

RS-14-222

August 11, 2014

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

Braidwood Station, Units 1 and 2
Facility Operating License Nos. NPF-72 and NPF-77
NRC Docket Nos. STN 50-456, 50-457, and 72-73

Byron Station, Units 1 and 2
Facility Operating License Nos. NPF-37 and NPF-66
NRC Docket Nos. 50-454, 50-455, and 72-68

Clinton Power Station, Unit 1
Facility Operating License No. NPF-62
NRC Docket No. 50-461

Dresden Nuclear Power Station, Units 1, 2 and 3
Facility Operating License No. DPR-2
Renewed Facility Operating License Nos. DPR-19 and DPR-25
NRC Docket Nos. 50-010, 50-237, 50-249, and 72-37

LaSalle County Station, Units 1 and 2
Facility Operating License Nos. NPF-11 and NPF-18
NRC Docket Nos. 50-373, 50-374, and 72-70

Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30
NRC Docket Nos. 50-254, 50-265, and 72-53

Subject: License Amendment Request to Revise the Emergency Plan Requalification
Training Frequency for Emergency Response Organization Personnel

In accordance with 10 CFR 50.90, "*Application for amendment of license, construction permit, or early site permit*," Exelon Generation Company, LLC (Exelon) requests amendments to the licenses for the facilities listed above.

Specifically, the proposed changes would revise the description for the Emergency Response Organization (ERO) requalification training frequency for Exelon personnel defined in Exelon's governing Emergency Plans for the named stations from annually to "*once per calendar year*"

not to exceed 18 months between training sessions." The Emergency Plan is described in each facility's Updated Final Safety Analysis Report (UFSAR). In accordance with 10 CFR 50.54, "Conditions of licenses," paragraph (q), "Emergency plans," Exelon requests U.S. Nuclear Regulatory Commission (NRC) approval of the proposed changes to the applicable Emergency Plans for the facilities listed.

The proposed changes have been reviewed by the Plant Operations Review Committees at each station and have been approved by the Nuclear Safety Review Board in accordance with the respective Quality Assurance Program requirements for the affected facilities.

Attachment 1 provides an evaluation of the proposed change, including a detailed description, technical and regulatory evaluations including a no significant hazards consideration, and an environmental consideration. Attachment 2 contains mark-ups of the existing Emergency Plan pages showing the proposed changes to each facility's Emergency Plan.

There are no regulatory commitments contained in this submittal.

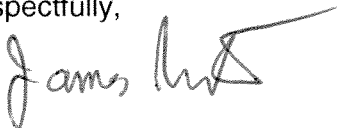
Exelon requests approval of the proposed license amendments by August 11, 2015. Once approved, the amendments shall be implemented within 60 days.

In accordance with 10 CFR 50.91, "Notice for public comment; State consultation," paragraph (b), Exelon is notifying the State of Illinois of this application for license amendments by transmitting a copy of this letter and the supporting attachments to the designated state officials.

Should you have any questions regarding this submittal, please contact Richard Gropp at (610) 765-5557.

I declare under penalty of perjury that the foregoing is true and correct. Executed on the 11th day of August 2014.

Respectfully,



James Barstow
Director, Licensing and Regulatory Affairs
Exelon Generation Company, LLC

Attachments: 1. Evaluation of Proposed Changes
2. Exelon Nuclear Standardized Radiological Emergency Plan Mark-ups

cc:	Regional Administrator – NRC Region III	w/ Attachments
	NRC Senior Resident Inspector – Braidwood	"
	NRC Senior Resident Inspector – Byron	"
	NRC Senior Resident Inspector – Clinton	"
	NRC Senior Resident Inspector – Dresden	"
	NRC Senior Resident Inspector – LaSalle	"

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cc: (continued)

NRC Senior Resident Inspector – Quad Cities	"
NRC Project Manager, NRR – Exelon Fleet	"
NRC Project Manager, NRR – Braidwood	"
NRC Project Manager, NRR – Byron	"
NRC Project Manager, NRR – Clinton	"
NRC Project Manager, NRR – Dresden	"
NRC Project Manager, NRR – LaSalle	"
NRC Project Manager, NRR – Quad Cities	"
Illinois Emergency Management Agency	"
Division of Nuclear Safety	"

ATTACHMENT 1

License Amendment Request

EVALUATION OF PROPOSED CHANGES

Subject: License Amendment Request to Revise the Emergency Plan Requalification Training Frequency for Emergency Response Organization Personnel for Braidwood Station, Byron Station, Clinton Power Station, Dresden Nuclear Power Station, LaSalle County Station, and Quad Cities Nuclear Power Station.

