APPENDIX C

EMERGENCY PREPAREDNESS EVALUATION REPORT

BY THE

DIVISION OF EMERGENCY PREPAREDNESS

OFFICE OF INSPECTION AND ENFORCEMENT

IN THE MATTER OF

WILLIAM B. MCGUIRE NUCLEAR STATION

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INTRODUCTION

The Nuclear Regulatory Commission's (NRC) evaluation of the state of emergency preparedness associated with the McGuire Nuclear Station involves review of the licensee's onsite emergency preparedness plus review of the Federal Emergency Management Agency (FEMA) findings and determinations pertaining to State and local emergency preparedness.

The Duke Power Company (Duke, licensee) filed with the NRC comprehensive revisions to the McGuire Nuclear Station Emergency Plan (Plan) by letters dated August 25, 1980 and February 13, 1981 and provided additional information pertaining to the Plan and associated procedures by letter dated April 3, 1981. The staff has reviewed these revisions and information. Previously, the staff had reviewed preliminary versions of the Plan, conducted a site visit to the facility, and held a local public meeting on emergency preparedness.

The Plan was reviewed against the sixteen planning standards in 10 CFR 50.47, the requirements of 10 CFR 50, Appendix E, and the specific criteria of NUREG-0654/FEMA-REP-1 entitled "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," Rev. 1, November 1980.

This evaluation report follows the format of Part II of NUREG-0654 in that each of the Planning Standards is listed and is followed by a summary of applicable portions of the Plan that relate principally to that specific standard. The conclusions of the staff review are provided in Part II of this Report. The findings of FEMA on State and local emergency preparedness are provided as an attachment to this report.

EVALUATION OF LICENSEE EMERGENCY PLAN

I. EVALUATION

A. Assignment of Responsibility (Organization Control)

Standard

Primary responsibilities for emergency response by the nuclear facility licensee and by State and local organizations within the Emergency Planning Zones (EPZ) have been assigned, the emergency responsibilities of the various supporting organizations have been specifically established, and each principal response organization has staff to respond to and to augment its initial response on a continuous basis.

Licensee Emergency Plan Evaluation

When an emergency condition arises, the shift supervisor is designated as the Emegency Coordinator and it is his responsibility to evaluate the situation. If, in his judgment, conditions meet or exceed any of the emergency classification action levels, it is his responsibility to implement the Plan. There is 24-hour per day communication linkage capability between the station and Federal, State and local response agencies and organizations to ensure rapid transmittal of accurate notification information and emergency assessment data.

The Plan clearly defines the authority, responsibility, and duties of station staff personnel for coping with emergencies, both the normal operating staff and the augmented staff. The operational relationships between the onsite emergency centers and offsite agencies are identified. The Duke Power Company Crises Management Plan details the corporate organization for coping with emergencies, including the corporate augmentation of the station organization. The individual responsible for assuring continuity of licensee resources and overall management of the emergency and recovery operation is the Recovery Manager.

The Plan describes the functions and responsibilities of each State and local organization with a response role. The principal State organization with responsibility for planning and for mobilization of State resources to cope with an emergency is the Emergency Management Division within the Department of Crime Control and Public Safety. This organization is supported by the Radiation Protection Branch of the Department of Human Resources, for radiological assessment and protection functions, and by other State agencies. For an emergency situation, the State organizations mobilize as the State Emergency Response Team (SERT) at Charlotte, N.C. The SERT is the primary response authority for the State. The principal local agency having planning and action responsibilities for emergencies is the Civil Preparedness Agency for Mecklenburg County. The Catawba County Department of Emergency Management, Gaston County Department of Emergency Management, Iredell County Civil Preparedness Agency, and Lincoln County Department of Emergency Management are responsible for implementing protective actions within their respective counties.

The McGuire Station, in the event of an emergency, will contact by telephone the State warning point and the warning points for Catawba, Gaston, Iredell, Lincoln, and Mecklenburg counties. These facilities are manned on a 24-hour per day

basis. Arrangements have been made for the counties to accomplish protective actions based upon licensee protective action recommendations.

Updated written agreements have been executed with appropriate Federal, State and local agencies and organizations to provide for radiological support, medical assistance, medical transportation, and fire protection during an emergency. The emergency plans of the five surrounding counties provide for law enforcement, social services, medical services and emergency protective actions.

B. Onsite Emergency Organization

Standard

On-shift facility licensee responsibilities for emergency responses 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.

