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Constellation Energy
Nine Mile Point Nuclear Station

August 31, 2006

U. S. Nuclear Regulatory Commission
Washington, DC 20555-0001

ATTENTION: Document Control Desk

SUBJECT: Nine Mile Point Nuclear Station
Unit Nos. 1 and 2; Docket Nos. 50-220 and 50-410

Proposed Site Emergency Plan Change Regarding 30-Minute Augmentation of the Emergency Response Organization

Nine Mile Point Nuclear Station, LLC (NMPNS) hereby submits a change to the Nine Mile Point (NMP) Site Emergency Plan (SEP) for review and approval. The proposed SEP change would eliminate the existing requirement for augmenting the on-shift Emergency Response Organization (ERO) staff within 30 minutes. This would result in the ERO being fully augmented within 60 minutes of notification. The change is requested to assure that ERO augmentation occurs within requisite time frames (considering increased flexibility in normal licensee working hours), to provide a more effective span of control for the on-shift Emergency Director, and to assure that more consistent oversight and direction is provided to augmented ERO staff performing assessment and mitigative actions.

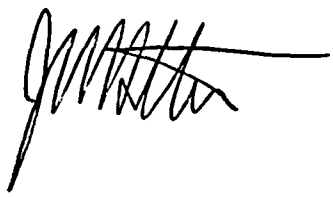
The description and evaluation of the proposed SEP change are contained in Attachment (1). Attachment (2) is a copy of Figure 5.3 from SEP Revision 15, which is the plan revision that was reviewed and approved by the NRC in NUREG-1047, "Safety Evaluation Report Related to Operation of Nine Mile Point Nuclear Station, Unit No. 2," Supplement No. 3, dated July 1986. Attachment (3) provides an evaluation of NUREG-0654 functional requirements for on-shift and augmented ERO positions. The proposed changes to the current SEP are shown in the markup in Attachment (4).

A review of the proposed SEP change was performed in accordance with 10 CFR 50.54(q) considering the requirements of 10 CFR 50.47, Appendix E to 10 CFR 50, and other applicable NRC guidance (e.g., Regulatory Issue Summary 2005-02). The review determined that the revised NMP SEP would continue to meet the planning standards of 10 CFR 50.47(b) and that no decrease in effectiveness of the SEP would occur. However, based on the guidance provided in NRC Regulatory Issue Summary 2005-02, the change is being submitted for NRC approval prior to implementation.

AX45

Should you have any questions regarding the information in this submittal, please contact M. H. Miller, Licensing Director, at (315) 349-1510.

Very truly yours,



JAH/DEV/tsc

Attachments:
(1) Evaluation of Proposed Changes to the Nine Mile Point Site Emergency Plan
(2) Figure 5.3 from NRC-Approved Site Emergency Plan (SEP) Revision 15
(3) Evaluation of NUREG-0654 Functional Requirements for On-Shift and Augmented ERO
(4) Proposed Changes to the Current SEP (Markup)

cc: S. J. Collins, NRC
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NMP1L 2062

COMMITMENTS IDENTIFIED IN THIS CORRESPONDENCE:	
• Revise procedures NIP-EPP-01 and EPIP-EPP-13 as appropriate to incorporate the ERF timing change, following NRC approval.	
Responsible Person/Organization:	J. Kaminski/J. Jones, Emergency Planning
Due Date:	Within 30 days following NRC approval
SAR/TSB Revision Required?	No
NCTS No.:	504623-00

Posting Requirements for Responses -- NOV/Order **No**

ATTACHMENT (1)

EVALUATION OF PROPOSED CHANGES TO THE NINE MILE POINT SITE EMERGENCY PLAN

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ATTACHMENT (1)

EVALUATION OF PROPOSED CHANGES TO THE
NINE MILE POINT SITE EMERGENCY PLAN

1. SCOPE OF PROPOSED CHANGE

The purpose of the proposed change is to change the current requirement for augmenting the on-shift Emergency Response Organization (ERO) within 30 minutes. NMPNS proposes to revise the Nine Mile Point (NMP) Site Emergency Plan (SEP) and associated emergency plan implementing procedures to require augmentation of the on-shift ERO within 60 minutes, eliminating any requirements for selected ERO staff members to have 30-minute response.

The specific change involves Section 5.2 of the NMP SEP, Revision 15, which was accepted by the NRC in NUREG-1047, Supplement 3, Section 13.3.4, dated July 1986 (Reference a).

NRC-Approved SEP wording:
During off-hours, the Station Shift Supervisor uses a notification roster to ensure that personnel to fill key positions within the emergency organization can be promptly notified, and to allow them to respond within 30 to 60 minutes, after the notification of an emergency.

Figure 5.3 presents, in tabular form, the available personnel on-shift and those key positions as a minimum, required to augment the On-Site Emergency Response Organization within 30 to 60 minutes after notification.

Proposed wording:
All emergency facilities will be staffed within 60 minutes of notification.

The following analysis examines each of the current 30-minute response functions committed to in the NRC-approved NMP SEP Revision 15 and assesses the impact of changing those functions to 60 minutes.

2. REASON FOR PROPOSED CHANGE

The proposed change is desired in order to provide for (1) consistently implemented ERO augmentation within requisite time frames, (2) a more effective span of control for the on-shift Emergency Director (Shift Manager/Emergency Director), and (3) available and consistent oversight and direction to augmented ERO staff performing assessment and mitigative actions. The proposed change would prevent the need for inconsistent or specialized controls, supervision, or methods to assure the ability to staff certain positions within the ERO that report to the Technical Support Center (TSC) or Operations Support Center (OSC) within the 30-minute requirements identified in the SEP (both Revision 15 and the current revision).

3. PROGRAM REQUIREMENTS

The following regulatory requirements and guidance documents apply to this analysis:

- 10 CFR 50.47(b)(2) states:

  "On-shift facility licensee responsibilities for emergency response are unambiguously defined, adequate staffing to provide initial facility accident response in key functional areas is maintained at all times, timely augmentation of response capabilities is available and the interfaces among various onsite response activities and offsite support and response activities are specified."

- 10 CFR 50, Appendix E, Section IV, Part A, "Organization," states, in part:

  "The organization for coping with radiological emergencies shall be described, including definition of authorities, responsibilities, and duties of individuals assigned to the licensee's emergency organization and the means for notification of such individuals in the event of an emergency. Specifically, the following shall be included:
  1. A description of the normal plant operating organization.
  2. A description of the onsite emergency response organization with a detailed discussion of:
     b. Plant staff emergency assignments;
  3. A description, by position and function to be performed, of the licensee's headquarters personnel who will be sent to the plant site to augment the onsite emergency organization."

- Regulatory Guide 1.101, Revision 4, Section C, states, in part:

  "The criteria and recommendations in Revision 1 of NUREG-0654/FEMA-REP-1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants" (November 1980), are methods acceptable to the NRC staff for complying with the standards in 10 CFR 50.47 that must be met in onsite and offsite emergency response plans. These criteria provide a basis for NRC licensees and State and local governments to develop acceptable radiological emergency plans and improve emergency preparedness."

- NUREG-0654/FEMA-REP-1, Revision 1, "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Section II.B.5 states, in part:

  "The licensee must be able to augment on-shift capabilities within a short period after declaration of an emergency. This capability shall be as indicated in Table B-1."

  Table B-1 of NUREG-0654/FEMA-REP-1 lists a number of functions primarily executed from the TSC and OSC, which are required to be staffed within either 30 or 60 minutes.

4. BACKGROUND

Onsite emergency plans for nuclear power reactors must meet the planning standards contained in 10 CFR 50.47(b)(2). NUREG-0654/FEMA-REP-1 provides the planning criteria that meet the requirements of 10 CFR 50.47. In particular, Table B-1 of NUREG-0654/FEMA-REP-1 provides the guidance regarding minimum emergency plan functions that must be performed and the staffing needed to satisfy the planning standard.

The NMP SEP, Revision 15, Section 5.2, "On-Site Emergency Response Organization," states, in part:

"During off-hours the Station Shift Supervisor uses a notification roster to ensure that personnel to fill key positions within the emergency organization can be promptly notified and to allow them to respond within 30 to 60 minutes, after the notification of an emergency."

