which compliance with online averaging requirements is determined may be as short as one full week and as long as six weeks and can vary to address certain transitions such as into and out of outages. There is no direct relationship between the physical rotation cycle and the length of the averaging period.

4.6.3 Periodically, workers and supervisors may need to work unscheduled hours to meet station needs. These unscheduled hours **MAY** be worked provided the individual meets all work hour restrictions for time at work, minimum break periods, and online averaging.



4.6.4 Short term contractor shift cycles should be developed considering the length of time the contractor is anticipated to be performing covered work, recognizing the scope of work may be completed early or the contractor could leave on their own accord. As long as the individual has not exceeded an average of 54 hours per full week before they depart site, compliance with 10 CFR 26 Subpart I is maintained.



4.7 Transitioning Between Shift Schedules

i	<u>NOTE</u>	i
	<p>1. Covered workers must comply with all work hour restrictions and break requirements regardless of the transition situation. Guidance for transitions ensures that the covered worker does not exceed average of 54 hours per week during the number of full weeks worked to ensure they remain well rested.</p> <p>2. When transitioning between schedules, it is acceptable to only provide an 8 hour break between shifts. This is only permissible for changing to a new schedule and is not permissible for a transition from days to nights on a regular schedule.</p>	

- 4.7.1 A transition into or between shift schedules can result in personnel not receiving sufficient days off to assure worker fatigue does not occur. To assure covered workers are not fatigued during shift schedule transitions, one of the following methods **SHALL** be implemented:
- A. Calculate the average duration of the shifts worked and to be worked over the cycle period (not to exceed 6 weeks), which includes the transition, and determine the minimum days off requirement based on table in Step 4.3.6.
 - B. The responsible supervisor may transition individuals or crews between shift schedules by ending a shift cycle and starting a new shift cycle with a different shift schedule.
- 4.7.2 For shift cycles that are terminated, ensure the individuals meet the MDO requirements applicable to the shift schedule that the individuals were working before it was terminated.

4.8 Transitioning from Uncovered Work to Covered Work

	<u>NOTE</u>	
There are no work hour restrictions when transitioning from covered work to uncovered work.		

	<u>CAUTION</u>	
Careful consideration must be given when transitioning workers between uncovered work and covered work to ensure that MDO requirements are met.		

- 4.8.1 A worker transitioning from uncovered work to covered work must meet all requirements for a covered worker prior to performing covered work. This transition guidance would apply in situations such as:
- Initial assignment as a covered worker
 - Returning to a covered worker status after being temporarily assigned as a non-covered worker
 - Transitioning from a covered group with one set of MDO requirements to a covered group with different MDO requirements
- 4.8.2 A minimum of 1 day off in the preceding 7 day period is required for individuals to begin or resume covered duties who have been working an 8 hour shift schedule, as either day or shift workers, and are transitioning from a non-covered group to a covered group, or (during outages) from a covered group to another covered group that has more stringent MDO requirements.
- 4.8.3 A minimum of 2 days off in the preceding 7 day period is required for individuals who have been working a 10 hour or 12 hour shift schedule, as either day or shift workers, and transition from a non-covered group to a covered group, or (during outages) from a covered group to another covered group with more stringent MDO requirements.
- 4.8.4 A forward look **SHALL** be performed to ensure working hours and online averaging requirements will be met for the covered work group entered.
- 4.8.5 If supplemental personnel commence covered work (either due to assigned work scope or receiving Protected Area access), the transition rules of this standing order **SHALL** apply.
- 4.8.6 If supplemental workers have not had sufficient work history at Fort Calhoun Station to verify specific work hour requirements are met, then Fort Calhoun Station **SHALL** determine through dialogue with the worker that the individual has received adequate rest.

4.9 Transitioning To a Plant Outage, Security System Outage, or Increased Threat Condition

4.9.1 When transitioning to an unplanned outage, unplanned security system outage, or increased threat conditions, workers will be considered to be in compliance with work hour restrictions if the schedule would have met the 54 hour calculated averaging period in 10 CFR 26.205(d)(7).

4.9.2 When entering or exiting a planned outage (breaker opened/breaker closed) or planned security system outage, the following options for managing the transition can be used.