Licensee Emergency Plan Evaluation

In an emergency situation, the Shift Supervisor assumes the function of Emergency Coordinator and, as such, has the authority and responsibility to implement the Plan and initiate any necessary emergency actions, including notification of and recommendation of protective actions to local authorities. The Station Manager, or his designee, assumes the position of Emergency Coordinator upon his arrival at the Technical Support Center. The functional responsibilities of the Emergency Coordinator are established and the Plan clearly specifies that he may not delegate the responsibility to notify and make protective action recommendations to offsite authorities.

Station staff emergency assignments have been made and the relationship between the emergency organization and normal staff complement are specified in the Plan. Positions and/or titles of shift and plant staff personnel, both onsite and offsite, assigned emergency functional duties are listed. Minimum shift manning requirements are in the Plan and provisions for timely shift augmentation are provided. The specified shift staffing for single unit operation satisfies the criteria in Table B-1 of NUREG-0654. The augmentation capability, with the exception of staff augmentation within one-half hour also satisfies the criteria in Table B-1.

The Plan, together with the Duke Power Company Crises Management Plan, establishes the framework for a long-term augmented licensee emergency organization. This organization, under the Recovery Manager, is utilized for the direction and control of all emergency and recovery activities and is located at the near-site Crises Management Center (i.e., Emergency Operations Facility). Actuation of the Crises Management Center occurs for an Alert, Site Area Emergency, or General Emergency. Interfaces between and among the Crises Management Center staff, the station staff, governmental and private sector organizations, and technical and/or engineering contractor groups have been clearly specified.

- A licensee condition pertaining to staff augmentation is required as follows: The licensee shall submit by July 1, 1981 a description of how the augmented staffing criteria of Table B-1, NUREG-0654, Rev. 1, will be met.

C. Emergency Response Support and Resources

Standard

Arrangements for requesting and effectively using assistance resources have been made, arrangements to accommodate State and local staff at the licensee's near-site Emergency Operations Facility have been made, and other organizations capable of augmenting the planned response have been identified.

Licensee Emergency Plan Evaluation

Arrangements for requesting and utilizing outside resources have been made including authority to request implementation of the Federal Radiological Monitoring and Assessment Plan by either the Emergency Coordinator or Recovery Manager. Technical and administrative assistance, in addition to the Crises Management Center organization, is available from the corporate organization. Arrangements have been made for assistance from the plant contractors.

The Plan describes the radiological laboratories and the associated capabilities and expected response times. Fixed laboratory facilities exist at the station, the Crises Management Center, and the near-site Duke Power Environmental Laboratory. Backup licensee facilities are available at the Catawba Nuclear Station (45 miles) and Oconee Nuclear Station (150 miles).

The Crises Management Center organization provides for dispatching licensee representatives to the principal governmental emergency operations centers. The Crises Management Center is designed to accommodate representatives from Federal, State, and local governmental agencies, as well as representatives from contractor and other support groups. The Crises Management Center is within one mile of the station and is the central data collection point for providing information needed by primary response agencies for implementation of protective actions.

D. Emergency Classification System

Standard

A standard emergency classification and action level scheme, the basis of which include facility system and effluent parameters is in use by the nuclear facility licensee, and State and local response plans call for reliance on information provided by facility licensees for determinations of minimum initial response measures.

Licensee Emergency Plan Evaluation

The four standard emergency classes (i.e., Unusual Event, Alert, Site Area Emergency, and General Emergency) have been established by the licensee. Emergency Action Levels (EALs) are established based upon onsite and offsite radiation monitoring information and upon readings from various reactor sensors.

These EALs are used for rapid classification of emergency situations. The EALs are observable and measurable and, in general, are identified using specific instrumentation, parameters, and equipment status. The emergency classification and action level scheme is consistent with the criteria of Appendix 1 to NUREG-0654. The licensee has committed to identifying in more specific detail certain of the EALs.

Station implementating procedures contain specific information and guidance for evaluating an emergency situation and the appropriate actions to be taken.

E. Notification Methods and Procedures

Standard

Procedures have been established for notification, by the licensee, of State and local response organizations and for notification of emergency personnel by all response organizations; the content of initial and followup messages to response organizations and the public has been established; and means to provide early notification and clear instructions to the populace within the plume exposure pathway Emergency Planning Zone have been established.

Licensee Emergency Plan Evaluation

Procedures have been established for notification of State and local response organizations in case of emergency. The Emergency Coordinator has been given the authority and responsibility to make prompt notification to these agencies and to initiate activation of the North Carolina Radiological Emergency Response Plan in Support of Fixed Nuclear Facilities and the emergency plans of the five local counties. The Plan has established procedures which described mutually agreeable bases for notification of offsite response organizations consistent with the standard emergency classification and action scheme set forth in Appendix 1 to NUREG-0654.