"Figure 5.3 presents, in tabular form, the available personnel on-shift and those key positions, as a minimum, required to augment the On-Site Emergency Response Organization within 30 to 60 minutes after notification."

SEP Revision 15, Figure 5.3 (Attachment (2) of this submittal), indicates a number of TSC and OSC positions that would be staffed within 30 and 60 minutes. Revision 15 of the SEP was accepted by the NRC in NUREG-1047, Supplement 3, Section 13.3.4, dated July 1986 (Reference a).

The original commitment detailed in the SEP, Revision 15, consisted of a number of personnel to supplement on-shift notification/communication, onsite and offsite radiological assessment, reactor/plant assessment and mitigative action functions. That commitment did not include any augmented staff for command, control or direction. Thus, any augmented staff that had responded within 30 minutes would be directed using on-shift staff (that is, the Shift Manager/Emergency Director). This could add command and control burden to that on-shift resource.

Staffing levels provided in the approved SEP detailed a "phased approach to staffing" that was determined by NMP to present implementation challenges. For that reason, NMP revised the SEP in 1994 (Revision 30) to require a fully staffed TSC and OSC within 30 minutes during normal working hours or within 60 minutes at all other times. Evaluation of the changes incorporated in SEP Revision 30 in accordance with 10 CFR 50.54(q) concluded that the changes did not decrease the effectiveness of the SEP. The revised ERO staff augmentation timing scheme resulted in:

- Augmenting the ERO within 30 minutes as required in the NRC-approved SEP Revision 15, and
- Fully staffing the TSC and OSC within 30 minutes during normal business hours (which was considered a reasonable goal that could result in lessening the command and control burden on the Control Room and provide the benefit of added assessment and mitigative functions).

Normal work hours were defined in the SEP, Revision 15, Section 5.1, as "8 am - 4:30 pm weekdays, except holidays." This definition has not been re-considered in any of the subsequent revisions made to the SEP. However, the more recent use of flexible work schedules, telecommuting, and shared workforces among NMP Unit 1 and Unit 2 have altered the traditional definition of "normal working hours." In an effort to reflect changes in work culture, the current NMP site policy allows work schedule configurations such as four-day weeks, every other Friday off, and early or late starting times. As a result, significant numbers of the ERO may be present on site during periods that were previously considered outside normal working hours and conversely, fewer members of the ERO may be present at any one specific time frame during the "normal" work week. While it had been relatively simple to establish controls to assure the availability of the full ERO complement at any time of the normal work day while continuing to meet the SEP time requirement of 60 minutes, the previous assumptions about the 30-minute availability of a full ERO complement during normal work hours and times that had traditionally been considered the normal work day without special scheduling and controls are less easily determined and/or proven.

5. ANALYSIS OF PROPOSED CHANGE

In order to assess the effect of the proposed change, an analysis has been performed considering the functions and timing contained in NMP SEP Revision 15 (the revision approved by the NRC) and NUREG-0654/FEMA-REP-1. The current revision of the NMP SEP (Revision 52) and other considerations were also included in the analysis. The analysis assessed whether:

- The proposal results in the degradation or loss of the capability to perform a function,
- The proposal changes the capability to perform a function in a timely manner as contained in the approved emergency plan, and

- A subject 30-minute augmentation adds benefit, defined as when augmented personnel either (1) perform critical tasks for which on-shift personnel are unavailable, or (2) aid on-shift personnel by relieving them, thus allowing those on-shift staff to perform critical tasks.

5.1 Analysis of the Proposed Change Versus the ERO Requirements in NMP SEP Revision 15 (NRC-Approved Revision)

The following table summarizes, by major functional area, the requirements for ERO staff augmentation within 30 minutes as contained in NMP SEP Revision 15. A complete copy Figure 5.3, "Minimum Staffing for Emergencies," from SEP Revision 15 is shown in Attachment (2).

Major Functional Area	Major Tasks	Position Title	No. Req'd Within 30 Minutes
Notification/Communication	Notifications, and Maintain Communication	Communicator	1
Radiological Accident Assessment and Support of Operational Assessment	On-Site Radiological Assessment	Chemistry and Radiation Protection Supervisor or Designee	1
	Off-Site Surveys	Radiation Protection Tech.	1
	On-Site (Out-of-Plant) Surveys	Radiation Protection Tech.	1
	In-Plant Surveys	Radiation Protection Tech.	1
	Chemistry/Radiochemistry	Chemistry Tech.	1
Plant System Engineering	Technical Support, Operational Accident Assessment	Core/Thermal Hydraulics	1
Repair and Corrective Actions	Repair and Corrective Actions	Mechanical Maintenance	1
	Repair and Corrective Actions	Electrical Maintenance	1
	Repair and Corrective Actions	Instrumentation & Control (I&C) Tech.	1
	Repair and Corrective Actions	Reactor Physics	1
Protective Actions (In-Plant)	Access Control; RP Coverage for Repair, Corrective Actions, Search and Rescue, First Aid & Firefighting; Personnel Monitoring; Dosimetry	Chemistry and Radiation Protection Tech.	1
Personnel Accountability	Personnel Accountability	Personnel Accountability Coordinator/Security Personnel	1

The following analysis assesses the impact of the proposed change on the functions and timing of the approved SEP by major functional area.

5.1.1 Major Functional Area: Notification/Communication

Current Staffing Requirement

Augment the on-shift notification/communication staff by 1 within 30 minutes. The expected function of this responder is to supplement the on-shift communication and notification staff, assisting them with onsite and offsite notifications and other incoming and outgoing communications.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

This function is currently initiated by the Shift Manager and performed by a dedicated auxiliary operator (Communications Aide). The Communications Aide has no other function than to provide the physical communications to state/local and federal authorities until relieved.

In accordance with current guidance, the majority of emergency communications are expected to occur within the first 30 minutes. Time limits for completion of notification to state and local authorities are specifically required by regulation to occur within 15 minutes of declaration of an emergency. Notification of the emergency response organization is required to occur rapidly, typically within the first 15 minutes following declaration.

The Shift Manager's function is to develop/approve the content of the communication with state and local agencies and the NRC. The Shift Manager is relieved of this function by the Emergency Director/Recovery Manager (ED/RM) located in the Emergency Operations Facility (EOF). Thus, the current notification/communications scheme may remain within the Control Room for the first 60 minutes, regardless of the presence of any 30-minute ERO augmentation.

SEP Revision 15, Figure 5.3, Note 3, indicates that the communications aide position would be assumed by one of the auxiliary or radwaste operators. NMP procedure GAP-OPS-01, "Conduct of Operations", provides the details for on-shift staffing requirements. This procedure specifically requires that a communications aide (from each unit) be assigned from among the auxiliary operators and that this individual shall have no other emergency duties.

The communications aide has advanced communications capabilities available such as the radiological emergency communications system (RECS), which permits a single telephone call to reach all required offsite organizations simultaneously. Communications with the NRC are over dedicated telephone lines provided for and maintained by the NRC (Emergency Notification System (ENS) Line). The communications aide is relieved of communications with federal agencies (NRC) by the ENS Communicator and by the Health Physics Network (HPN) Line Communicator in the TSC. The communications aide is further relieved of communications responsibilities with state and local agencies by the Communication Coordinator located in the EOF. All of these augmented ERO positions are required to respond within 60 minutes during off hours but are not precluded from responding earlier if nearby.

NRC notification is required by regulation to occur as soon as possible and in all cases within 1 hour of emergency declaration. Typically, only additional information would be relayed to the offsite agencies within the time period of 30 to 60 minutes as most offsite agencies take at least 1 hour to activate and staff their organizations. Also, as this position is dedicated to notifications/ communications until relieved, there is little additional burden placed upon the communications aide during the added 30 minutes proposed by this revision.

This analysis was validated during the "Northeast Blackout" on August 14, 2003, during which both NMP Units 1 and 2 lost offsite power, declared a Notification of Unusual Event and performed all required notifications using backup methods within requisite timeframes using only on-shift staff.

