

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program	Use Category: General Skill Reference		
	Revision: 07	Page: 1 of 25	

ALARA PROGRAM

Effective Date: 11/18/21

Approved:  / 9/14/21
Program Manager Date

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 2 of 25

TABLE OF CONTENTS

	<u>Page</u>
1.0 PURPOSE	3
2.0 SCOPE	3
3.0 DEFINITIONS	3
4.0 PREREQUISITES	3
5.0 PROCEDURE DETAILS	4
5.1 Responsibilities	4
5.2 SAC/SASC General Guidelines	15
5.3 SAC/SASC Orientation Requirements	16
5.4 Site ALARA Committee	17
5.5 Site ALARA Sub-Committee	17
5.6 ALARA Suggestion Program	18
5.7 ALARA Review of New or Existing Plant Designs, Equipment Selection and Procedures	18
5.8 Station Exposure Performance Monitoring	19
6.0 RECORDS	20
7.0 REFERENCES	20
8.0 SCOPE OF REVISION	21

ATTACHMENTS

ATTACHMENT 1	SITE ALARA COMMITTEE AGENDA/MINUTES GUIDELINE	23
ATTACHMENT 2	SITE ALARA SUB-COMMITTEE AGENDA/ MINUTES GUIDELINE	24
ATTACHMENT 3	ACTION ITEM FORMAT GUIDELINE	25

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 3 of 25

1.0 PURPOSE

This procedure establishes the ALARA program management and review.

2.0 SCOPE

The ALARA Program is applicable to all station activities that involve exposure of individuals to ionizing radiation. This procedure provides guidance and requirements for station management and personnel to maintain dose to workers As Low As Reasonably Achievable through management committees, periodic reviews, planning and worker input. This procedure captures the guidance found in Regulatory Guide 8.8, INFORMATION RELEVANT TO ENSURING THAT OCCUPATIONAL RADIATION EXPOSURES AT NUCLEAR POWER STATIONS WILL BE AS LOW AS IS REASONABLY ACHIEVABLE.

3.0 DEFINITIONS

3.1 ALARA – (acronym for “As Low As is Reasonably Achievable”) means making every reasonable effort to maintain exposures to radiation as far below the dose limits as is practical consistent with the purpose for which the licensed activity is undertaken, taking into account the state of technology, the economics of improvements in relation to state of technology, the economics of improvements in relation to benefits to the public health and safety, and other societal and socioeconomic considerations, and in relation to utilization of nuclear energy and licensed material.

3.2 Wrench Time – The actual time working in an area when the worker is in a radiation area accumulating exposure.

3.3 Work Supervisor or Project Manager – Any individual assigned to provide supervisory oversight for any job, task, or work activity.

4.0 PREREQUISITES

None

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 4 of 25

5.0 PROCEDURE DETAILS

5.1 Responsibilities

5.1.1 Site Vice President

1. Ensure the ALARA Program effectively integrates management philosophy with current regulatory requirements and that the program has specific objectives and goals.
2. Delegate the authority and responsibility to implement and maintain a sound program that is capable of achieving station ALARA objectives and goals.
3. Ensure the resources necessary for achieving ALARA objectives and goals. These resources include personnel, equipment, facilities, funding, and training programs.
4. Ensure that an effective system exists to monitor, communicate, and determine the degree of success achieved with respect to the established objectives and goals of the ALARA Program.
5. Ensure that periodic assessments are performed to independently validate that procedures and processes of the ALARA Program are being performed as required to meet established objectives and goals.

5.1.2 General Plant Manager

1. Serve as the Chairman of the Site ALARA Committee (SAC). If the GPM is not available to perform this duty, a Director may be appointed as an Alternate Chairman.
2. Ensure that appropriate resources are assigned to serve on the Site ALARA Committee (SAC) and the Site ALARA Sub-Committee (SASC).
3. Ensure the Radiation Protection Manager has the authority and resources to operate the station ALARA Program.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 5 of 25

5.1.3 Radiation Protection / Chemistry Manager

1. Maintain and implements the station ALARA Program.
2. Serve as member of the SAC.
3. Plan and communicate ALARA Program work activities and initiatives as part of the Radiation Protection Program.
4. Ensure that all station exposure goals (e.g. daily, weekly, monthly, yearly, individual jobs as designated, and outages) are monitored.
5. Provide advice to the Site Leadership Team and SAC as the technical expert in the area of Radiation Protection. To ensure the station is meeting radiation protection standards as required by the technical specifications and federal regulations.
6. Coordinate plant chemistry in a manner that supports sound ALARA principles.
7. Quantitatively sample, analyze, and communicate plant processes for radiological conditions and source term information.
8. Maintain chemistry parameters in a manner that minimizes radiation exposures.
9. At least annually, provide SAC with a status report on Source Term Reduction Program.
10. Develop departmental exposure goals, and if applicable, exposure reduction plans.