- Using averaging periods six weeks or less in length
- Changing the shift duration
- Using a rolling averaging period (maximum of six weeks)
- A new averaging period can be used at the completion of an outage

4.9.3 Closure of the output breakers can create schedule transition issues coming out of the outage. Individuals and supervisors **SHALL** ensure work hour restrictions are not exceeded, especially work hour restrictions for on-line, as soon as output breakers are closed (on-line limits are more restrictive than outage limits).

4.10 Call-Out Work Periods

4.10.1 A call-out is considered an addition to the normal work schedule. The work hours can be accounted for using three different methods depending on timing and circumstances of the call-out work period.

4.10.2 The call-out hours can be considered a separate work period. Using this method, only the hours worked at FCS will be counted. The method requires a 10-hour break before the call-out period and after the call-out period.

4.10.3 The call-out hours can be considered an extension to the preceding or succeeding work period. Using this method, the intervening hours between the normal work period and the call-out work period must be counted as hours worked.

4.10.4 A Waiver can be processed for the required 10 hour break between successive work periods. When using this method, the duration of the insufficient break does not count as work hours.

4.11 Daylight Savings Time

4.11.1 When working during the change from standard time to daylight savings time, the shift being worked during the time change may be counted as a 7 hour, 9 hour, or 11 hour shift.

- 4.11.2 When working during the change from daylight savings time to standard time, the shift being worked during the time change may be counted as an 8 hour, 10 hour, or 12 hour day (i.e., the additional hour does not have to be included in the work hour calculations).
- 4.11.3 A 10 hour break is still required even when the available break period is shortened by time changes.

4.12 Reset From Deviations

- 4.12.1 Deviations from the requirements of this standing order may occur as the result of administrative errors or unforeseen circumstances and may constitute violations of 10 CFR 26 Subpart I requirements.
- 4.12.2 A person is considered "reset" from a deviation, whether under a Waiver or otherwise, when they meet all of the work hour restrictions. This includes all of the following:
 - A. 16 hours in a 24 hour period and 26 hours in a 48 hour period and 72 hours in a 7 day period,
 - B. Have had at least 10 hours off since they were last at work,
 - C. Have had at least 34 hours off in last 9 days, **AND**
 - D. Actions are in place to ensure they will meet the maximum average work hour alternative during on-line or minimum days off requirements during outage.
- 4.12.3 A Condition Report **SHALL** be initiated to document all deviations from the requirements of this standing order and/or violations of 10 CFR 26 Subpart I.

4.13 Waivers

4.13.1 Waivers are considered appropriate if required to mitigate a Condition Adverse To Safety. If compliance with work hour controls would result in the following type conditions, it would be appropriate to consider using the waiver process.

i	<u>NOTE</u>	i
	The conditions in this list may not always be adequate justification for a waiver nor is this list considered all inclusive of the conditions that could require a waiver.	

- A. Compliance with the work hour controls would violate other NRC requirements, such as minimum on-site staffing.
- B. Compliance with the work hour controls would delay recovery of failed plant equipment necessary for maintaining safe operation.
- C. Compliance with the work hour controls would cause a forced reactor shutdown, power reduction, or other similar action as a result of exceeding a time limit for a Technical Specification Limiting Condition for Operations.
- D. Compliance with the work hour controls would result in an increase in Core Damage Frequency of greater than 1.0E-6.

4.13.2 For Covered Workers, all hours worked must be included as hours accumulated toward the work hour limits specified in this standing order. Work activities on both risk-significant and non-risk significant systems, structures, and components contribute toward personnel fatigue. Therefore, all work hours are considered in the accumulated time related to work hour limitations and regarding the need for a Waiver.

4.13.3 If the work to be performed is not Covered Work, station management may elect to remove the worker from the covered worker population, work the tasks in question and then return the worker back to covered worker status. Prior to returning the individual to covered worker status, the individual is required to have met all work hour restrictions for current shift cycle.

4.13.4 The intent of the waiver process is to address circumstances that could not have been reasonably controlled by the station. Waivers shall not be utilized to support routine operational requirements.

- 4.13.5 In order to approve a Waiver, one of the following requirements **SHALL** be met:
- A. An Operations Shift Manager determines that the Waiver is necessary to mitigate or prevent a Condition Adverse to Safety.