Conclusion

All required communications/notification functions can continue to be accommodated within the requisite time frames using on-shift resources, and any anticipated tasks can be handled by that resource. In addition, direction and control of any 30-minute augmented resources need to be performed by on-shift resources (i.e., the SM/ED). This may represent an additional burden on the SM/ED without commensurate benefit.

5.1.2 Major Functional Area: Radiological Accident Assessment and Support of Operational Accident Assessment

a. *Major Task: On-Site Radiological Assessment*

Current Staffing Requirement

Augment the on-shift dose assessment staff by 1 within 30 minutes. The function of onsite radiological assessment is to review radiological conditions on-site using data from available instrumentation, assess the impact of changing radiological conditions on emergency classification, assist in accident assessment based upon those changing radiological conditions, and recommend appropriate onsite protective measures.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

All required functions and actions associated with emergency classification, accident assessment and onsite protective action measures are accommodated using on-shift resources. The addition of personnel would be advantageous if they either decreased the burden of the on-shift staff or added substantially to the assessment or mitigation of the emergency. Classification is performed by the Shift Manager using NMP procedures EPIP-EPP-01 and EPIP-EPP-02 for the classification of emergency conditions at NMP Unit 1 and Unit 2, respectively, which utilize the Nuclear Management and Resources Council (NUMARC) NESP-007 emergency classification methodology. This methodology uses readily available and easily recognized plant instrumentation, and associated alarm setpoints combined with event and symptom based emergency action levels to determine the

appropriate emergency classification. The on-shift Radiation Protection technician reports to the control room upon notification of any declared emergency to provide radiological assessment support. The Control room supervisor uses flowcharted symptom based emergency operating procedures (EOPs). These procedures eliminated the need for specific accident assessment. The operating crew performs actions based upon symptoms that are described in the EOPs, not based upon the type of accident.

The Shift Manager uses flowcharts contained within NMP procedure EPIP-EPP-18, "Activation and Direction of the Emergency Plans," which contains the decision making processes by which on-site protective measures are directed. The information needed to accomplish this is simple and deterministic in nature and allows for rapid decision making using readily available information by the SM/ED. Should survey teams be needed, NMP procedure EPIP-EPP-08, "Off-site Dose Assessment and Protective Action Recommendations," utilizes the results of offsite surveys in the dose assessment process, but only after the EOF is activated and the dose assessment staff is fully augmented. This process allows for an adequate briefing, appropriate direction and full analysis of the survey results. In any case, it is not the function of the onsite radiological assessment Chemistry and Radiation Protection Supervisor to provide for this direction and control.

NMP annually drills all shift crews without any ERO augmentation, for a wide spectrum of accidents that result in a general emergency declaration. Several years of data from these evolutions demonstrate satisfactory performance in the conduct of in-plant and out-of-plant radiological dose assessment and protective action recommendation development.

Conclusion

Required onsite radiological accident assessment functions are accommodated by on-shift personnel using appropriate procedures, within required time frames. In addition, direction and control of any 30-minute augmented resources need to be performed by on-shift resources (i.e., the SM/ED). This may represent an additional burden on the SM/ED without commensurate benefit.

b. Major Tasks: Off-Site Surveys and On-Site (Out-of-Plant) Surveys

Current Staffing Requirement

Augment the on-shift survey staff capability by 2 within 30 minutes (one each for offsite and onsite surveys. The function of the offsite and onsite (out-of-plant) survey staff is to assess radiological conditions and provide this data to various assessment staff for use in dose assessment, emergency classification, and protective action functions.

Proposed Change

Require these 30-minute responders to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

All required functions and actions associated with dose assessment, protective action development, and emergency classification are currently accommodated using on-shift resources. The addition of

personnel would be advantageous if they either decreased the burden of the on-shift staff or added substantially to the assessment or mitigation of the emergency. In addition, effective use of these staff assumes the existence of sufficient personnel to brief, direct and utilize the results obtained from the surveys.

Dose Assessment - NMP procedure EPIP-EPP-08 utilizes the results of offsite surveys in the dose assessment process, but only after the EOF is activated and the dose assessment staff is fully augmented. This procedure is consistent with the NUREG-0654 Supplement 3, which details rapid, deterministic methods of protective action development. The existing process allows for an appropriately detailed briefing, appropriate direction, and full analysis of the survey results. Specific data obtained from offsite surveys is not typically incorporated into the on-shift dose assessment process, following the deterministic method of protective action formulation required by and described in NUREG-0654 Supplement 3.

Protective Actions - Flowcharts contained within NMP procedure EPIP-EPP-18 contain the decision-making processes by which on-site protective actions are determined. The information needed to accomplish this is simple and deterministic in nature, which allows for rapid decision making using readily available information. The use of more quantitative data, such as that which would be obtained from offsite or onsite survey teams, would not provide early commensurate benefit until the emergency response organization is fully staffed.

Emergency Classification - NMP procedures EPIP-EPP-01 and EPIP-EPP-02 for the classification of emergency conditions at NMP Unit 1 and Unit 2, respectively, utilize the NUMARC NESP-007 emergency classification methodology. This methodology uses readily available and easily recognized plant instrumentation, combined with event and symptom based emergency action levels to determine the appropriate emergency classification. Though offsite and onsite surveys would result in additional sources of information, such as direct radiation measurements that could be directly applied to emergency classification, it is more likely that other events, system failures or plant instrumentation would lead to the appropriate emergency classification.

The resources needed to effectively brief and direct offsite survey teams and then utilize the data from offsite and onsite survey teams are not, nor are they required to be, available until EOF activation, or 60 minutes into the emergency. The burden to provide for management of these functions falls to the SM/ED.

NMP annually drills all shift crews without any ERO augmentation, for a wide spectrum of accidents that result in a general emergency declaration. Several years of data from these evolutions demonstrate satisfactory performance in the conduct of in-plant and out-of-plant radiological dose assessment and protective action recommendation development.

<u>*Conclusion*</u>

Required offsite and onsite survey functions are most effectively implemented only after sufficient augmented ERO staff are available to safely brief and direct survey staff with more complete context of event development and optimal resource deployment, to make use of the data provided. This occurs after the ERO is fully augmented at 60 minutes. The above analysis shows that the functions of dose assessment, protective action development and emergency classification are accommodated by on-shift staff within required time frames. In addition, direction and control of any 30-minute augmented resources need to be performed by on-shift resources (i.e., the SM/ED). This may

represent an additional burden on the SM/ED without commensurate benefit.

c. *Major Task: In-Plant Surveys*

Current Staffing Requirement

Augment the on-shift in-plant survey staff capability by 1 within 30 minutes. The function of in-plant surveys is to determine dose rates in areas prior to dispatching damage and repair teams to assure the safety of these personnel. Another purpose for these surveys can be to provide confirmation of in-plant dose rates for emergency event classification.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

Personnel accessing the radiologically controlled areas (RCA) at NMP are required by procedure to obtain electronic alarming dosimetry (EAD) prior to entry. This same EAD is also used as a "key" to unlock turnstiles to gain access to the RCA. Radiation work permits (RWPs) establish the necessary preset warnings/alarms associated with the EAD. Specific emergency RWPs have also been developed for use during a declared emergency, which automatically provide the EAD with emergency dose and dose rate alarms. This assures that the person being dispatched to the in-plant areas to perform any function during a declared emergency will be afforded ample warning /alarm prior to exceeding his/her allowed dose or dose rate. Hence, any radiation monitoring or controls that would be provided to personnel entering the plant for mitigative actions (prior to full ERO augmentation) is accommodated by the current dosimetry system, without staff augmentation.

Additionally, sufficient radiological monitoring instrumentation is provided at NMP in areas determined necessary for the operation of the station. The Emergency Action Levels (EALs) take credit for existing installed instrumentation wherever practical. Plant operations personnel are trained to read and utilize that data. The SM/EDs compare existing instrumentation to the EALs and declare the emergency if conditions match or exceed the EAL.

Management of any additional resources remains within the Control Room under the direction of the SM/ED until the remainder of the ERO arrives in the TSC/OSC to provide oversight and control. The addition of augmented ERO staff would result in an additional span of control for the SM/ED until the TSC and OSC were fully staffed.