5.1.4 Director, Site Engineering

1. Serve as an Alternate Chairman of the SAC.
2. Provide technical support as necessary to ensure that Design Change Packages, Temporary Modifications, Cobalt Reduction Activities, and other plant engineering programs support the ALARA Program.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 6 of 25

3. Ensure the appropriate site engineering staff members are adequately trained to incorporate ALARA principles during day-to-day activities.
4. Promote permanent platform solutions for repetitive, high dose, on-line and outage scaffolding efforts. It is recommended that each outage period have permanent structure fabrication imbedded in the outage schedule.
5. Promote permanent solutions for repetitive, high dose, on-line and outage shielding packages.
6. Develop engineering departmental exposure goals and, if applicable, exposure reduction plans.

5.1.5 Director, Site Performance Improvement

1. Serve as an Alternate Chairman of the SAC.
2. Ensure that site action plans, corrective actions, and performance improvement efforts are consistent with sound ALARA principles.
3. Ensure departmental exposure goals and, if applicable, exposure reduction plans are developed.

5.1.6 Engineering Managers – Design Engineering and Strategic Engineering. |

1. Serve as a member of the SAC.
2. Provide departmental resources to serve on the SASC.
3. Provide departmental resources for input to the ALARA planning process such as, ALARA Plans, WIP's, and pre/post job reviews.
4. Develop engineering departmental exposure goals and, if applicable, exposure reduction plans.

5.1.7 Maintenance and Site Projects Managers |

1. Serve as members of the SAC.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 7 of 25

2. Provide departmental resources for input to the ALARA planning process such as, ALARA Plans, WIP's, and pre/post job reviews.
3. Provide departmental resources to serve on the SASC.
4. Assist ALARA planning with the identification and development of job/task mock-ups for high exposure work.
5. Develop departmental exposure goals and, if applicable, exposure reduction plans

5.1.8 Operations Manager

1. Serve as a member of the SAC.
2. Coordinate the operations of the plant in a manner that supports sound ALARA principles.
3. Monitor system radiological conditions with input from Radiation Protection and Chemistry to ensure the plant is operated in a manner that minimizes exposure.
4. Provide departmental resources for input to the ALARA planning process such as, ALARA Plans, WIP's, and pre/post job reviews.
5. Provide departmental resources to serve on the SASC.
6. Develop operations departmental exposure goals and, if applicable, exposure reduction plans.
7. May act as GPM in his absence.

5.1.9 Manager Nuclear Work Control

1. Serve as member of the SAC.
2. Ensure ALARA concerns and initiatives are incorporated in the planning process for work activities.
3. Ensure that RP support activities and resources required to properly implement the ALARA Program are planned and scheduled.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 8 of 25

4. Provide the SAC and ALARA staff with current planning schedules and timetables.
5. Provide departmental resources to serve on the SASC.
6. Assist with the preparation of exposure goals and ALARA impact related to the forecasts.
7. Develop departmental exposure goals and, if applicable, exposure reduction plans.

5.1.10 Training Manager

1. Serve as member of the SAC.
2. Ensure ALARA concerns and initiatives are incorporated in the appropriate Site Training Programs.
3. Ensure that radiological conditions and sound ALARA principles are incorporated into training activities.
4. Assist ALARA planning with the identification and development of job/task training mock-ups for high exposure work.
5. Provide departmental resources to serve on the SASC.
6. Develop departmental exposure goals and, if applicable, exposure reduction plans.

5.1.11 ALARA Supervisor

1. Serve as a member of SAC.
2. Serve as the SAC Secretary or designate an individual to be the SAC Secretary.
3. Serve as the Chairman of the SASC.
4. Administer the site ALARA Program.
5. Ensure the ALARA Staff complete the required documentation as required by approved procedures and processes.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 9 of 25