The Plan has established procedures for notifying, alerting, and mobilizing licensee emergency response personnel, including both station and corporate staff.

The information to be reported to the offsite agencies in the event of an emergency has been predetermined in accordance with the recommendations in NUREG-0654 and the format of the notification messages is included in the Plan. A means for verification of the messages has been provided. The Plan specifies the supporting information to be provided for inclusion in written messages intended for release to the public, including recommended protective actions.

The licensee is currently developing an alert and notification system to be used to promptly inform the public within the plume exposure pathway Emergency Planning Zone. The licensee has described the system, and has committed to meet the criteria of Appendix 3 to NUREG-0654 and to have the system operational by July 1, 1981.

F. Emergency Communications

Standard

Provisions exist for prompt communications among principal response organizations to emergency personnel and to the public.

Licensee Emergency Plan Evaluation

The station communication system is designed to provide secure, redundant and diverse communications to all essential onsite and offsite locations during normal operations and under accident conditions. Within-station systems are comprised of a commercial telephone system, station telephone system, public-address system, radio networks, and intercom systems. Offsite systems are comprised of a commercial telephone system, a microwave system, and two-way radio systems. Two separate commercial telephone lines are dedicated to NRC communications.

These communications systems are located in plant areas manned 24 hours per day. The Emergency Coordinator will, in emergency situations, communicate directly with the State Warning Point at Raleigh, North Carolina, the dispatchers at each of the five surrounding counties, and the NRC. These governmental offices are manned 24 hours a day. Communications between the Control Room, the Technical Support Center, and the Crises Management Center are established utilizing the radio system frequency. In addition, radio communications are established between the Technical Support Center, Crises Management Center, and local and State agencies, including the State Emergency Response Team.

G. Public Information

Standard

Information is made available to the public on a periodic basis on how they will be notified and what their initial actions should be in an emergency; the principal points of contact with the news media for dissemination of information during an emergency (including physical location or locations) are established in advance; and procedures for coordinated dissemination of information to the public are established.

Licensee Emergency Plan Evaluation

The Plan provides for the dissemination of information to the public regarding how they will be notifed and what their actions should be during an emergency. This information includes: (1) educational information on radiation, (2) methods of notification during an emergency, (3) planned protective actions, (4) location and description of predesignated shelters and evacuation routes, (5) a detailed map, and (6) who to contact for additional information. The information will be disseminated approximately annually in a brochure format to the permanent and transient adult population within the plume exposure pathway EPZ. The brochure will be mass-mailed and also distributed to motels, motels, gas stations, and marinas and signs will be posted at boating areas. The licensee has provided this brochure to the NRC for review.

In an emergency, the Crises Management Center will serve as the principal point of interaction between the station, governmental authorities, and corporate management for the exchange of information. The Crises News Center, co-located with the Crises Management Center, will be utilized for all news media briefings and interviews. The Crises News Director and his staff collect, verify, and disseminate information to the news media and coordinate the release of information with local, State and Federal public information officials.

The licensee will conduct annual training for personnel of the news media which will acquaint these persons with the Plan, information concerning radiation, and points of contact for release of public information during an emergency.

H. Emergency Facilities and Equipment

Standard

Adequate emergency facilities and equipment to support the emergency response are provided and maintained.

Licensee Emergency Plan Evaluation

Emergency facilities needed to support an emergency response have been provided including a Technical Support Center, Emergency Operations Facility (entitled the Crises Management Center), and an Operations Support Center. Each will be activated for an Alert or higher emergency classification.

The Technical Support Center has been established in the same building as, and in close proximity to, the Control Room. The Technical Support Center will be used by plant management and technical and engineering support personnel directly involved in assessment of plant accident response and mitigation. It contains equipment to display plant status and diagnostic information necessary to support the emergency organization.

The Crises Management Center will be utilized to evaluate and coordinate emergency and reentry/recovery operations on a continuing basis by the licensee, Federal and State officials. It will also be the center for receipt and analysis of field monitoring information. The Crises Management Center is located at the licensee's Training and Technology Center within one mile of the site. The licensee has made provisions for an alternate Emergency Operations Facility at the corporate headquarters in Charlotte, N. C.