Conclusion

All required in-plant survey functions are accommodated within the requisite time frames using on-shift resources, and any anticipated tasks can be handled by that resource. In addition, direction and control of any 30-minute augmented resources need to be performed by on-shift resources (i.e., the SM/ED). This may represent an additional burden on the SM/ED without commensurate benefit.

d. Major Task: Chemistry/Radiochemistry

Current Staffing Requirement

Augment the on-shift chemistry/radiochemistry staff by 1 within 30 minutes. The function of this responder is to provide for additional collection and analysis of reactor coolant samples which could then be used to determine the status of the reactor core or assist in determination of emergency classification.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

The addition of personnel would be advantageous if they either decreased the burden of the on-shift staff or added substantially to the assessment or mitigation of the emergency. NMP presently requires an on-shift chemistry technician to be assigned to each unit. The function of the on-shift technician is to assure reactor water chemistry is monitored and maintained as required by Technical Specifications. Sample results obtained using normal processes are analyzed using available site analysis equipment and the results are provided to the Shift Manager. Readings outside the normal range required by Technical Specifications require actions in accordance with the limiting condition for operation (LCO) action statement. NMP procedures EPIP-EPP-01 and EPIP-EPP-02 utilize the NUMARC NESP-007 emergency classification methodology. This methodology uses readily available and easily recognized plant instrumentation, combined with event and symptom based emergency action levels to determine the appropriate emergency classification. At NMP, EALs associated with chemistry sample results are provided which are based upon the Technical Specification LCO values.

The SM/ED will compare existing values to the EALs and if conditions match or exceed the EAL, declare the emergency. Any additional capability provided by an augmented Chemistry responder is fully provided for by the on-shift chemistry technician.

If core damage has occurred prior to coolant sampling, other more easily obtained instrumentation readings (such as in-plant radiation monitors, containment radiation monitors, containment hydrogen/oxygen monitors) and methodologies detailed in NRC Response Technical Manual 96 provide sufficient evidence of the onset of core damage and therefore provide the SM information necessary to make emergency classifications.

NMP annually drills all shift crews without any ERO augmentation, for a wide spectrum of accidents that result in a general emergency declaration. Several years of data from these evolutions demonstrate satisfactory performance in the conduct of in-plant and out-of-plant radiological dose assessment and protective action recommendation development.

Conclusion

All required radiological accident assessment functions which may be provided for by an augmented responder chemistry technician are accommodated within the requisite time frames using on-shift resources, and any anticipated tasks can be handled by that resource. In addition, direction and control of any 30-minute augmented resources need to be performed by on-shift resources (i.e., the SM/ED). This may represent an additional burden on the SM/ED without commensurate benefit.

5.1.3 Major Functional Area: Plant System Engineering

a. Major Task: Technical Support, Operational Accident Assessment – Core/Thermal Hydraulics

Current Staffing Requirement

Augment the on-shift core/thermal hydraulics capability by 1 within 30 minutes. The function of this responder is to provide confirmation of adequacy of core cooling, maintenance of coolable core geometry, and to verify that actual plant response to the event is as expected.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

The Shift Technical Advisor (STA) is a function which, as provided for in NUREG-0654, Table B-1 (the double-asterisked note), can be performed by personnel on shift who have other functions. NMP procedure GAP-OPS-01, "Conduct of Operations," requires each unit to have a Shift Manager (SRO licensed) that is qualified as an Emergency Director and maintains oversight of plant operations; a Control Room Supervisor (SRO licensed) who directs the actions of the licensed and non-licensed operators in an emergency, including the Emergency Operating Procedures; and a qualified STA to assure that plant response is as expected and that the core remains in a coolable geometry. Hence, NMP practice exceeds the original commitment for this major task.

The use of flowcharted, symptom based emergency operating procedures, severe accident procedures, and computerized/automated core management and calculation routines (3-D Monicore), combined with current shift staffing, provides for adequate functional oversight to assure that core thermal hydraulic limits are not exceeded and that core coolable geometry is maintained.

Conclusion

All required core/thermal hydraulic assessment functions are accommodated within the requisite time frames using on-shift resources, and any anticipated tasks can be handled by that resource. In addition, direction and control of any 30-minute augmented resources need to be performed by on-shift resources (i.e., the SM/ED). This may represent an additional burden on the SM/ED without commensurate benefit.

5.1.4 Major Functional Area: Repair and Corrective Actions

a. Major Task: Repair and Corrective Actions – Mechanical Maintenance, Electrical Maintenance, Instrumentation and Control (I&C) Technician

Current Staffing Requirement

Augment the on-shift capability by 1 Mechanical Maintenance technician, 1 Electrical Maintenance technician, and 1 I&C technician within 30 minutes. The function of these positions is to provide for minor or limited scope damage repair and corrective actions associated with mechanical, electrical, and I&C equipment.

Proposed Change

Require these 30-minute responders to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

The function of these positions is to provide for minor or limited scope damage repair and corrective actions such as:

- Mechanical - Identification and operation of faulty valves, clogged filters, packing and/or seal adjustments, and/or hands off troubleshooting.
- Electrical - Identification and correction of tripped breakers and overloads and/or hands off troubleshooting.
- I&C - Identification and correction of controller and setpoint mal-adjustment, calibration, and surveillance necessary for accident mitigation and/or hands off troubleshooting.

These are the only activities that can be accomplished in the time frame in question.

NMP procedure GAP-OPS-01 requires that shift staffing consist of 2 non-licensed operators (NLOs) who are required to have the capability to perform basic corrective action functions such as detailed above (licensed operators may also fill this role). These two NLOs are required by this same procedure to have no other Emergency Planning duties (such as fire brigade or communications aide). Thus, the addition of these augmented responders does not substantially add to the capability to perform corrective actions prior to the activation of the TSC and OSC. Management of these additional resources remains within the Control Room under the direction of the SM/ED until the remainder of the ERO arrives in the TSC/OSC to provide for the oversight and control.

Conclusion

All required emergency mechanical, electrical, and I&C maintenance functions that can likely be accomplished early in the emergency (within 30 minutes following declaration) are accommodated within the requisite time frames using on-shift resources, and any anticipated tasks can be handled by those resources. In addition, direction and control of any 30-minute augmented resources need to be

performed by on-shift resources (i.e., the SM/ED). This may represent an additional burden on the SM/ED without commensurate benefit.

b. Major Task: Repair and Corrective Actions – Reactor Physics

Current Staffing Requirement

Augment the on-shift reactor physics capability by 1 staff member within 30 minutes. This function mimics the "Core/Thermal Hydraulics" position analyzed above.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

The functional analysis provided for the "Core/Thermal Hydraulics" position applies here as well. Further, the function of this position would be to fill the STA functions, which NMP SEP Revision 15 assumes to be filled as a shared duty by the Assistant Station Shift Supervisor (the present title for this position is Control Room Supervisor). In practice, the STA position is an on-shift assigned position required by GAP-OPS-01. NMP practice renders the 30-minute staff augmentation unnecessary.

Conclusion

The 30-minute augmentation of this function is not necessary since the function is covered by existing on-shift staff. In addition, computerized core management functions and operator aides allow all required functions to be completed by on-shift staffing.

5.1.5 Major Functional Area: Protective Actions (In-Plant)

Major Tasks: Access Control; RP Coverage for Repair, Corrective Actions, Search and Rescue, First Aid and Firefighting; Personnel Monitoring; Dosimetry

Current Staffing Requirement

Augment the on-shift capability by 1 health physics technician within 30 minutes. The function of these additional resources is to provide radiation protection oversight of the on-shift complement of personnel and augmented personnel who are expected to respond to emergency events for damage repair, corrective actions, search and rescue, first aid, fire fighting and personnel monitoring. They can also be expected to provide for access control and the issuance of dosimetry.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

With the advent and use of electronic alarming dosimeters (EADs), personnel support for the above activities is no longer required. On-shift personnel are able to access radiologically controlled areas (RCA) of the station using the EADs, normal radiation work permits (RWPs), and emergency RWPs (for damage control and repair, search and rescue, first aid and firefighting) as described in Section 5.1.2.c above.