6. Provide ALARA preplanning interfacing with work groups for daily, weekly, monthly, and outage work activities.
7. Review ALARA documentation for accuracy, content, and radiological controls to ensure adequate exposure reduction techniques are incorporated.
8. Provide the tracking, trending, and communication of site daily, weekly, monthly, annual, and outage exposure and Personnel Contamination Event (PCE) information through the MAOM and MPR process.
9. Provide SAC with periodic reviews of station, departmental, and RWP exposure performance relative to station goals.
10. Present or coordinate the presentation of required ALARA Plans to the SAC for review and approval.
11. Ensure SAC reviews and approvals are obtained for those ALARA Plans required by NOP-OP-4107, for work activities selected by SAC, or work activities that are believed to require a higher level of scrutiny based on the nature of the work or industry data.
12. Evaluate and recommend ALARA suggestions for review by the SAC.
13. Provide the information and assistance necessary to allow each department to develop exposure goals and exposure reduction plans.
14. Review each department's exposure goals and exposure reduction plans to ensure they are sufficiently challenging and align with station goals.
15. Ensure SAC and SASC meeting minutes are documented, distributed, and archived in electronic files.
16. Maintain the Station 5 Year Exposure Reduction Plan.

5.1.12 Work Supervisor or Project Manager

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 10 of 25

1. Provide detailed work plans (work scope, resource allocation, man-hours, accurate work location, and estimated wrench time) to allow for ALARA Planning to estimate realistic dose estimates and designate adequate radiological controls. Effective ALARA Plans and RWP's cannot be developed until a clear understanding of the specific work activities are defined.
2. Ensure that assigned personnel comply with all ALARA Program Procedures, radiological briefing instructions, and requirements.
3. Present work scope and ALARA plans as necessary, with the assistance of the ALARA Supervisor, for those work activities selected to be presented to SAC.
4. Ensure sound ALARA principles are being practiced in the field by workers performing jobs, tasks, and work activities.
5. Review exposure status of personnel under their supervision.
6. Monitor exposure accumulation of jobs, tasks, or activities being supervised.
7. Provide input to the ALARA planning process such as, ALARA Plans, WIP's, and pre/post job reviews.
8. Monitor in-field performance as it relates to the execution of ALARA Plans and radiation protection practices.

5.1.13 Radiation Protection Personnel

1. Perform the implementation and monitoring of the site ALARA and Radiological Protection Programs as assigned.
2. Provide the required radiological monitoring as specified by the ALARA Plans, Procedures, and Radiation Work Permits (RWP's).
3. Provide information to Radworkers on radiological conditions, travel paths, and low dose waiting areas to ensure ALARA awareness and exposure reduction techniques.
4. Perform coaching as necessary to improve radworker practices in the field.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 11 of 25

5. Initiate Stop Work Orders when unsafe practices are observed, radiological condition changes warrant such an action or when establish limits have been reached or exceeded.
6. Report to Radiation Protection Supervision the existence of conditions, situations, or actions, which are counterproductive to established ALARA goals/estimates.

5.1.14 Site ALARA Committee

1. Meet quarterly, as a minimum.
2. Evaluate and approve the station and departmental annual exposure and PCE goals. Ensure that all goals are adequately challenging to ensure focus on exposure reduction.
3. Perform periodic reviews of station, outage, and departmental exposure and PCE performance relative to site goals. Initiate performance improvement plans to close gaps to excellence.
4. Review selected ALARA Suggestions and recommend applicable suggestions for approval and awards.
5. Review the status of the Source Term Reduction Program, at least annually, as presented by the Chemistry Manager.
6. Review the status of the Station 5 Year Exposure Reduction Plan, at least annually, as presented by the RPM.
7. Review periodically, action items to close gaps to station, departmental, and outage exposure and PCE goals.
8. Review audits and assessments of the ALARA Program.
9. Perform Post-Outage reviews of station exposure performance, success, lessons learned, and areas for improvement.
10. Perform annual reviews of station and departmental exposure performance.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 12 of 25

11. Review and evaluate the radiological significance of work being presented to ensure the activity being proposed is necessary under the proposed operating conditions and is in balance with operational urgency and radiological safety.

NOTE

Exemptions from SAC review and approval are identified in NOP-OP-4107.

12. Per the requirements of NOP-OP-4107 evaluate and approve the appropriate Micro ALARA and ALARA Plans for the following:
 - On-Line tasks/jobs with exposure estimates of equal to or greater than 500 person-mrem for Beaver Valley and Davis Besse.
 - On-Line task/jobs with exposure estimates of equal to or greater than 1,000 person-mrem for Perry.
 - Other on-line tasks/jobs as identified by the RPM requiring a higher level of review based on the nature of the work or industry data.
 - Outages projects with tasks/jobs equal to or greater than 5,000 person-mrem.