- 1.0 SUMMARY DESCRIPTION
- 2.0 DETAILED DESCRIPTION
- 3.0 TECHNICAL EVALUATION
- 4.0 REGULATORY EVALUATION
 - 4.1 Applicable Regulatory Requirements/Criteria
 - 4.2 Precedent
 - 4.3 No Significant Hazards Consideration
 - 4.4 Conclusions
- 5.0 ENVIRONMENTAL CONSIDERATION
- 6.0 REFERENCES

1.0 SUMMARY DESCRIPTION

In accordance with 10 CFR 50.90, "*Application for amendment of license, construction permit, or early site permit*," Exelon Generation Company, LLC (Exelon) requests amendments to the following Facility Operating Licenses (FOLs) for the plants listed below:

- Braidwood Station, Units 1 and 2
Facility Operating License Nos. NPF-72 and NPF-77
- Byron Station, Units 1 and 2
Facility Operating License Nos. NPF-37 and NPF-66
- Clinton Power Station, Unit 1
Facility Operating License NPF-62
- Dresden Nuclear Power Station, Units 1, 2 and 3
Facility Operating License No. DPR-2
Renewed Facility Operating License Nos. DPR-19 and DPR-25
- LaSalle County Station, Units 1 and 2
Facility Operating Licenses Nos. NPF-11 and NPF-18
- Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30

The proposed changes would revise the description for the Emergency Response Organization (ERO) requalification training frequency defined in the Emergency Plans for the stations listed above. The proposed frequency will be defined as "*once per calendar year not to exceed 18 months between training sessions*." In this context, training session refers to the annual requalification training received by the ERO.

The Emergency Plan is described in each facility's Updated Final Safety Analysis Report (UFSAR). In accordance with 10 CFR 50.54, "*Conditions of licenses*," paragraph (q), "*Emergency plans*," Exelon requests U.S. Nuclear Regulatory Commission (NRC) approval of the proposed changes to the Emergency Plans for the applicable Exelon facilities identified.

2.0 DETAILED DESCRIPTION

Planning Standard 10 CFR 50.47(b)(15) specifies that Radiological Emergency Response Organization (ERO) training is provided to those who may be called on to assist in an emergency. This is further expanded in regulatory guidance provided in NUREG-0654, Revision 1, "*Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants*," which specifies that organizations shall establish specialized initial and periodic retraining programs for those who may be called on to assist in an emergency and that each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities.

Exelon Standard Radiological Emergency Plan (EP-AA-1000)

Section O, "*Emergency Response Training*," of the Exelon Nuclear Standardized Radiological Emergency Plan for Braidwood Station, Byron Station, Clinton Power Station, Dresden Nuclear Power Station, LaSalle County Station and Quad Cities Nuclear Power Station describes the training requirements for the Exelon Nuclear ERO as well as the Offsite Response Organizations (OROs). The training frequency for the Exelon Nuclear ERO is defined as annual.

The term "Annual" is defined in the Exelon Nuclear Standardized Radiological Emergency Plan Appendix 4, "*Glossary of Terms and Acronyms*," as:

Frequency of occurrence equal to once per calendar year, January 1 to December 31.

Under the Exelon Emergency Preparedness (EP) Program, the Exelon Nuclear Standardized Radiological Emergency Plan is common between all ten (10) of Exelon's legacy nuclear stations. Site specific guidance relating to Emergency Plan requirements is contained in each Station's Emergency Plan Annex. Together, the Standard Plan and the Station Annex make up the site's Emergency Plan. The Emergency Plan is arranged such that requirements in the Annex take precedence when contradictory statements exist. Section A, "*Purpose*," of the Standard Plan provides the following explanation:

"...The Station Annex becomes a part of the plan and is subject to the same review and audit requirements as the plan. In the areas where a Station Annex deviates from the general requirements of the E-Plan, the Station Annex shall serve as the controlling document...."

Braidwood Station, Byron Station, Clinton Power Station, Dresden Nuclear Power Station, LaSalle County Station, and Quad Cities Nuclear Power Station follow the guidance established in the Exelon Nuclear Standardized Radiological Emergency Plan, which requires annual ERO requalification training to be performed within each calendar year.