Personnel monitoring is performed by each individual as they leave the radiologically controlled area (RCA). Personnel portal monitors are staged at each RCA ingress/egress point. Personnel who alarm these portal monitors are fully capable of self monitoring to determine the exact location and extent of contamination. Should contamination be extensive, either of the on shift Radiation Protection Technicians (1 per unit) can be dispatched to the access area to provide support for additional monitoring and/or decontamination, including control of contaminated injured personnel.

Dosimetry in this instance is taken to mean the issuance of such devices that are now self-issued and tracked via computer log in/log out at the RCA access points. Operations personnel typically sign in to their assigned radiation work permits at the beginning of their assigned shift and sign out after turnover at the end of their shift. This permits rapid ingress/egress to the RCA if the need arises. Actual dose readings as well as the highest dose rate encountered can quickly be determined from the EAD and/or computer log. Offsite agency personnel (such as offsite fire department and medical personnel) responding to NMP are issued dosimetry by security force members assigned to vehicle access as they enter the site through the vehicle security access. These responders are trained to read their dosimeters and respond to various dose and dose rate limits without the intervention of NMP personnel.

Management of these additional resources remains within the control room under the direction of the SM/ED until the remainder of the ERO arrives in the TSC/OSC to provide for the oversight and control.

Conclusion

All required radiation protection functions are accommodated within the requisite time frames using on-shift resources, and that any anticipated tasks can be handled by that resource. In addition, direction and control of any 30-minute augmented resources need to be performed by on-shift resources (i.e., the SM/ED). This may represent an additional burden on the SM/ED without commensurate benefit.

5.1.6 Major Functional Area: Personnel Accountability

Current Staffing Requirement

Augment this capability by 1 within 30 minutes. The function of this additional resource is to provide for accountability of personnel remaining within the protected area to assure that missing/injured personnel are rapidly identified and actions are initiated to locate these personnel.

Proposed Change

Require this 30-minute responder to respond within 60 minutes. There would be no augmentation required at 30 minutes. However, this does not preclude ERO staff from responding more rapidly if they are nearby.

Analysis

NMP utilizes a computerized accountability system. Personnel are required to "card-in" to gain access to the protected area. By carding in, each person is then logged into a computer database which is maintained by the security computer. Upon initiation of accountability, all personnel are trained and required to card in to an accountability card reader. These card readers are located in multiple locations throughout the protected area. The Security Site Supervisor then initiates the computer protocol for accountability, which instructs the computer to compare the list of personnel within the protected area to those that have carded into the accountability card readers and print out a list of missing personnel. This list is then reported to the SM/ED for initiation of search and rescue if needed. In accordance with NUREG-0654, the process to identify the missing personnel must be completed within 30 minutes. If a security event is in progress, accountability is not initiated until it is safe to do so, as described in NMP procedure EPIP-EPP-18. It is reasonable to assume that when accountability is desired, a Security Site Supervisor will be available to perform that function. The addition of one person to aid in or perform this function does not affect the ability to perform the function within the required time frame.

Conclusion

All required accountability functions are accommodated within the requisite time frames using on-shift resources, and any anticipated tasks can be provided by that resource.

5.1.7 Overall Conclusion of the Analysis of the Proposed Change Versus the ERO Requirements in NMP SEP Revision 15 (NRC-Approved Revision)

The analysis indicates that all required actions contained in NRC-approved SEP Revision 15 can be accommodated by on-shift staff within the requisite time frames and that the proposed change to eliminate required augmentation of the on-shift ERO staff within 30 minutes does not result in degradation or loss of the capability to perform a function or perform a function in a timely manner, as described in the NRC-approved SEP. Further, the addition of augmented personnel to the span of control of the on-shift staff may represent an additional burden without commensurate benefit.

5.2 Analysis of the Proposed Change Versus NUREG-0654 Functional Requirements for On-shift and Augmented ERO

Attachment (3) details all functions required by NUREG-0654 for on-shift and augmented ERO. The analysis documented in Attachment (3) was performed to assure that any functions required by NUREG-0654 but not contained in either Table B-1 of NUREG-0654 or NMP SEP Revision 15 were assessed against the proposed change. The attachment demonstrates that all functions or timing of functions are assessed in the analysis of the proposed change against NMP SEP Revision 15.

5.3 Analysis of the Proposed Change Versus the Current NMP SEP Revision (Revision 52)

The current revision of the NMP SEP (Revision 52) states that the TSC and OSC will be staffed within 30 minutes during normal working hours or within 60 minutes during off-hours. In accordance with NMP procedure NIP-EPP-01, "Emergency Response Organization Expectations and Responsibilities," ERO members are expected to respond immediately to their emergency facility when notified of an emergency. Since the TSC and OSC are located on site, it can reasonably be expected that the TSC and OSC will be fully staffed within 30 minutes during normal working hours. Hence, there is no effect on the ability to staff the TSC and OSC consistent with the current NMP SEP. In addition, the analysis in Section 5.1

above indicates that all required actions contained in the NRC-approved SEP (Revision 15) can be accommodated by on-shift staff within the requisite time frames. Thus, the proposed change does not result in degradation or loss of the capability to perform a function or perform a function in a timely manner, as contained in the current SEP, and does not constitute a decrease in effectiveness of the SEP.

5.4 Additional Considerations

5.4.1 Security-Related Issues

In response to the events of September 11, 2001, a number of issues related to emergency planning provisions have been identified. Review of these issues has determined that no requirements for additional on-shift or augmented ERO staff have been imposed, and implementing actions associated with these issues do not rely on augmented responders in any time frame, as discussed below.

a. Implementation of the two person vital area access rules (NRC Order EA-02-026 dated February 25, 2002) - Implementation of the two person vital area access rules is accomplished immediately and thus is accommodated by on-shift staffing. Therefore support from augmented personnel is unnecessary.

b. NRC Threat Advisory and Protective Measures System (Regulatory Issue Summary 2002-12A) - Implementing actions for a change in the Homeland Security Advisory System threat level involve notifications to plant management which are accomplished using available on-shift personnel. Also, actions associated with this effort typically take place prior to a declared emergency. Therefore support from augmented personnel is unnecessary.

c. Accelerated NRC notifications (NRC Bulletin 2005-02) - Accelerated NRC notifications are expected to be completed within 15 minutes, and thus are completed by on-shift staff. Therefore support from augmented personnel is unnecessary.

d. Accelerated onsite protective measures (NRC Bulletin 2005-02) - Accelerated onsite protective measures are implemented by on-shift personnel within a few minutes of notification. Therefore support from augmented personnel is unnecessary.

e. Actions for Large Area Loss (NRC Order EA-02-026, Section B.5.b) - Actions for large area losses require response by the ERO to the alternate emergency duty location. Immediate response to the scene would be by local fire departments, law enforcement and emergency medical service personnel. Any augmented responders would report to the alternate emergency duty location for assurance of safety.

f. Ensure no collateral duties between emergency responders (NRC Order EA-02-026, Section B.5.d) - There are no on-shift positions at NMP that have collateral duties.

    - The communications aide at each unit is dedicated and has no concurrent duties during an emergency. All communications aides have been trained and tested to provide all communications/notifications singularly (without assistance from the opposite unit) and also with assistance from the opposite unit. This capability was validated during the "Northeast Blackout" on August 14, 2003, during which both NMP Units 1 and 2 lost offsite power, declared a Notification of Unusual Event and performed all required notifications using backup methods within requisite timeframes using only on-shift staff.

- The Shift Technical Advisor (STA) position is dedicated; thus, the Control Room Supervisor (formerly the Assistant Station Shift Supervisor) has no concurrent duties.
- The fire brigade members are dedicated and thus have no concurrent duties.
- The security force is a dedicated force and thus there are no concurrent duties.
- The immediate notification of the NRC in regards to security attacks/threats is performed by the Security Site Supervisor and/or by the Shift Manager. In either case, the limited amount of information required to be communicated produces minimal burden.

5.4.2 Emergency Response Facility Staffing Expectations

In accordance with NMP procedure NIP-EPP-01, "Emergency Response Organization Expectations and Responsibilities," ERO members are expected to respond immediately to their emergency facility when notified of an emergency. For an emergency during normal working hours, the actual response by those ERO members on-site is unaffected by the proposed SEP change.