NOTE

Due to urgency, SAC may choose to review work activities at a lower exposure level than indicated in this procedure, However, this does not routinely eliminate the need for the SASC to perform their assigned activities.

5.1.15 Site ALARA Sub-Committee

1. Meet quarterly as a minimum.
2. Perform periodic reviews of station, outage, and departmental exposure and PCE performance relative to site goals.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 13 of 25

3. Review selected ALARA Suggestions and recommend applicable suggestions for approval.
4. Propose actions to close gaps to station, departmental, and outage exposure and PCE goals.
5. Engage in and encourage development and implementation of dose reduction measures for jobs that meet criteria of this procedure.
6. Per the requirements of NOP-OP-4107 evaluate and approve the appropriate Micro ALARA and ALARA Plans for the following:
 - On-Line tasks/jobs with exposure estimates of equal to or greater than 100 person-mrem to less than 500 person-mrem for Beaver Valley and Davis Besse.
 - On-Line task/jobs with exposure estimates of equal to or greater than 500 person-mrem to less than 1,000 person-mrem for Perry.
 - Other on-line tasks/jobs as identified by the ALARA Supervisor requiring a higher level of review based on the nature of the work or industry data.
 - Outages projects with tasks/jobs equal to or greater than 2,000 person-mrem to less than 5,000 person-mrem.
 - Evaluate work being proposed with respect to expected plant operating conditions and provide recommendations to how the proposed work could be delayed, or operational conditions changed to reduce dose rates in the affected area.
 - Understand the work activities impact on station Collective Radiation Exposure (CRE).
 - Support ALARA to ensure radiological risk and dose exposure is minimized.
 - Make recommendations to the SAC.

5.1.16 Radiation Workers

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 14 of 25

1. Responsibilities include the following:

- Be cognizant of their current whole-body dose and exposure limits.
- Comply fully with the instructions of radiation protection personnel in all matters pertaining to radiation protection, contamination control, and ALARA principles.
- Comply with good radiological work practices and operating procedures, ALARA principles, warning signs, and barriers that concern radiation/contamination control.
- Be cognizant of the current radiological conditions at their job site. Using the special tools and methods available to reduce radiation exposure as specified by the RWP or procedure.
- Discuss exposure reduction ideas with Radiation Protection and supervisory personnel, and submitting ALARA Suggestions, if appropriate.
- Participate in pre-planning of work to be done in radiation areas and post job reviews, as requested.

5.1.17 Section ALARA Sub-Committee members

1. Responsibilities include the following:

- Represent departments at ALARA Sub-Committee by providing work activity details such as resource allocations, work site hands on person-hours (wrench time), work effort category (light – Medium – Heavy), and general area support activities (distance from source information).
- Provide detailed work plans to allow for ALARA Planning to designate adequate radiological controls.
- Communicate any changes to work scope as-soon-as possible to ALARA staff.
- Minimize the potential for unnecessary exposure due to poor communications or lack of proper planning/scheduling.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 15 of 25

- Inform Radiation Protection of upcoming tasks that may involve potentially significant radiation exposure, so that proper attention may be given to radiation protection preplanning.
- Participate and assist in conducting reviews and briefing for ALARA purposes.
- Trend individual section exposure and the groups collective exposure, keeping section management informed such that exposures may be balanced throughout their respective work groups.

5.2 SAC / SASC General Guidelines

- 5.2.1 Meeting agendas and minutes shall be created for every SAC / SASC meeting.
- 5.2.2 Meeting agendas should be distributed to SAC / SASC committee members prior to scheduled committee meetings.
- 5.2.3 Quorum / Members may be represented by Alternates. The chairperson shall determine if over-representation of quorum members by alternates will negatively impact the effectiveness of the meeting.
- 5.2.4 The chairperson shall confirm quorum is met and document in the meeting minutes.
- 5.2.5 IF sufficient quorum is not met, as determined by the committee chair, THEN the committee secretary shall initiate a Condition Report (CR) AND reschedule the meeting.
- 5.2.6 The SAC / SASC chairman shall have the previous meeting minutes reviewed and dispositioned as Approved or Approved with Comments.
- 5.2.7 The SAC / SASC secretary shall document the disposition of the previous meeting minutes in the current meeting minutes.
- 5.2.8 The SAC / SASC secretary should draft and distribute meeting minutes for review in a timely manner.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 16 of 25