The proposed revision to the ERO requalification training frequency for the six (6) Exelon facilities identified above would result in changes to Section O of the Exelon Nuclear Standardized Radiological Emergency Plan. Section O establishes the ERO requalification training frequency. Exelon proposes to modify the discussion in EP-AA-1000, to define the training frequency for Exelon personnel assigned to ERO positions as: "*once per calendar year not to exceed 18 months between training sessions*," as described below. The change does not apply to training for OROs provided by Exelon. The following changes are proposed:

1. *Assurance of Training*

*The E-Plan Training Program assures the training, qualification, and requalification of individuals who may be called on for assistance during an emergency. Specific emergency response task training, prepared for each E-Plan position, is described in lesson plans and study guides. The lesson plans, study guides, and written tests are contained in the ERO Training Program. Responsibilities for implementing the training program are contained in plant procedures. A description of the content of the training courses is given in TQ-AA-113. **Exelon personnel who are assigned an E-Plan***

position will receive retraining per TQ-AA-113 at a frequency of once per calendar year not to exceed 18 months between training sessions.

The statements regarding frequency requirements for Exelon ERO position training are being consolidated into Section O.1, "Assurance of Training." As such, the following excerpts from Section O.4 and O.5 were revised to remove reference to annual training within the section.

4. *Emergency Response Organization Training Program*

...On-Shift emergency response personnel perform emergency response activities as an extension of their normal duties and are trained ~~annually~~ as part of their duty specific training. Additional Emergency Preparedness information is provided as part of the Station Nuclear General Employee Training...

...Emergency response personnel in the following categories receive knowledge and/or performance based training initially and retraining thereafter ~~on an annual basis as defined within Appendix 4 or per the applicable Station Annex:~~

- a. Directors, Managers and Coordinators within the station and corporate ERO*
- b. Personnel Responsible for Accident Assessment*
- c. Radiological Monitoring Teams and Radiological Analysis Personnel*
- d. Police, Security, and Fire Fighting Personnel*
- e. Repair and Damage Control Teams*
- f. First Aid and Rescue Personnel*
- g. Local Support Service Personnel*
- h. Medical Support Personnel*
- i. Public Information Personnel*
- j. Communications Personnel*

5. *General, Initial, and **Requalification** ~~Annual~~ Training Program Maintenance*

- b. Initial and Requalification ERO Training: The proficiency of emergency response personnel (as defined in 10 CFR 50 Appendix E) is ensured by the following means:*
 - Initial training and ~~annual~~ retraining on applicable generic and site-specific portions of the E-Plan and the corresponding implementing procedures. Individuals not demonstrating the required level of knowledge in initial or retraining classes receive additional training on the areas requiring improvement. ~~Annual retraining is conducted on a calendar year basis, or as indicated in the Station Annex.~~*

3.0 TECHNICAL EVALUATION

Exelon proposes to revise the Exelon Nuclear Standardized Radiological Emergency Plan for the following facilities in order to establish a common annual ERO qualification training frequency for Exelon personnel assigned to ERO positions and to align the training frequency across the Exelon fleet:

- Braidwood Station
- Byron Station
- Clinton Power Station
- Dresden Nuclear Power Station
- LaSalle County Station
- Quad Cities Nuclear Power Station

This constitutes a minor change which will allow application of common procedural guidance and administrative tracking tools throughout the Exelon fleet. This LAR does not affect established training frequencies for non-Exelon ORO responders where Exelon may provide periodic training.

Exelon's Mid-Atlantic stations (i.e., Limerick Generating Station, Oyster Creek Nuclear Generating Station, Peach Bottom Atomic Power Station, and Three Mile Island Nuclear Station) previously submitted and supplemented a License Amendment Request (LAR) to revise their ERO qualification training frequency (References 6.2 and 6.3). The LAR requested approval to align the training frequency with those at Exelon's legacy Midwest stations (i.e., Braidwood Station, Byron Station, Clinton Power Station, Dresden Nuclear Power Station, LaSalle County Station, and Quad Cities Nuclear Power Station). However, based on NRC comments, Exelon supplemented the Reference 6.2 submittal to align the training frequency with the frequency being proposed in this submittal in order to establish the training frequency as: *"once per calendar year not to exceed 18 months between training sessions."* As noted above, the supplemental response for the Mid-Atlantic stations is cited as Reference 6.3. From a business needs and resource perspective, there is a benefit to have all of Exelon's nuclear facilities perform ERO training under the same requirements. Exelon utilizes common procedures and programs to manage the EP training program and having all of its stations under the same program would provide efficiency and simplicity in program administration.