The Operations Support Center (assembly area) is located adjacent to the Control Room and will be the assembly point for unassigned support personnel. Emergency equipment and supplies are readily available.

The licensee's emergency facilities satisfy the interim staff criteria but not the final staff criteria for the permanent facilities contained in NUREG-0696, February 1981.

The Plan contains a listing of emergency equipment and supplies. The Plan provides for the inspection, inventory, and operational check of the equipment in accordance with station procedures.

Onsite monitoring systems and instrumentation used to initiate emergency measures and/or provide continuing assessment are identified. These include meteorological and seismic instrumentation, radiological monitors, process monitors, fire detection systems, and portable dose rate and radiation detection instruments.

The licensee has made provisions for offsite monitoring equipment which includes an extensive TLD network, in accordance with the staff's position, and portable radiation monitoring instruments for use by the offsite field assessment teams. Mobile monitoring capabilities, in addition to the licensee's, are available through the North Carolina Department of Human Resources, Radiation Protection Branch and the DOE Radiological Assistance Team. Offsite meteorological data is available from both the National Weather Service and the North Carolina Air National Guard.

The licensee's capabilities pertaining to meteorology presently do not meet the criteria identified in Appendix 2 to NUREG-0654. The licensee has committed to meet the criteria and associated implementation schedule, with the exception of remote interrogation capability.

The licensee has committed to upgrade the radiation and effluent monitoring capability to meet the criteria of NUREG-0737.

Three license conditions will be required as follows:

- The licensee shall submit by June 1, 1981, the conceptual design description of emergency response facilities in sufficient detail to describe how the criteria of NUREG-0696 will be met, including specifically, the provisions for data acquisition and transmission and the Safety Parameter Display System.

- The licensee shall provide meteorological and dose assessment remote interrogation capability to meet the criteria of Appendix 2, NUREG-0654, Rev. 1 as follows: (1) a functional description of upgraded capabilities by January 1, 1982, (2) installation of hardware and software by July 1, 1982 and (3) full operational capability by October 1, 1982.

- The licensee shall revise, within 30 days, the emergency plan implementing procedures to incorporate the following in dose projections:

  (1) actual source terms, rather than design basis accident source terms
  (2) realistic meteorological conditions over the dose time period
  (3) actual containment pressures.

I. Accident Assessment

Standards

Adequate methods, systems, and equipment for assessing and monitoring actual or potential offsite consequences of a radiological emergency condition are in use.

Licensee Emergency Plan Evaluation

The Plan and procedures contain system and radiological effluent parameter values characteristic of a spectrum of off-normal conditions and accidents. These parameter values and other reliable information are tabulated to cross-reference initiating conditions for each of the Emergency Classes. Specific alarm setpoints, both visual and audio, are in the Control Room to alert the operator.

The onsite radiation monitoring and sampling system consists of (1) a process radiological monitoring and sampling system, (2) an effluent radiological monitoring and sampling system, (3) an airborne radioactive monitoring system, (4) an area radiation monitoring system, and (5) portable survey and counting equipment. The licensee has committed to upgrading and post-accident monitoring and sampling capability to meet the criteria of NUREG-0737.

The Plan provides the methodology for determining the magnitude of a release or potential release by utilizing: (1) evaluation of plant conditions, (2) dose projections offsite, and (3) offsite radiological measurements. Station procedures provide the details of the methodology. The licensee has established a methodology to be used for estimating offsite doses in the unlikely event that assessment instrumentation is offscale or out of service. The details for such projected dose calculations are provided in the station procedures.

In addition to projecting offsite consequences from measured inplant parameters, the licensee has also established a field monitoring capability. Four field monitoring teams are dispatched at the Site Emergency and General Emergency levels. The teams are provided with radiological monitoring and sampling equipment and radio communication equipment. A single team can be deployed within ten minutes and all teams can be operational within one hour.

The licensee has under development procedures to provide the means for relating measured field contamination levels to dose rate and for estimating integrated dose to the population at risk.

J. Protective Response

Standard

A range of protective actions has been developed for the plume exposure pathway EPZ for emergency workers and the public. Guidelines for the choice of protective actions during an emergency, consistent with Federal guidance, are developed and in place, and protective actions for the ingestion exposure pathway EPZ appropriate to the locale have been developed.