- 5.2.9 The SAC / SASC secretary shall maintain agendas and approved meeting minutes in electronic storage.
- 5.2.10 Special ALARA committee meetings may be convened at the discretion of the SAC / SASC chairperson to address specific need of the program. Quorum requirements are at the discretion of the SAC / SASC chairperson.
- 5.2.11 A majority vote is required to pass or dismiss agenda items.
- 5.2.12 The SAC / SASC chairperson may cast the deciding vote if the committee cannot obtain a majority vote.
- 5.2.13 During emergent situations, the SAC chairperson may appoint a subcommittee consisting of a chairman and no less than two voting members, one of which one must be RP, to speak for the entire committee. The full committee, as part of the next regular meeting, will conduct a review and critique of any work approved by the subcommittee.
- 5.2.14 The RPM has professional "Veto" authority for those activities deemed radiologically unsafe to ensure that perceived time pressure for scheduled work, emergent activities, or operational conditions do not circumvent appropriate radiological planning or situational analysis for radiation safety precautions.

5.3 SAC / SASC Orientation Requirements

- 5.3.1 The principles of ALARA are incorporated into the General Employee Training Program and are supplemented with pre-job briefings on job specific ALARA techniques and methods, as applicable.
- 5.3.2 SAC and SASC members meeting quorum duties should review the following documents:
- Reg. Guide 8.8,
Reg. Guide 8.10,
NOP-OP-4005,
Occupational Radiation Safety Significant Determination Process (SDP),
IMC 0609, Appendix C.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 17 of 25

5.4 Site ALARA Committee

5.4.1 The SAC consists of the following voting members/designees:

- Director, Site Engineering
- Director, Site Performance Improvement
- General Plant Manager
- Radiation Protection / Chemistry Manager
- Operations Manager
- Maintenance Manager
- Design Engineering Manager
- Strategic Engineering Manager
- Manager Nuclear Work Control
- Sites Projects Manager
- Training Manager
- ALARA Supervisor and Secretary
- Other members as approved by the SAC

5.4.2 A Quorum of the SAC consists of the following:

- Chairman, or alternate as assigned and,
- Four voting members, with representation from Operations, Maintenance, and Radiation Protection; of which, no more than two are allowed to be alternates. (Three during outages)

5.4.3 The SAC provides oversight and direction to the station SASC as follows:

- The SAC reviews and approves SASC membership to ensure a well-rounded mixture of experienced craft and craft supervision/superintendents are represented on the committee.
- The expectation is to drive accountability for station dose to the craft level with an appropriate amount of supervisory/superintendent leadership.

5.5 Site ALARA Sub-Committee

5.5.1 The SASC consists of the following voting members/designees:

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 18 of 25

- ALARA Supervisor
- Chemistry
- Design Engineering
- Strategic Engineering
- Electrical Maintenance
- FIN Team
- I&C Maintenance
- Nuclear Maintenance Support
- Mechanical Maintenance
- Operations
- Nuclear Work Control
- Radiation Protection
- Safety
- Site Projects
- Training
- Others as recommended by the SASC and approved by the SAC.

5.5.2 Each member section shall designate at least one alternate.

5.5.3 The SASC meetings are scheduled by the chairman as required to address the work activities that match the exposure criteria identified in this procedure.

5.5.4 The Quorum of the SASC consists of the following:

- Chairman, or alternate as assigned and,
- Six voting members, with representation from Operations, Maintenance, and Radiation Protection; of which, no more than three are allowed to be alternates. (Four during outages)

5.6 ALARA Suggestion Program

5.6.1 The ALARA Suggestion Program is described in NOBP-OP-4005.

5.7 ALARA Review of New or Existing Plant Designs, Equipment Selection and Procedures

5.7.1 Existing station systems, components, work areas and procedures are evaluated for compliance per Regulatory Guide 8.8. The review considers the following:

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 19 of 25

- Systems or components contributing to large accumulation of dose during on-line operations, maintenance, or surveillance.
- Potential solutions to reducing the dose:
 - Shielding
 - Abrasive or Chemical decontamination
 - Replacement of materials
 - Relocation or re-routing equipment in cases where the equipment is not the source but its proximity to another component causes the dose (i.e. valve operation)
 - Procedure revisions for ALARA operations, surveillance periodicity changes

5.7.2 All station modifications or equipment changes, which may affect radiation exposure, receive an ALARA review prior to implementation.