Braidwood, Byron, Clinton, Dresden, LaSalle, and Quad Cities Stations

The proposed requirement restricts the time between training sessions to 18 months. This is considered more restrictive than the current definition found in the Exelon Standard Emergency Plan for Braidwood, Byron, Clinton, Dresden, LaSalle and Quad Cities which requires training to occur within each calendar year.

While the flexibility to train more than 18 months apart will no longer be permitted, the overall impact to ERO training is believed to be minor. Exelon stations typically schedule the annual ERO training during the same timeframe each year, within a defined training cycle. This is generally true for all Exelon ERO training groups including Operations, Maintenance, Chemistry, Radiation Protection, Engineering and Technical, as well as the corporate staff. It is acknowledged that ERO training must sometimes be adjusted to address emergent plant outages or reassignment of individuals to other ERO teams. Since training often occurs by

team and is often scheduled over several weeks, some flexibility is desired to manage these changes. The 18-month limit is believed to be adequate to support these types of emergent issues.

The added condition of not exceeding 18 months between training sessions is not a reduction in the effectiveness of the Exelon Nuclear Standardized Radiological Emergency Plan. The revised training frequency requirement will continue to ensure the ERO will receive timely training and maintain proficiency with their assigned emergency preparedness position.

Impact on Performance Indicators and Drill Participation

The proposed revisions to the training frequency would have no impact to NRC Performance Indicators (PIs). The NRC ERO Drill Participation performance indicator tracks the participation of ERO members assigned to fill key positions in performance-enhancing experiences and through linkage to the Drill and Exercise Performance (DEP) indicator ensures that the risk significant aspects of classification, notification, and Protective Action Recommendation (PAR) development are evaluated and included in the PI process. This indicator measures the percentage of ERO members assigned to fill key positions who have participated recently in performance-enhancing experiences such as drills, exercises, or in an actual event during the previous eight quarters, as measured on the last calendar day of the quarter.

The proposed revision to the annual training frequency is unrelated to drill participation requirements for the indicator. Although a drill participation requirement currently exists as a separate element of the ERO qualification process, it does not impact the objective for key ERO members to have a performance-enhancing experience every eight quarters.

The proposed change in the ERO requalification training frequency for Exelon personnel assigned to ERO positions for the Exelon facilities noted in this submittal would result in consistency with the other Mid-Atlantic station ERO requalification training requirements as described in the Reference 6.2 and 6.3 submittals. The flexibility to schedule training within the calendar year as described allows the EP organizations to schedule around planned and emergent outages, operations training cycles, and other emergent station priorities.

4.0 REGULATORY EVALUATION

4.1 Applicable Regulatory Requirements/Criteria

The proposed change has been evaluated to determine whether applicable regulations and requirements continue to be met.

The criteria in 10 CFR 50.54(q) provide direction to licensees seeking to revise their Emergency Plan. The requirements related to nuclear power plant Emergency Plans are specified in the standards in 10 CFR 50.47, *"Emergency plans,"* and the requirements of 10 CFR 50, Appendix E, *"Emergency Planning and Preparedness for Production and Utilization Facilities."*

Planning Standard 10 CFR 50.47(b)(15) states that: *"Radiological emergency response training is provided to those who may be called on to assist in an emergency."* This is further discussed in NUREG-0654, Section II.O, *"Radiological Emergency Response Training,"* which states that: *"Each organization shall assure the training of appropriate individuals."* More specifically, step 5 states: *"Each organization shall provide for the initial and annual retraining of personnel with emergency response responsibilities."* The proposed change to the Exelon Nuclear

Standardized Radiological Emergency Plan for Braidwood Station, Byron Station, Clinton Power Station, Dresden Nuclear Power Station, LaSalle County Station, and Quad Cities Nuclear Power Station reflects a change in frequency in how ERO requalification training is implemented at those affected Exelon facilities. Exelon has determined that the proposed change does not require any exemptions or relief from regulatory requirements and does not affect conformance with any 10 CFR 50, Appendix A, "*General Design Criteria for Nuclear Power Plants*," (GDC) differently than that described in the Updated Final Safety Analysis Reports (UFSARs) for each affected facility.