License Emergency Plan Evaluation

The licensee has established an onsite protective response for employees, contractor personnel, and members of the general public who may be onsite at the time of an emergency. This response consists of warning and notification, relocation and accountability, and protective actions. Onsite warning and notification will be by means of various alarm systems, station public address system, and an electric signal-horn system. In the case of a Site or General Emergency, personnel onsite will be relocated to designated shelter areas and

an initial accountability completed within thirty minutes. Evacuation of non-essential personnel is by designated preplanned routes to offsite reassembly locations. The reassembly locations have provisions for radiological monitoring and decontamination of personnel. Additional onsite protective measures include the use of individual respiratory protection, protective clothing, and radioprotective drugs.

The Plan provides for recommending offsite protective measures depending on the projected dose to the environs. The particular recommendation may be sheltering or evacuation depending on the magnitude of the projected dose, the meteorological conditions, the nature of the release, and the predetermined evacuation time estimates for the sector(s) affected. The Plan contains maps and information regarding evacuation routes, and areas, shelters, preselected sampling and monitoring points, and the population distribution around the facility.

The Plan contains time estimates for evacuation within the plume exposure EPZ. These time estimates are generally in accordance with Appendix 4 of NUREG-0654. The licensee has committed to revising the evacuation time estimates in accordance with the criteria by August 1981.

K. Radiological Exposure Control

Standard

Means for controlling radiological exposures, in an emergency, are established for emergency workers. The means for controlling radiological exposures shall include exposure guidelines consistent with EPA Emergency Workers and Lifesaving Activity Protective Action Guides.

Licensee Emergency Plan Evaluation

The licensee has established a radiation protection program for controlling radiological exposures in the event of an emergency. Emergency exposure guidelines have been provided for the various categories of radiation workers. These guidelines are consistent with the EPA Emergency Worker and Life-Saving Activity Protective Action Guides. Emergency procedures specify the persons authorized to permit emergency exposures in excess of 10 CFR Part 20 limits.

The Station Health Physics Manual defines the radiation protection program for normal and emergency conditions. It provides for 24-hour per day dose determination for emergency personnel and for maintenance of dose records to ensure that exposure history is current.

Onsite contamination control measures for personnel, equipment, and access control are provided. The criteria for decontamination of personnel and equipment are specified in the Plan. Procedures have been developed for permitting the return of areas and items to normal use.

Provisions have been established for decontaminating relocated onsite personnel including provisions for extra clothing and decontaminants suitable for the type of contamination expected.

L. Medical and Public Health Support

Standard

Arrangements are made for medical services for contaminated and injured individuals.

Licensee Emergency Plan Evaluation

The licensee has made arrangements by written agreement with the Charlotte Memorial Hospital to provide medical assistance to injured personnel including injuries involving radiological material. In addition, written agreements provide for Oak Ridge National Laboratories to act as a consultative and referral facility. Charlotte Memorial Hospital is a large general hospital with complete emergency-treatment capabilities and Oak Ridge has extensive radiological care facilities and expertise.

The station has two first aid facilities located in the Administration Building for providing medical assistance to injured personnel. The facilities can provide first aid treatment for minor injuries and emergency aid for more serious injuries. One facility has decontamination capability. Arrangements have been made with local physicians for onsite medical assistance.

Written agreements have been made with the North Mecklenburg Ambulance Service and the North Mecklenburg Rescue Squad for the transportation of injured personnel who may also be contaminated.

M. Recovery and Reentry Planning and Postaccident Operations

Standard

General plans for recovery and reentry are developed.

Licensee Emergency Plan Evaluation

The Duke Power Company Crisis Management Plan (CMP) is designed to support the McGuire Nuclear Station in the execution of its Plan. The CMP describes an extensive recovery organization which is activated upon actuation of the Crises Management Center. The organization consists of experienced corporate management and supervisory personnel who have the authority to assure the best available use of corporate resources to assist in rapid recovery. The CMP organization will provide:

1. Technical and operational support planning for recovery operation
2. Radiological field monitoring and data assesment
3. Logistics support for emergency personnel
4. Management level interface with local, State, and Federal government authorities
5. Release of information to news media coordinated with governmental authorities

Any decision on the part of Duke Power Company to relax protective measures will be made by the Recovery Manager in coordination with NRC, North Carolina and local officials. Whenever a recovery operation is to be initiated or any change is to be made in the organizational structure, the Recovery Manager will notify representatives of the response organizations.

N. Exercises and Drills

Standard

Periodic exercises are (will be) conducted to evaluate major portions of emergency response capabilities, periodic drills are (will be) conducted to develop and maintain key skills, and deficiencies identified as a result of exercises or drills are (will be) corrected.