OR

- B. A Security Shift Supervisor, or in their absence, a Shift Lieutenant determines that a Waiver is necessary to maintain site security.

OR

- C. The Plant Manager makes either of the preceding determinations.

4.13.6 Waivers **SHALL** be completed on an individual basis. There is no provision for implementing group Waivers.

4.13.7 Supervisory assessments for Waivers **SHALL** be completed by a cognizant and qualified work group supervisor.

i	<u>NOTE</u>	i
	When documenting a condition adverse to safety or site security requiring resolution, do NOT include safeguards information (SGI).	

4.13.8 A Condition Report **SHALL** be initiated to document each Waiver and the associated assessments and approvals.

4.13.9 Each Waiver **SHALL** be reviewed individually for appropriateness. Waivers **SHALL** also be reviewed collectively in accordance with FFD-100, during annual reporting, to ensure the health of the station's fatigue management program.

4.13.10 Approval of a waiver request **SHALL** be obtained **PRIOR** to exceeding work hour restrictions.

4.13.11 Waivers are **NOT** required for the following:

- A. For the purposes of compliance with the online averaging alternative, shifts worked by security personnel during the actual conduct of force-on-force tactical exercises evaluated by the NRC may be excluded when calculating the individual's maximum average work hours. Only those hours in excess of 54 during the week of exercise may be excluded.
- B. OPPD need not meet the work hour requirements when informed, in writing by the NRC, that these requirements, or any subset thereof, are waived for security personnel in order to assure the common defense and security, for the duration of the period defined by the NRC.
- C. OPPD need not meet work hour scheduling and work hour control requirements during declared emergencies, as defined in the FCS Emergency Plan.

4.14 Waiver Processing

i	NOTE	i
	<p>If an individual is performing or being assessed for work under a Waiver and declares that, due to fatigue, he or she is unable to safely and competently perform his or her duties, then refer to FFD-100, Appendix A.</p>	

- 4.14.1 The work group supervisor **SHALL** complete Section 1, of Form FC-70.
- 4.14.2 The Operations Shift Manager, Security Shift Supervisor, or in their absence, a Shift Lieutenant, Plant Manager, or Site Vice President **SHALL** document the condition adverse to safety or site security that requires resolution by completing Section 2 of Form FC-70.
- 4.14.3 If the condition is determined to **NOT** be a condition adverse to safety or site security, then the waiver is not appropriate and the work hour restrictions **SHALL NOT** be exceeded.
- 4.14.4 Once the request for a waiver is approved, the cognizant work group supervisor **SHALL** perform a face-to-face fatigue assessment in accordance with FFD-100 on the individual and determine if there is a reasonable assurance that the individual will be able to safely and competently perform assigned duties during the additional work period for which the Waiver will be granted.
- 4.14.5 The supervisor performing the fatigue assessment shall be qualified to perform a fatigue assessment and shall be the person responsible for directing the work function, except as modified in Step 4.14.6.

- 4.14.6 If there is no supervisor on site who is qualified to direct the work, the assessment may be performed by a qualified fatigue assessor. The assessor, if knowledgeable of the work activity, can be a second level Supervisor or a Manager/Superintendent in the chain of command. If no one is available that meets the above criteria, then the waiver process **SHALL** be exited.
- 4.14.7 The cognizant supervisor **SHALL** initiate a Condition Report to document the waiver in accordance with standing order SO-R-2 and forward completed FC-70 form to the Fitness For Duty Specialist.
- 4.14.8 Waivers **SHALL** be entered into EmpCenter within 72 hours of waiver period.

5.0 REFERENCES AND COMMITMENTS

- 5.1 10 CFR 26 Subpart I, Managing Fatigue
- 5.2 Technical Specification Section 5.0, Administrative Controls
- 5.3 Updated Safety Analysis Report, Section 12.1.5, Plant Staff Working Hours
- 5.4 FFD-100, Appendix A, Managing Fatigue
- 5.5 Regulatory Guidance 5.73, Fatigue Management for Nuclear Power Plant Personnel
- 5.6 NEI-06-11, Rev 1 Addendum June 2011, Managing Personnel Fatigue at Nuclear Power Reactor Sites (with Addendum)
- 5.7 PED-SEI-34, Maintenance Rule Program
- 5.8 PED-SEI-46, Functional Equipment Group (FEG) and Functional Importance Determination (FID) Process
- 5.9 Form FC-70, Work Hour Limit Waiver Request Form
- 5.10 Form FC-1418, Schedule Change Request Form
- 5.11 Form FC-1419, Covered Status Change Request
- 5.12 Form FC-1420, Short-Term Non-Cover Request