5.8 Station Exposure Performance Monitoring

5.8.1 Station exposure performance shall be monitored for the following:

- Daily departmental
- Weekly departmental exposure
- Weekly station exposure
- Monthly departmental exposure
- Monthly station exposure
- Individual or projects of interest with a desired frequency

5.8.2 Initiate a Condition Report for the following:

- IF the individual work effort was greater than 20 mrem and the dose projection for the job was exceeded by 30 percent
- If the Section's weekly dose projection was greater than 20 mrem and the dose projection was exceeded by 30 percent

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 20 of 25

- If the Section's monthly dose projection was greater than 20 mrem and the dose projection was exceeded by 30 percent
- If the Site's monthly dose projection was exceeded by 30 percent
- IF the dose projection of a long-term project is exceeded by 30 percent
- IF the dose overrun was a result of incorrectly identifying the radiological conditions in the field, then the Condition Report should be assigned to Radiation Protection.
- If the dose overrun was a result of incorrectly identifying the scope of work OR resource allocation, then the Condition Report should be assigned to the appropriate Section.

6.0 RECORDS

6.1 Records Handling

Non-records shall be retained at the discretion of the Site RPM

6.2 Records Capture

Captured electronically

6.3 Non-Records

Site ALARA Committee Meeting Minutes

Site ALARA Sub-Committee Meeting Minutes

7.0 REFERENCES

7.1 Discretionary

NOP-OP-4107, Radiation Work Permit (RWP)

NOBP-SS-2008, Action Plans

NOBP-OM-2001, FENOC Outage Management

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title:	ALARA Program	Use Category: General Skill Reference	
		Revision: 07	Page: 21 of 25

NOBP-OP-4005, ALARA Suggestion Program

7.2 Obligations

7.2.1 Multi-site 10CFR20.1101, Radiation Protection Programs

10CFR19, Notices, Instructions, and Reports to Workers; Inspections and Investigations

NRC Regulatory Guide 8.8, Information Relevant to Ensuring that Occupational Radiation Exposures at Nuclear Power Stations will be As Low As Is Reasonably Achievable

NRC Regulatory Guide 8.10, Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Practicable

IMC 0609 Appendix C, Occupational Radiation Safety Significant Determination Process

INPO 05-008, Radiological Protection at Nuclear Power Stations

7.2.2 BV

None

7.2.3 DB

None

7.2.4 PY

None

8.0 SCOPE OF REVISION

8.1 Reflected changes in job titles in all sections of the procedure. Deleted Director of Site Maintenance job title. Combined Responsibilities of Radiation Protection and Chemistry Managers.

8.2 Removed references to Business Plan Goals.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 22 of 25

8.3 Added records handling information.

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 23 of 25

ATTACHMENT 1: SITE ALARA COMMITTEE AGENDA/MINUTES GUIDELINE

Header Information:

Site Name
 Site ALARA Committee Meeting
 First Energy Nuclear Operating Company (FENOC)
 Date / Time / Location
 Meeting Number

Membership Information:

Membership by Name / Title
 Membership Alternates by Name / Title
 Quests by Name / Title
 Indication of attendance

Agenda Topics:

Opening comments by Chairman
 Verification of Quorum Requirements
 Review of previous minutes
 Approval of previous minutes
 Review of Action Items
 Review of site dose performance
 Review as required for ALARA Plans / Micro ALARA Plans / WIP's
 Other topics of interest
 Open Forum / Round Table
 Review of new Action Items
 Plus – Delta
 Chairman closing comments

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 24 of 25

ATTACHMENT 2: SITE ALARA SUB-COMMITTEE AGENDA/MINUTES GUIDELINE

Header Information:

Site Name
 Site ALARA Sub-Committee Meeting
 First Energy Nuclear Operating Company (FENOC)
 Date / Time / Location
 Meeting Number

Membership Information:

Membership by Name / Title
 Membership Alternates by Name / Title
 Quests by Name / Title
 Indication of attendance

Agenda Topics:

Opening comments by Chairman
 Verification of Quorum Requirements
 Review of previous minutes
 Approval of previous minutes
 Review of Action Items
 Review of site dose performance
 Review as required for ALARA Plans / Micro ALARA Plans
 Other topics of interest
 Open Forum / Round Table
 Review of new Action Items
 Plus – Delta
 Chairman closing comments

NUCLEAR OPERATING PROCEDURE		Procedure Number: NOP-OP-4005	
Title: ALARA Program		Use Category: General Skill Reference	
		Revision: 07	Page: 25 of 25

ATTACHMENT 3: ACTION ITEM FORMAT GUIDELINE

ACTION ITEMS

AMC Action ID#	Description	Responsible Person Assigned	Committed Due Date	Status
11-001				CLOSED
11-002				OPEN
11-003				LATE
11-004				NEW