Licensee Emergency Plan Evaluation

Annual exercises will be conducted to test the integrated capability and a major portion of the basic elements existing within the Plan. Offsite, as well as licensee, response organizations will be involved. Although the State Plan will be exercised annually, it may be done separate from the licensee in some years due to the existence of other nuclear power reactor facilities within the State's jurisdiction. At least once every six years exercises will be started between 6:00 P.M. and midnight and another between midnight and 6:00 A.M. The scenario used for the various exercises will contain at least the essential elements as set forth in NUREG-0654. Arrangements will be made for qualified observers and a critique will be held after the exercise. The critique will provide a formal evaluation of the exercise. Management control has been established to ensure that any necessary corrective actions are implemented.

In addition to the exercises, various drills will be conducted covering communications, fires, medical emergencies, health physics and radiological monitoring. Depending on the particular drill, the frequency varies from monthly to annually in accordance with that set forth in NUREG-0654. Minimum requirements have been established for each of the drills. Management control is established such that necessary corrective actions are implemented.

O. Radiological Emergency Response Training

Standard

Radiological emergency response training is provided to those who may be called upon to assist in an emergency.

Licensee Emergency Plan Evaluation

The licensee provides training in the Emergency Plan and procedures to all permanent plant personnel. This includes assignment of duties and responsibilities, location and use of assembly areas, and familiarization with alarms and communications systems. In addition, those personnel having specific response roles as part of the onsite emergency organization are given specialized training in accordance with their expected duties. These areas include emergency response coordination and direction, accident assessment, radiological monitoring,

repair and damage control, rescue, and first aid. The licensee will provide training and annual retraining for those offsite organizations whose services may be required in an emergency, such as fire, police, medical support, and rescue personnel. The training will be consistent with the organization's emergency functions.

The training program for members of the licensee's emergency organization will include practical drills as discussed in section N above.

P. Responsibility for the Planning Effort: Development, Periodic Review and Distribution of Emergency Plans

Standard

Responsibilities for plan development and review and distribution of emergency plans are established, and planners are properly trained.

Licensee Emergency Plan Evaluation

The Recovery Manager has the overall authority and responsibility for radiological emergency response planning at the corporate level. The Emergency Planning Coordinator has responsibility for the development and updating of station emergency plans and coordination of these plans with other response organizations.

The Plan, as well as any changes thereto, are provided to the organizations and individuals having a responsibility for implementation of the Plan. Provisions exist for an annual review of the Plan and for the incorporation of necessary revisions.

An independent review of the emergency preparedness program will be conducted at least every year. The review will include the Plan, the Crises Management Plan, the implementing procedures and practices, training, readiness testing and equipment.

II CONCLUSIONS ON LICENSEE EMERGENCY PLAN

Based on our review against the criteria in "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants", NUREG-0654, Revision 1, November 1980, we conclude that, providing the items identified as requiring conditions of the full-power license are accomplished, the McGuire Nuclear Station Emergency Plan will provide an adequate planning basis for an acceptable state of emergency preparedness and meets the requirements of 10 CFR 50 and Appendix E thereto.

The license conditions required for a full-power license are identified in Section I of this evaluation and are as follows:

1. The licensee shall submit by July 1, 1981 a description of how the augmented staffing criteria of Table B-1, NUREG-0654, Rev. 1 will be met by July 1, 1982.

2. The licensee shall submit by June 1, 1981, the conceptual design description of emergency response facilities in sufficient detail to describe how the criteria of NUREG-0696 will be met, including specifically, the provisions for data acquisition and transmission and the Safety Parameter Display System.

3. The licensee shall provide meteorological and dose assessment remote interrogation capability to meet the criteria of Appendix 2, NUREG-0654, Rev. 1 as follows: (1) a functional description of upgraded capabilities by January 1, 1982, (2) installation of hardware and software by July 1, 1982 and (3) full operational capability by October 1, 1982.

4. The licensee shall revise, within 30 days, the emergency plan implementing procedures to incorporate the following in dose projections:

   (1) actual source terms, rather than design basis accident source terms
   (2) realistic meteorological conditions over the dose time period
   (3) actual containment pressures

The Federal Emergency Management Agency (FEMA) has provided interim findings on the State and local emergency response plans. FEMA concludes that State and local preparedness is adequate to cope with an accident at McGuire.

Based upon our review of the licensee's plans and procedures, the NRC and FEMA evaluation of the joint exercise, and our review of the FEMA findings, we find that the state of onsite and offsite emergency preparedness provides reasonable assurance that adequate protective measures can and will be taken in the event of a radiological emergency.