4.2 Precedent

There is current precedent within the Exelon fleet supporting the proposed change. By letter dated October 30, 2013 (Reference 6.2), Exelon submitted an amendment request to revise the ERO requalification training requirements specified in the Emergency Plans for Limerick Generating Station, Oyster Creek Nuclear Generating Station, Peach Bottom Atomic Power Station, and Three Mile Island Nuclear Station. The amendment request was subsequently amended by letter dated June 13, 2014 (Reference 6.3) to include similar provisions that the training be conducted "*once per calendar year not to exceed 18 months between training sessions*."

4.3 No Significant Hazards Consideration

In accordance with 10 CFR 50.90, "*Application for amendment of license, construction permit, or early site permit*," Exelon Generation Company, LLC (Exelon) requests amendments to the Facility Operating Licenses listed below.

- Braidwood Station, Units 1 and 2
Facility Operating License Nos. NPF-72 and NPF-77
- Byron Station, Units 1 and 2
Facility Operating License Nos. NPF-37 and NPF-66
- Clinton Power Station, Unit 1
Facility Operating License NPF-62
- Dresden Nuclear Power Station, Units 1, 2 and 3
Facility Operating License No. DPR-2
Renewed Facility Operating License Nos. DPR-19 and DPR-25
- LaSalle County Station, Units 1 and 2
Facility Operating Licenses Nos. NPF-11 and NPF-18
- Quad Cities Nuclear Power Station, Units 1 and 2
Renewed Facility Operating License Nos. DPR-29 and DPR-30

Specifically, the proposed changes would revise the Emergency Response Organization (ERO) requalification training frequency for Exelon personnel assigned ERO positions defined in the station Emergency Plans as "annual" to a frequency defined as "*once per calendar year not to exceed 18 months between training sessions*." The Emergency Plan is described in each station's Updated Final Safety Analysis Report (UFSAR). In accordance with 10 CFR 50.54,

"Conditions of licenses," paragraph (q), *"Emergency plans,"* Exelon requests NRC approval of the proposed changes to the Exelon Nuclear Standardized Radiological Emergency Plan for Braidwood Station, Byron Station, Clinton Power Station, Dresden Nuclear Power Station, LaSalle County Station, and Quad Cities Nuclear Power Station.

The proposed changes have been reviewed considering the applicable requirements of 10 CFR 50.47, 10 CFR 50, Appendix E, and other applicable NRC documents. Exelon has evaluated the proposed changes to the affected sites' Emergency Plans and determined that the changes do not involve a Significant Hazards Consideration. In support of this determination, an evaluation of each of the three (3) standards, set forth in 10 CFR 50.92, *"Issuance of amendment,"* is provided below.

1. *Does the proposed amendment involve a significant increase in the probability or consequences of an accident previously evaluated?*

Response: No.

The proposed changes do not increase the probability or consequences of an accident. The proposed changes do not involve the modification of any plant equipment or affect plant operation. The proposed changes will have no impact on any safety-related Structures, Systems, or Components (SSC).

The proposed changes would revise the ERO requalification frequency from an annual basis to once per calendar year not to exceed 18 months between training sessions defined in the Emergency Plan for the applicable Exelon facility. The proposed changes will align the Exelon legacy plants under one standard regarding the annual requalification training frequency for ERO personnel.

Therefore, the proposed changes to the Emergency Plan requalification training frequency for the affected sites do not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. *Does the proposed amendment create the possibility of a new or different kind of accident from any accident previously evaluated?*

Response: No.

The proposed changes have no impact on the design, function, or operation of any plant SSC. The proposed changes do not affect plant equipment or accident analyses. The proposed changes only affect the administrative aspects of the annual ERO requalification training frequency requirements.

Therefore, the proposed changes to the Emergency Plan requalification training frequency for the affected sites do not create the possibility of a new or different kind of accident from any accident previously evaluated.

3. *Does the proposed amendment involve a significant reduction in a margin of safety?*

Response: No.

The proposed changes do not adversely affect existing plant safety margins or the reliability of the equipment assumed to operate in the safety analyses. There is no change being made to safety analysis assumptions, safety limits, or limiting safety system settings that would adversely affect plant safety as a result of the proposed changes. Margins of safety are unaffected by the proposed changes to the frequency in the ERO requalification training requirements.

Therefore, the proposed changes to the Emergency Plan requalification training frequency for the affected sites do not involve a significant reduction in a margin of safety.