The overall methodology to assure timely ERO staffing has been enhanced since the NRC approved SEP Revision 15. Specifically, ERO duty teams, each with designated on-call dates and times, have been established. Also, ERO notification/communications capabilities are significantly more diverse through the use of automated calling centers and the use of pagers. There is presently no reliance upon rosters and telephone calls to each ERO individual, as described in SEP Revision 15. Consistently satisfactory performance both in ERO augmentation drills and ERO notification and staffing for actual emergencies provides validation of this assessment.

5.4.3 ERF Activation Time

SEP Revision 15 indicated that staffing would be achieved within 30 to 60 minutes from notification. Thus, the ERO response time is measured from the time of notification. The proposed change does not alter this defined start time. As described in the current SEP, ERF activation is indicated when the facility has become fully operational. NMP procedure EPIP-EPP-13, "Emergency Response Facilities Activation and Operation," defines facility activation and the expected times. This procedure will be revised as appropriate to incorporate the proposed timing change, following NRC approval.

6. *CONCLUSIONS*

The proposed change eliminates existing requirements for augmenting the on-shift ERO within 30 minutes and revises the NMP SEP and associated emergency plan implementing procedures to require augmentation of the on-shift ERO within 60 minutes. NMPNS has evaluated this proposed change in accordance with 10 CFR 50.54(q). The evaluation determined that the proposed SEP change continues to meet the planning standards of 10 CFR 50.47(b) and the requirements of Appendix E of 10 CFR 50, and that there is no decrease in effectiveness of the SEP. This conclusion is based on the following:

- There is no significant detriment to SEP implementation by eliminating the requirements for 30-minute response.
- The functions that would be performed by 30-minute responders are performed adequately by on-shift staff within any requisite time frames. Thus, there is no degradation or loss of capability to perform a function in a timely manner, as defined in the SEP.

- The addition of augmented ERO staff without the established command and control structure that would be present with the fully augmented ERO represents additional command and control burden on the on-shift staff without commensurate benefit.

7. SEP CHANGES

Changes to the current SEP to implement the proposed change are shown in Attachment (4).

8. REFERENCES

a. NUREG-1047, Safety Evaluation Report Related to Operation of Nine Mile Point Nuclear Station, Unit No. 2, Supplement No. 3 dated July 1986, Section 13.3.4

9. REGULATORY COMMITMENTS

The following table identifies those actions committed to by NMPNS in this submittal. Any other statements in this submittal are provided for information purposes and are not considered to be regulatory commitments.

REGULATORY COMMITMENTS	DUE DATE
NMP procedures NIP-EPP-01 and EPIP-EPP-13 will be revised as appropriate to incorporate the proposed ERF timing change.	Following NRC approval of the proposed SEP changes.

ATTACHMENT (2)

FIGURE 5.3 FROM NRC-APPROVED SITE EMERGENCY PLAN (SEP) REVISION 15

SEP Revision 15, Figure 5.3
Minimum Staffing for Emergencies

Major Functional Area	Location	Major Tasks	Position Title or Expertise	On Shift	Additions Within 30 Minutes	Additions Within 60 Minutes
Plant Operations & Assessment of Operational Aspects	CR		Station Shift Supervisor (SRO)	1	—	—
			Asst Station Shift Supv (Note 4)	1*	—	—
			Chief Shift Operator (RO)	1	—	—
			Nuclear Operator(RO)	1	—	—
	Plant Area		Auxiliary Operators	2	—	—
Emergency Direction & Control (Note 1)	TSC	Overall Direction & Control (for Plant)	General Superintendent (Note 2)	1*	—	1
	EOF	Overall direction & Control, Interface with Offsite Authorities, Protective Action Recommendations , Off-site Dose Assessment	V.P. for Nuc. Gen.	—	—	1
Notification/ Communication	CR, TSC	Notify Licensee, State, Local & Federal Personnel & Maintain Communication	Communicator (Note 3)	1*	1	2
Radiological Accident Assessment and Support of Operational Accident Assessment	TSC, OSC, EOF	Off-Site Dose Assessment	Chemistry & Radiation Protection Superintendent or Designee	1*	—	2
		On-Site Radiological Assessment	Chemistry & Radiation Protection Supervisor or Designee	1*	1	—
		Off-Site Surveys	Radiation Protection Technician	—	1	3

SEP Revision 15, Figure 5.3
Minimum Staffing for Emergencies

Major Functional Area	Location	Major Tasks	Position Title or Expertise	On Shift	Additions Within 30 Minutes	Additions Within 60 Minutes
		On-Site (Out-of-Plant) Surveys	Radiation Protection Technician	---	1	1
		In-Plant Surveys	Radiation Protection Technician	1	1	1
		Chemistry /Radiochemistry	Chemistry Technician	1	1	1
Plant System Engineering	CR, TSC	Technical Support, Operational Accident Assessment	Shift Technical Advisor (Note 4)	1	---	---
			Core/Thermal Hydraulics	---	1*	1
			Electrical	---	---	1
			Mechanical	---	---	1
Repair and Corrective Actions	OSC	Repair and Corrective Actions	Mechanical Maintenance	1*	1	1
			Rad Waste Operator	2	---	---
			Electrical Maintenance	1*	1	1
			Instrument and Control (I&C) Technician	---	1	---
			Reactor Physics	---	1	---
Protective Actions (In-Plant)		Radiation Protection a. Access Control b. RP Coverage for Repair, Corrective Actions, Search and Rescue, First-Aid & Fire Fighting c. Personnel Monitoring d. Dosimetry	Chemistry and Radiation Protection Technician	2*	1	3

SEP Revision 15, Figure 5.3
Minimum Staffing for Emergencies

Major Functional Area	Location	Major Tasks	Position Title or Expertise	On Shift	Additions Within 30 Minutes	Additions Within 60 Minutes
Fire Fighting		----	----	5	Local Support	Local Support
Rescue Operations		---	----	5*	Local Support	Local Support
Site Access Control		Security, Fire Fighting Communications	Security Personnel	All per Security Plan	---	---
Personnel Accountability	CR, OSC	Personnel Accountability	Personnel Accountability Coordinator/Operations Personnel	1*	1	---
			TOTALS	15	12	20

NOTES:

* May be provided by shift personnel assigned other functions.

1. Overall authority of the response will be assumed by Corporate Emergency Director/Recovery Manager when all centers are full manned. Direction of minute-to-minute facility operations remains with General Superintendent. Direction and coordination of off-site assignment and interface with off-site authorities remains with Corporate Emergency Director/Recovery Manager in the Emergency Operations Facility.
2. Position initially assumed by the Station Shift Supervisor until relieved.
3. Position initially assumed by one of the Auxiliary or Radwaste Operators.
4. Assistant Shift Supervisor assumes the position of the Shift Technical Advisor when the emergency is declared.

ATTACHMENT (3)

EVALUATION OF NUREG-0654 FUNCTIONAL REQUIREMENTS FOR ON-SHIFT AND AUGMENTED ERO

Nine Mile Point Nuclear Station, LLC
August 31, 2006

NUREG-0654 Section II		NMP Compliance		
Item No.	**Function and Timing Requirement**	**SEP Rev. 15 Section No.**	**Function Covered in SEP Rev. 15 by an On-shift OR 30-min Responder?**	**Comments**
A.1.d	Designation of Organization Director	5.2.1	YES	Function is provided by on-shift responder. There is no proposal to change this commitment.
A.1.e	24 Hour Response/Communication	5.2.2	YES	Function is provided by on-shift responder. There is no proposal to change this commitment.
B.1	Provision for Onsite Shift Emergency Organization	Fig. 5.1	YES	Function is provided by on-shift responder. There is no proposal to change this commitment.
B.2	Designation of Onsite Emergency Coordinator	5.2.1	YES	Function is provided by on-shift responder. There is no proposal to change this commitment.
B.3	Line of succession for the Emergency Coordinator	5.2.1	YES	Function is provided by on-shift responder. There is no proposal to change this commitment.
		5.2.2b	YES	
		5.2.5.1	YES	
B.4	Functional Responsibilities of the Emergency Coordinator	5.2.1, 5.2.5.1	YES	Function is provided by on-shift responder. There is no proposal to change this commitment.
B.5	Functional assignments, titles, tasks, and timing	Fig. 5.1, Fig. 5.2	YES	See analyses in Sections 5.1.1 through 5.1.6 of Attachment (1).
B.7	Corporate level support and Table B-1	Fig. 5.1, Fig. 5.2	NO	This item applies to the 60-120 minute commitment for corporate level response only. There is no proposal to change this commitment.
E.1	Bases for Notification/Verification	6.2.2	YES	See analysis in Section 5.1.1 of Attachment (1).
E.2	Personnel Notification/Alerting/ Mobilization	6.2.3	YES	See analysis in Section 5.1.1 of Attachment (1).