6.0 ATTACHMENTS

- 6.1 Attachment 1 - Covered Work Determination

Attachment 1 - Covered Work Determination

10 CFR 26 Subpart I applies when workers with unescorted access perform maintenance or operations activities on structures, systems, or components (SSCs) which have been determined to be risk significant. For purposes of 10 CFR 26 Subpart I, risk significant is related to public health and safety and not to plant generation risk. Activities which are not directly related to maintenance or operation of SSCs are not covered work under 10 CFR 26 Subpart I.

Support activities which support maintenance or operation tasks are not covered work under 10 CFR 26 Subpart I. Support activities are tasks performed to enable maintenance or operation tasks but are not physically maintenance or operation of an SSC. The following are examples of support activities that are NOT considered to be covered work:

- Nuclear Oversight activities
- Non-destructive examinations
- Radiation Protection coverage
- Decontamination activities
- Material handling, storage, and disposal, including Warehouse activities
- Crane operation not directly related to covered component maintenance
- Tool control activities
- Metrology support not involving calibration of M&TE
- Housekeeping activities
- Foreign Material Exclusion support activities (i.e., FME Monitor)
- Fire Watch (continuous or roving)
- Confined space monitoring
- Scaffolding erection and removal
- Application of structural and architectural coatings outside containment
- Temporary power and lighting installation and removal
- Mobilization and de-mobilization of tools and equipment
- Installation and removal of temporary facilities
- Work control activities

Attachment 1 - Covered Work Determination

1.0 DETERMINATION

1.1 There are some systems which contain no components which are risk significant as it pertains to 10 CFR 26 Subpart I. Maintenance or operations on the following systems are not required to be controlled under work hour restrictions:

Table 1 - Excluded Plant Systems

1	AG	ACETYLENE GAS
2	AI-RR	REACTOR REG
3	AR	ARGON GAS
4	AS	AUXILIARY STEAM
5	AS-AB	AUX BOILER
6	AS-AUX	AUX BUILDING AUX STEAM
7	BC	BUILDING CONTROLS
8	BP	BLOWPIPE SYSTEM
9	CA	COMPRESSED AIR
10	CA-PA	SERVICE AIR
11	CF	CHEMICAL FEED
12	CG	CARBON DIOXIDE GAS
13	CM	COMMUNICATIONS
14	CN	COMMUNICATION (GAI-TRONICS)
15	DG-PS	SECURITY DIESEL
16	DW	DEMINERALIZED WATER SYSTEM
17	EE-6	120/208 MISC POWER LIGHTING
18	EE-6A	277/480 MISC POWER LIGHTING
19	EE-BL	EMERGENCY LIGHTING
20	EM	ELECTRICAL POWER MEASUREMENT
21	EW	EARLY WARNING
22	FO-PS	SECURITY DIESEL FUEL OIL
23	FP-FD	FIRE DETECTION
24	FP-SEC	FIRE PROTECTION - SECURITY BUILDING
25	FP-WH	FIRE PROTECTION - WAREHOUSE
26	FW-BD	STEAM GENERATOR BLOWDOWN
27	FW-CE	CONDENSER EVACUATION
28	FW-HVD	HEATER VENTS & DRAINS
29	HE	HOISTING EQUIPMENT
30	HG	HYDROGEN GAS
31	LG	LABORATORY GAS