4.4 Conclusions

In conclusion, based on the considerations discussed above: 1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, 2) such activities will be conducted in compliance with the Commission's regulations, and 3) the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.

5.0 ENVIRONMENTAL CONSIDERATION

The proposed changes are applicable to emergency planning standards involving ERO requalification training requirements and do not reduce the capability to meet the emergency planning standards established in 10 CFR 50.47 and 10 CFR 50, Appendix E. The proposed changes specifically relate to education, training, experience, qualification or other employment suitability requirements. Accordingly, the proposed changes meet the eligibility criterion for categorical exclusion set forth in 10 CFR 51.22(c)(3)(iv). Therefore, pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the proposed change.

6.0 REFERENCES

- 6.1 NRC Regulatory Issue Summary 2005-02, Revision 1, *"Clarifying the Process for Making Emergency Plan Changes,"* dated April 19, 2011.
- 6.2 Letter from James Barstow, Exelon Generation Company, LLC, to U.S. Nuclear Regulatory Commission - *License Amendment Request to Revise the Emergency Plan Requalification Training Frequency for Emergency Response Organization Personnel,* dated October 30, 2013.
- 6.3 Letter from James Barstow, Exelon Generation Company, LLC, to U.S. Nuclear Regulatory Commission – *Supplemental Response to License Amendment Request to Revise the Emergency Plan Requalification Training Frequency for Emergency Response Organization Personnel,* dated June 13, 2014.

ATTACHMENT 2

Mark-up of Emergency Plan Pages

Exelon Nuclear Standardized Radiological Emergency Plan

EMERGENCY PLAN EP-AA-1000

Pages

O-1

O-2

O-3

O-6

O-7

Section O: Emergency Response Training

This section describes the emergency response training that is provided to those who may be called upon in an emergency. It outlines the training provided by Exelon Nuclear to both its employees and offsite support personnel requiring site access.

1. Assurance of Training

The E-Plan Training Program assures the training, qualification, and requalification of individuals who may be called on for assistance during an emergency. Specific emergency response task training, prepared for each E-Plan position, is described in lesson plans and study guides. The lesson plans, study guides, and written tests are contained in the ERO Training Program. Responsibilities for implementing the training program are contained in plant procedures. A description of the content of the training courses is given in TQ-AA-113. **Exelon personnel who are assigned an E-Plan position will receive retraining per TQ-AA-113 at a frequency of once per calendar year not to exceed 18 months between training sessions.**

Offsite training is provided to support organizations that may be called upon to provide assistance in the event of an emergency. The following outlines the training received by these organizations:

- a. Emergency Preparedness shall annually train, or document an annual written offer to train, those non-Exelon Nuclear organizations referenced in the Station Annexes that may provide specialized services during a nuclear plant emergency (e.g., local law enforcement, fire-fighting, medical services, transport of injured, etc.). The training made available is designed to acquaint the participants with the special problems potentially encountered during a nuclear plant emergency, notification procedures and their expected roles. Those organizations that must enter the site shall also receive site-specific emergency response training and be instructed as to the identity (by position and title) of those persons in the onsite organization who will control their support activities.
- b. Training of offsite emergency response organizations is described in their respective radiological emergency plans, with support provided by Exelon Nuclear as requested.

2. Functional Training of the ERO

In addition to general and specialized classroom training, members of the Exelon Nuclear ERO receive periodic performance based emergency response training. Performance based training is provided using one or more of the following methods:

- **Familiarization Sessions:** A familiarization session is an informal, organized tabletop discussion of predetermined objectives.
- **Walk Throughs:** Consists of a facility walk through to familiarize plant ERO personnel with procedures, communications equipment, and facility layout. Walk throughs also provide the opportunity to discuss facility activities, responsibilities and procedures with an instructor.

- Drills: A drill is a supervised instruction period aimed at testing, developing and maintaining skills in a particular operation. Drills described in Section N of this plan are a part of training. These drills allow each individual the opportunity to demonstrate the ability to perform their assigned emergency functions. During drills, on-the-spot correction of erroneous performance may be made and a demonstration of the proper performance offered by the Controller.

3. First Aid Response

Selected station personnel are trained in accordance with the Exelon Nuclear approved First Aid Program. First-Aid Teams will likely be augmented with additional personnel such as Fire Brigade Members and other personnel qualified to assist in the rescue.