NUREG-0654 Section II		NMP Compliance		
Item No.	**Function and Timing Requirement**	**SEP Rev. 15 Section No.**	**Function Covered in SEP Rev. 15 by an On-shift OR 30-min Responder?**	**Comments**
E.3	Initial Emergency Message Content	6.2.1	YES	See analysis in Section 5.1.1 of Attachment (1).
E.4 & 4.a-n	Provisions for Content of Plant Follow up Messages	6.2.1	YES	See analysis in Section 5.1.1 of Attachment (1).
E.6	Means for Population Notification	6.2.2	YES	See analysis in Section 5.1.1 of Attachment (1).
		6.3.4	YES	See analysis in Section 5.1.1 of Attachment (1).
F.1a	24 Hour Notification/Activation of State and County Emergency Response	5.2.2	YES	See analysis in Section 5.1.1 of Attachment (1).
		7.1.7	YES	See analysis in Section 5.1.1 of Attachment (1).
		7.1.8	YES	See analysis in Section 5.1.1 of Attachment (1).
F.1.b	Communications with State/County	7.2.3	YES	See analysis in Section 5.1.1 of Attachment (1).
F.1.c	Communications with Federal Emergency Response Organizations	7.2, Fig. 6.2	YES	See analysis in Section 5.1.1 of Attachment (1).
H.4	Timely Activation/Staffing of ERFs/EOCs	5.2	YES	See analysis in Section 5.1.1 of Attachment (1).
I.8	Capability for Assessment of Actual/Potential Magnitude and Location of Radiological Hazards	6.4.1	YES	See analyses in Sections 5.1.2.a, 5.1.2.b, and 5.1.2.c of Attachment (1).
		6.5	YES	See analyses in Sections 5.1.2.a, 5.1.2.b, and 5.1.2.c of Attachment (1).

NUREG-0654 Section II		NMP Compliance		
Item No.	**Function and Timing Requirement**	**SEP Rev. 15 Section No.**	**Function Covered in SEP Rev. 15 by an On-shift OR 30-min Responder?**	**Comments**
J.5	Accountability for Onsite Personnel	6.7.1.c	YES	See analysis in Section 5.1.6 of Attachment (1).
J.7	Prompt Notification of Offsite Authorities - PARs	6.2.2	YES	See analysis in Section 5.1.1 of Attachment (1).
		6.3.4	YES	See analysis in Section 5.1.1 of Attachment (1).
K.1.a - g	Onsite Exposure Guidelines - Removal of Injured Persons	6.7.1e	YES	See analysis in Section 5.1.5 of Attachment (1).
	Onsite Exposure Guidelines - Removal of Injured Persons	6.7.1.f	YES	See analysis in Section 5.1.5 of Attachment (1).
K.3.a, b	Provide for 24 Hour/Day Dosimetry	6.7.1.f	YES	See analysis in Section 5.1.5 of Attachment (1).
L.2	Onsite First Aid Capability	6.8.2	YES	See analysis in Section 5.1.5 of Attachment (1).
		7.5	YES	See analysis in Section 5.1.5 of Attachment (1).

ATTACHMENT (4)

PROPOSED CHANGES TO THE CURRENT SEP (MARK-UP)

Page 5-2 (Section 5.2)

Page 5-28 (Table 5.1 deleted – replaced with new Table 5.1)

Page 5-29 (Table 5.2 deleted – replaced with new Table 5.1)

Table 5.1 (New – replaces existing Tables 5.1 and 5.2. The markup shows the proposed changes from Figure 5.3 in SEP Revision 15.) (3 sheets)

Page 7-8 (Section 7.3.3.b)

5.1.2 Station Responsibility During Off-Normal Working Hours (NUREG 0654 II.B.1)

During off-normal working hours, the SM have overall responsibility for the site and safe operation of their respective units. Selected management personnel are on-call and may be reached through the use of a personal page (beeper) if an SM needs to notify them of an event that requires technical consultation or requires additional personnel. However, it is the on-duty SM who has the responsibility and authority to declare an emergency. Upon declaring an emergency, the SM immediately becomes the SM/ED.

In the event of an emergency declaration due to an initiating condition affecting both Unit 1 and Unit 2, both Unit's SMs will confer and determine:

- The Unit with the higher emergency classification will become the SM/ED.
- If emergency classification levels are equal, the SM first notified will become the SM/ED.
- If there is any question as to who should initiate the Site Emergency Plan, the Unit 1 SM shall assume the SM/ED duties.

5.2 ON-SITE EMERGENCY RESPONSE ORGANIZATION
(NUREG 0654 II.A.1.e, II.A.4, II.B.1, II.B.5, II.F.1.a, II.H.4)

The Nine Mile Point Nuclear Station On-Site Emergency Response Organization (ERO) begins with the on-shift crew and may expand to include other personnel as they are needed and available, or as required by the emergency classification level. The Nine Mile Point ERO is consistent with the number and type of personnel required by NUREG 0654, Table B1. (See Table 5.1 ~~and 5.2~~)

Initial staffing of the ERO consists of the on- shift crew for each unit under the direction of a SM , and would provide initial assessment of and response to an emergency condition.

Typical on-shift staffing is shown in Figure 5.1. Specific on-shift configuration is detailed in the USAR/UFSAR. An augmented ERO may be activated by the SM at any time, but activation is required at an Alert emergency classification or higher. The augmented ERO is staffed by Nuclear Division staff and is capable of handling large scale and/or long term emergencies. Typical ERO positions by facility are depicted in Figures 5.2 through 5.5. The number of personnel in each position may be increased using qualified ERO members as deemed necessary. Specific ERO configuration is detailed in NIP-EPP-01.

~~During normal working hours, the TSC and OSC should be staffed within 30 minutes, and the EOF and JNC should be staffed within 60 minutes. During off-hours,~~ all emergency facilities will be staffed within 60 minutes. of notifications

If an affected Unit declares an Alert or higher emergency classification, the emergency organization for that unit staffs in accordance with established procedures, and the affected Unit takes the lead in NMPNS' response to the emergency.

(Replaced with New Table 5.1)

Table 5.1
Comparison of NUREG 0654 Staffing Requirements to Minimum NMP Shift Staffing

NUREG 0654 TABLE B-1			NMP SHIFT STAFF PER UNIT
Major Functional Area	Major Tasks/Position Title or Expertise	Number Required	
Plant operations and Assessment of Operational Aspects	Shift Supervisor (SRO)	1	SM (1)
	Shift Foreman (SRO)	1	CRS (1)
	Control Room Operators	2	CSO/CR E (2)
	Auxiliary Operators	2	AO's (2)
Emergency Direction and Control	Shift Technical Advisor, Shift Supervisor, or designated facility manager	1**	SM/ED (1)
Notification and communication	Notify licensee, State , local and Federal personnel and maintain communication	1	Communications Aide (1)
Radiological accident assessment and support of operational accident assessment	In-plant surveys	1	On Shift RP Tech (1)
	Chemistry/Radiochemistry	1	On shift Chem Tech
Plant system engineering, repair and corrective actions	Shift Technical Advisor	1	STA (1)
	Repair and corrective actions: mechanical maintenance/Rad Waste operator	1**	On Shift Operator
	Repair and corrective actions: Electrical maintenance/ I&C	1**	On Shift Operator
In-plant protective actions	Access control, Damage repair support, Personnel monitoring, Dosimetry	1**	
Fire Fighting	Fire Brigade	per Tech Specs	Fire Brigade (5 for site)
Rescue Operations and First Aid	Fire Brigade	2**	Fire Brigade
	Total required:	10*	Total actual: (10) Does not include fire brigade members