Attachment 1 - Covered Work Determination

Table 1 - Excluded Plant Systems

32	LG-VM	LABORATORY GAS - VACUUM
33	LO-SO	SEAL OIL
34	ME	METEOROLOGICAL DATA AQUITION
35	MM	METEOROLOGICAL MONITORING
36	NO	NITROUS OXIDE GAS
37	OX	OXYGEN GAS
38	PC	PLANT COMPUTER
39	PC-CDS	CONTROL AND DATA SYSTEM
40	PC-DCS	DISTRIBUTED CONTROL SYSTEM
41	PC-ERF	EMERGENCY RESPONSE FACILITY CO
42	PC-PDN	PLANT DATA NETWORK
43	PG	PORTAL MONITOR GAS
44	PR	PROPANE GAS
45	PS	PLANT SECURITY
46	PW	POTABLE WATER
47	SD	SANITARY & STORM DRAINS
48	SL	SAMPLING
49	SL-DW	DEMINERALIZED WATER SAMPLING
50	SL-PAS	POST ACCIDENT SAMPLING
51	SL-PRI	PRIMARY SAMPLING
52	SL-SEC	SECONDARY SAMPLING
53	ST	TURBINE GENERATOR
54	ST-SCW	MAIN GENERATOR STATOR COOLNG
55	SW	SERVICE WATER
56	TM	TOXIC GAS MONITORING
57	TS	TURBINE SUPERVISORY
58	TS-EHC	ELECTRO HYDRAULIC CONTROL
59	VA-CRP	CHEM/RP BLDG VENTILATION
60	VA-INT	INTAKE STRUCTURE VENTILATION
61	VA-RWP	RAD WASTE BLDG VENTILATION
62	VA-SEC	SECURITY BUILDING VENTILATION
63	VA-TB	TURBINE BUILDING VENTILATION
64	VA-TSC	TECH SUPPORT CENTER VENTILATION
65	VA-WH	WAREHOUSE HVAC
66	VD	VENTS & DRAINS
67	VD-SMP	SUMP PUMP

Attachment 1 - Covered Work Determination

Table 1 - Excluded Plant Systems

68	VD-VP	VACUUM PRIMING
69	VM	VIBRATION MONITORING
70	WD	WASTE DISPOSAL
71	WD-G	WASTE DISPOSAL GASEOUS
72	WD-L	WASTE DISPOSAL LIQUID
73	WD-S	SOLID WASTE DISPOSAL
74		STATION SWITCHYARD

- 1.2 Maintenance and operations of permanent plant equipment by personnel with unescorted access **SHALL** be considered to be covered work unless it has been determined to not fall under the requirements of 10 CFR 26 Subpart I. The following process **SHALL** be used to determine if structures, systems, or components which are not excluded as a support activity or under the plant system exclusions in Table 1, of this attachment, can be excluded from the scope of work hour restrictions.
- 1.3 If a work activity involves multiple components, then the following process **SHALL** be performed for each component. If any components are determined to be covered, then the entire scope of work **SHALL** be considered covered work.
- 1.3.1 Excavation work activities in close proximity of a safety significant component **SHALL** be considered covered work.
- 1.4 If the component does not have an equipment number, then the closest, functionally related component with an equipment number may be used. If no related tag can be identified, then proceed to Step 1.4.2.
- 1.4.1 Components with an Equipment Number:
- A. Use the Functional Importance Determination (FID) classification in Passport.
 - B. If the FID Nuclear Criticality classification is null (i.e., not given), then proceed to Step 1.4.2.
 - C. If the FID Nuclear Criticality classification is N1, then the activity is covered work.
 - D. If the FID Nuclear Criticality classification is N2 or NN, then the component is **NOT** covered work.

Attachment 1 - Covered Work Determination

- 1.4.2 Components with no FID Classification or Equipment Number:
 - A. Refer to the list of non-risk significant systems found in Table 1.
 - B. If the system associated with the component is on the non-risk significant systems list, then the activity is **NOT** covered work.
 - C. If the system associated with the component is not on the non-risk significant systems list, then proceed to Step 1.4.3.
- 1.4.3 The primary tools for determination of covered work scope are the Functional Importance Determination process in PED-SEI-46 and the Maintenance Rule Risk Significance Determination process in PED-SEI-34. If the work group supervisor is able to determine that the activity is or is not covered work by performing the steps in this Attachment, then no documentation or further action is required. If it can not be readily determined whether the scope of work is covered or not, then the supervisor **SHALL** contact Reliability Engineering to make that determination.
- 1.5 If a covered piece of equipment used in the plant is being worked anywhere on site and will be returned to its location, it is covered work. If it is an entirely new piece of equipment or system, not previously in the plant, it would be non-covered until at its permanent location.

Attachment 1 - Covered Work Determination

Screening Flow Chart