4. Emergency Response Organization Training Program

Exelon Nuclear ERO personnel who are responsible for implementing this plan receive specialized training. The training program for emergency response personnel is developed based on the requirements of 10 CFR 50, Appendix E and position specific responsibilities as defined in this document.

On-Shift emergency response personnel perform emergency response activities as an extension of their normal duties and are trained annually as part of their duty specific training. Additional Emergency Preparedness information is provided as part of the Station Nuclear General Employee Training.

New ERO personnel receive an initial overview course that familiarizes them with the E-Plan by providing basic information in the following areas as well as specific information as delineated in the sections below:

- Planning Basis
- Emergency Classifications
- Emergency Response Organization and Responsibilities
- Call-out of Emergency Organization
- Emergency Response Facilities
- Communications Protocol/Emergency Public Information
- Offsite Organizations

Emergency response personnel in the following categories receive knowledge and/or performance based training initially and retraining thereafter: ~~on an annual basis as defined within Appendix 4 or applicable Station Annex:~~

- a. Directors, Managers and Coordinators within the station and corporate ERO: Personnel identified by the Emergency Response Organization Telephone Directory as Directors, Managers and Coordinators for the station and corporate EROs receive training appropriate to their position in accordance with the approved ERO Training Program. These personnel receive specialized training in the areas of:

- Notifications
- Emergency Classifications
- Protective Action Recommendations
- Emergency Action Levels
- Emergency Exposure Control

Selected Directors, Managers, Coordinators and Shift Emergency Directors receive training in accordance with the approved ERO Training Program. Training in accident assessment sufficient to classify an event and to mitigate the consequences of an event are also covered.

- b. Personnel Responsible for Accident Assessment:

The skills and knowledge required to perform plant stabilization and mitigation are a normal function of operations specific positions, as identified in Section B of this plan. Power changes and planned and unplanned reactor shutdowns are handled on a normal operation basis. Subsequent plant stabilization and restoration is pursued utilizing normal operating procedures. Licensed Operators receive routine classroom and simulator training to ensure proficiency in this area.

- 1) Active Senior Licensed Control Room Personnel shall have training conducted in accordance with the approved ERO Training Program such that proficiency is maintained on the topics listed below. These subjects shall be covered as a minimum ~~on an annual basis during retraining per~~ TQ-AA-113.

- Event Classification.
- Protective Action Recommendations.
- Radioactive Release Rate Determination.
- Notification form completion and use of the Nuclear Accident Reporting System (NARS).
- Federal, state and local notification procedures as appropriate.

- Site specific procedures for activating the onsite and offsite ERO.

To remove peripheral duties from the Operations shift, the following group of positions responsible for accident assessment, corrective actions, protective actions, and related activities receive the training listed below:

2) Core Damage Assessment Personnel: During an emergency when core/cladding damage is suspected, a specialized group of trained individuals perform core damage assessment. At a minimum, personnel responsible for core damage assessment receive classroom and hands-on training in the following areas:

- Available Instrumentation and Equipment
- Isotopic Assessment and Interpretation
- Computerized Core Damage Assessment Methodology (CDAM) and/or proceduralized assessment methods.

c. Radiological Monitoring Teams and Radiological Analysis Personnel

1) Offsite Radiological Monitoring: Offsite radiological monitoring is performed by trained individuals who provide samples and direct readings for dose assessment calculations and dose projection comparisons.

Personnel identified as members of Field Monitoring Teams receive training in accordance with the approved training program. Field Monitoring Team members receive classroom and hands-on training in the following areas:

- Equipment and Equipment Checks
- Communications
- Plume Tracking Techniques

2) Personnel Monitoring: Personnel monitoring is performed by trained individuals who monitor station personnel and their vehicles for contamination during an emergency. Personnel Monitoring Team members receive classroom and hands-on training in the following areas:

- Personnel Monitoring Equipment and Techniques
- Decontamination Techniques for Personnel
- Decontamination Techniques for Vehicles

- 3) Dose Assessment: Dose Assessment training includes the skills and knowledge necessary for calculation and interpretation of an offsite release and its impact on the environment under varying meteorological conditions. Individuals responsible for performing dose assessment are trained in the following areas:

- Computerized Dose Assessment
- Protective Action Recommendations
- Field Monitoring Team Interface
- Protective Action Guidelines associated with offsite plume exposure doses
- Basic Meteorology

d. Police, Security, and Fire Fighting Personnel

- 1) Local Police and Fire Fighting Personnel: The local Police and Fire Departments are invited to receive training as outlined in Part 1.a of this section.
- 2) Security Personnel: Station security personnel are trained in accordance with training defined by the Nuclear General Employee Training (NGET) and Exelon Nuclear Security Program.
- 3) Fire Control Teams (fire brigades): Station fire brigades are trained in accordance with training defined by the Exelon Nuclear Fire Protection Program. Fire Brigade personnel are considered the primary members of rescue teams and will receive the appropriate EP training as part of their training program. Training also includes rescue of personnel from hazardous environments.