** May be provided by shift personnel assigned other functions.
* Fire Brigade numbers are consistent with requirements of USAR/UFSAR for the site

(Replaced with New Table 5.1)

Table 5.2
Comparison of NUREG 0654 Staffing Requirements to Augmented NMP ERO Staffing

NUREG 0654 TABLE B-1			NMP ERO Position and Number
Major Functional Area	Major Task	ERO Number Required	
Notification and communication	Notify licensee, State , local and Federal personnel and maintain communication	3	Comm. Coordinator (EOF), ENS Communicator (TSC), HPN Communicator (TSC) Total of 3
Radiological accident assessment and support of operational accident assessment	EOF Director	1	Emergency Director (1)
	Offsite dose assessment	1	ODAM (1)
	Offsite surveys	4	RP Techs for downwind and in plant surveys (8)
	Onsite (out-of-plant) surveys	2	
	In-plant surveys	2	
	Chemistry/Radiochemistry	1	Chem Tech or Chem Supervisor (1)
Plant system engineering, repair and corrective actions	Technical support: Core/thermal hydraulics	1	NED Staff : Fuels (1) or Reactor Analyst (1)
	Technical support: Electrical	1	NED Staff : Electrical (1)
	Technical support: Mechanical	1	NED Staff : Mechanical (1)
	Repair and corrective actions: Mech. Maint.	1	Damage Control Team: Mechanical (3)
	Repair and corrective actions: Rad Waste operations	1	Rad Waste Operator (call-in or from unaffected unit) (1)
	Repair and corrective actions: Elect. Maint.	2	Damage Control: Electrical (3)
	Repair and corrective actions: I&C	1	Damage Control Team: I&C (3)
In-plant protective actions	Access control, Damage repair support, Personnel monitoring, Dosimetry	4	RP Techs for support (3) (can use RP Techs from downwind/inplant survey teams)
Fire Fighting	Fire Fighting	Local Support	Local Support
	Total required:	26	Total actual: 32

*Does not include on-shift staffing

Table 5.1 (New)
Minimum Staffing for Emergencies

Major Functional Area	Location	Major Tasks	Position Title or Expertise	On Shift	Additions Within 30 Minutes	Additions Within 60 Minutes
Plant Operations & Assessment of Operational Aspects	CR		Shift Manager (SRO)	1	---	---
			Control Room Supv. (SRO) (Note 4)	1*	---	---
			Chief Shift Operator (RO)	1	---	---
			Nuclear Operator(RO)	1	---	---
	Plant Area		Auxiliary Operators	2	---	---
Emergency Direction & Control (Note 1)	TSC	Overall Direction & Control (for Plant)	TSC Manager	1*	---	1
	EOF	Overall direction & Control, Interface with Offsite Authorities, Protective Action Recommendations , Off-site Dose Assessment	Emergency Director / Recovery Manager (Note 2)	---	---	1
Notification/ Communication	CR, TSC	Notify Licensee, State, Local & Federal Personnel & Maintain Communication	Communicator (Note 3)	1*	~~1~~	~~2~~ 3
Radiological Accident Assessment and Support of Operational Accident Assessment	TSC, OSC, EOF	Off-Site Dose Assessment	Offsite Dose Assessment Manager Dose Assessment Staff	1*	---	2
		On-Site Radiological Assessment	Radiological Assessment Manager	1*	~~1~~	1
		Off-Site Surveys	Radiation Protection Technician	---	~~1~~	~~3~~ 4

Table 5.1 (New)
Minimum Staffing for Emergencies

Major Functional Area	Location	Major Tasks	Position Title or Expertise	On Shift	Additions Within 30 Minutes	Additions Within 60 Minutes
		On-Site (Out-of-Plant) Surveys	Radiation Protection Technician	—	~~1~~	~~1~~ 2
		In-Plant Surveys	Radiation Protection Technician	1	~~1~~	~~1~~ 2
		Chemistry /Radiochemistry	Chemistry Technician	1	~~1~~	~~1~~ 2
Plant System Engineering	CR, TSC	Technical Support, Operational Accident Assessment	Shift Technical Advisor (Note 4)	1	—	—
			Core/Thermal Hydraulics (Note 5)	—	~~1~~*	~~1~~ 2
			Electrical	—	—	1
			Mechanical	—	—	1
Repair and Corrective Actions	OSC	Repair and Corrective Actions	Mechanical Maintenance	1*	~~1~~	~~1~~ 2
			Rad. Waste Operator	2	—	—
			Electrical Maintenance	1*	~~1~~	~~1~~ 2
			Instrument and Control (I&C) Technician	—	~~1~~	1
			Reactor Physics (Note 5)	—	~~1~~	1
Protective Actions (In-Plant)		Radiation Protection a. Access Control b. RP Coverage for Repair, Corrective Actions, Search and Rescue, First-Aid & Fire Fighting c. Personnel Monitoring d. Dosimetry	Chemistry and Radiation Protection Technician	2*	~~1~~	~~3~~ 4

Table 5.1 (New)
Minimum Staffing for Emergencies

Major Functional Area	Location	Major Tasks	Position Title or Expertise	On Shift	Additions Within 30 Minutes	Additions Within 60 Minutes
Fire Fighting		----	----	5	Local Support	Local Support
Rescue Operations		---	----	5*	Local Support	Local Support
Site Access Control		Security, Fire Fighting Communications	Security Personnel	All per Security Plan	---	---
Personnel Accountability	CR, OSC	Personnel Accountability	Personnel Accountability Coordinator/Operations Personnel	1*	~~1~~	1
			TOTALS	15	~~13~~	~~20~~ 33

NOTES:

* May be provided by shift personnel assigned other functions.

1. Overall authority of the response will be assumed by the Emergency Director / Recovery Manager when all centers are full manned. Direction of minute-to-minute facility operations remains with the TSC Manager. Direction and coordination of off-site assignment and interface with off-site authorities remains with the Emergency Director / Recovery Manager in the Emergency Operations Facility.
2. Position initially assumed by the Shift Manager until relieved.
3. Position initially assumed by one of the Auxiliary or Radwaste Operators.
4. Control Room Supervisor assumes the position of the Shift Technical Advisor when the emergency is declared.
5. Provided by the Shift Technical Advisor, a Reactor Analyst, and a Fuels Engineer.

4) Offsite Radiological Monitoring Systems (NUREG 0654 II.H.7)

There are approximately nine offsite radiological monitoring stations. These stations surround the plant and are described in the ODCM. Each of these monitoring stations is designed to continuously collect particulate and iodine air samples, and each has the capability for collecting precipitation samples, if required.

5) Emergency Radiological Survey Teams (NUREG 0654 II.H.12, II.I.8)

In addition to the monitoring capabilities provided by the fixed assessment systems, survey teams may be dispatched on-site and off-site to take direct radiation readings and collect samples for field or laboratory evaluation in the field. ~~During normal hours,~~ survey team members are notified through normal station communications systems, and survey teams can be deployed within approximately 30 minutes. ~~During off-hours, survey team members are notified through~~ the standard call-out procedure by telephone or radio activated beepers. ~~Deployment time during off-hours is~~ approximately 60 minutes ~~from~~ of notification. Survey teams can be deployed within

Direction of the survey teams may be initiated by the affected control room, but is normally transferred to the TSC when it is activated. Following activation of the EOF, direction of the teams, including receipt and analysis of data is transferred to this facility. Monitoring information from the State and/or County may also be available and would be used.

c. Containment Monitors (NUREG 0654 II.H.5.c)

Containment monitor data may be used to determine the extent of core damage. EPIP-EPP-09 provides the required implementation steps to determine the extent of core damage, using information obtained from these monitors.

1) Containment High-Range Radiation Monitor

See Site Emergency Plan, Section 7.3.3.b.3.

2) Containment Pressure Monitor

Continuous indication and recording of containment pressure from - 5 psig to 250 psig is provided in the Unit 1 Control Room for each pressure transmitter.

The Unit 2 drywell pressure monitors provide continuous indication and recording of containment pressure from -5 psig to 150 psig in the Unit 2 Control Room.