- e. Repair and Damage Control Teams: Operations, Maintenance and Radiation Protection personnel are trained as part of their normal job specific duties to respond to both normal and abnormal plant operations.

Operations personnel are trained to: (1) recognize and to mitigate degrading conditions in the plant, (2) mechanically and electrically isolate damaged or malfunctioning equipment, (3) isolate fluid leaks, and (4) minimize transients.

Maintenance personnel are trained to troubleshoot and repair damaged or malfunctioning electrical, mechanical, or instrumentation systems as appropriate to their job classification.

Radiation Protection personnel are trained to assess the radiological hazards associated with equipment repair and instruct personnel as to the appropriate protective clothing requirements, respiratory protection requirements, stay times, and other protective actions specific to the conditions present.

At least 50% of personnel from those departments, who are potential responders to the OSC as Damage Control Team members, are required to be qualified in the use of respiratory protection equipment. This includes in-plant supervision and craft/technicians for the following departments:

- Operations
 - Radiation Protection
 - Chemistry
 - Maintenance (mechanical, electrical and I&C)
- f. First Aid and Rescue Personnel: First aid and rescue team members receive training as outlined in Part 3 of this section.
- g. Local Support Service Personnel: Local support service personnel providing assistance during an emergency are invited to receive training as outline in Parts 1.a and 1.b of this section.
- h. Medical Support Personnel: Onsite medical personnel receive specialized training in the handling of contaminated victims and hospital interface. Offsite ambulance and hospital personnel are offered annual training in accordance with a program provided by Emergency Preparedness.
- i. Public Information Personnel: Corporate and station personnel responsible for disseminating emergency public information and responding to media and public information requests receive specialized public information training.
- j. Communications Personnel: ERO personnel receive training on communications protocol as a part of the initial Emergency Response Overview Course. Personnel using specialized communications equipment that is not part of their normal daily function receive initial and requalification training on the equipment. Personnel involved in notifications to offsite agencies receive specialized training in the notification process.

5. General, Initial, and ~~Requalification~~ Annual Training Program Maintenance

- a. Station Departments and Emergency Preparedness share the responsibility for ensuring that the ERO receives all necessary training and retraining. In order to carry this out, responsibilities are assigned as follows:

Corporate Responsibilities for Corporate ERO Personnel

- Scheduling and conducting initial, retraining, and make-up classes.

- Acting as the sole contact point for ensuring attendance.
- Record keeping for the training courses, including dates of scheduled classes and non-attendance information.
- Verifying that all emergency response personnel training records are current.
- Ensure instructional materials are prepared and reviewed every two years.

Station Responsibilities for Station ERO Personnel

- Station management shall ensure the attendance of onsite personnel for training, including required E-Plan courses.
 - Each Station shall conduct onsite emergency personnel initial and retraining for station Emergency Response Personnel using approved lesson plans.
 - The Station Training Department shall provide those shift personnel included in a continuing training program an annual review of the following items as a minimum:
 - Assembly Areas
 - Emergency Response Facility assignment
 - Potential Hazards (radiological and non-radiological)
 - Anticipated actions including assembly requirements, protective equipment requirements (clothing, masks, SCBA, etc.), the use of KI, emergency exposure limits and accountability requirements.
- b. Initial and Regualification ERO Training: The proficiency of emergency response personnel (as defined in 10 CFR 50 Appendix E) is ensured by the following means:
- Assigning persons to emergency duties that are similar to those performed as a part of their regular work assignment or experience.
 - Initial training and ~~annual~~ retraining on applicable generic and site-specific portions of the E-Plan and the corresponding implementing procedures. Individuals not demonstrating the required level of knowledge in initial or retraining classes receive additional training on the areas requiring improvement. ~~Annual retraining is conducted on a calendar year basis, or as indicated in the Station Annex.~~
 - Training on E-Plan changes shall be completed within one hundred twenty (120) days of implementation of the change.