

ATTACHMENT 1A

Proposed McGuire Unit 1 and 2 Technical Specifications Changes

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Insert for Technical Specification 6.8.2

INSERT A

For Applied Science Center procedures which implement offsite environmental, technical, and laboratory activities, the above review and approval may be performed by the Manager, Production Environmental Services or designated Technical System Manager in the Production Support Department, in lieu of the individuals specified above.

## ADMINISTRATIVE CONTROLS

### SAFETY LIMIT VIOLATION (Continued)

- c. The Safety Limit Violation Report shall be submitted to the Commission, the NSRB and the Vice President, Nuclear Production, within 14 days of the violation; and
- d. Critical operation of the unit shall not be resumed until authorized by the Commission.

### 6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978;
- b. The applicable procedures required to implement the requirements of NUREG-0737;
- c. Security Plan implementation;\*
- d. Emergency Plan implementation;
- e. PROCESS CONTROL PROGRAM implementation;
- f. OFFSITE DOSE CALCULATION MANUAL implementation; and
- g. Quality Assurance Program for effluent and environmental monitoring.
- h. Fire Protection Program implementation.
- i. Commitments contained in FSAR Chapter 16.0

6.8.2 Each procedure of Specification 6.8.1 above, and changes thereto, shall be reviewed and approved by the Station Manager; or by: (1) the Operating Superintendent, (2) the Technical Services Superintendent, (3) the Maintenance Superintendent, or (4) the Superintendent of Integrated Scheduling as previously designated by the Station Manager; prior to implementation and shall be reviewed periodically as set forth in administrative procedures. ← INSERT A |

6.8.3 Temporary changes to procedures of Specification 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered;
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Operator license on the unit affected; and

\*Review and approval may be performed by the Superintendent of Station Services.

ADMINISTRATIVE CONTROLS

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PROCEDURES AND PROGRAMS (Continued)

- c. The change is documented, reviewed, and approved by the Station Manager; or by: (1) the Operating Superintendent, (2) the Technical Services Superintendent, (3) the Maintenance Superintendent, or (4) the Superintendent of Integrated Scheduling, as previously designated by the Station Manager, within 14 days of implementation.

6.8.4 The following programs shall be established, implemented, and maintained:

a. Reactor Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include RHR, Boron Recycle, Refueling Water, Liquid Waste, Waste Gas, Safety Injection, Chemical and Volume Control, Containment Spray, and Nuclear Sampling. The program shall include the following:

- 1) Preventive maintenance and periodic visual inspection requirements, and
- 2) Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- 1) Training of personnel,
- 2) Procedures for monitoring, and
- 3) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- 1) Identification of a sampling schedule for the critical variables and control points for these variables,
- 2) Identification of the procedures used to measure the values of the critical variables,
- 3) Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS (Continued)

- 4) Procedures for the recording and management of data,
  - 5) Procedures defining corrective actions for all off-control point chemistry conditions, and
  - 6) A procedure identifying: (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.
- d. Backup Method for Determining Subcooling Margin
- A program which will ensure the capability to accurately monitor the Reactor Coolant System subcooling margin. This program shall include the following:
- 1) Training of personnel, and
  - 2) Procedures for monitoring.
- e. Post-accident Sampling
- A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines, and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:
- 1) Training of personnel,
  - 2) Procedures for sampling and analysis, and
  - 3) Provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the NRC Regional Office unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant STARTUP and power escalation testing shall be submitted following: (1) receipt of an Operating License, (2) amendment to the License involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the plant.

ATTACHMENT 1B

Proposed Catawba Units 1 and 2 Technical Specifications Changes

Insert for Technical Specification 6.8.2

INSERT A

For Applied Science Center procedures which implement offsite environmental, technical, and laboratory activities, the above review and approval may be performed by the Manager, Production Environmental Services or designated Technical System Manager in the Production Support Department, in lieu of the individuals specified above.

## ADMINISTRATIVE CONTROLS

### 6.8 PROCEDURES AND PROGRAMS

6.8.1 Written procedures shall be established, implemented, and maintained covering the activities referenced below:

- a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978;
- b. The emergency operating procedures required to implement the requirements of NUREG-0737 and Supplement No. 1 to NUREG-0737 as stated in Generic Letter No. 82-33;
- c. Security Plan implementation;\*
- d. Emergency Plan implementation;
- e. PROCESS CONTROL PROGRAM implementation;
- f. OFFSITE DOSE CALCULATION MANUAL implementation; and
- g. Quality Assurance Program implementation for effluent and environmental monitoring.

6.8.2 Each procedure of Specification 6.8.1, and changes thereto, shall be reviewed and approved by the station Manager; or by: (1) Operating Superintendent, (2) Technical Services Superintendent, (3) Maintenance Superintendent, or (4) Superintendent of Integrated Scheduling, as previously designated by the Station Manager; prior to implementation and shall be reviewed periodically as set forth in administrative procedures. ← INSERT A

6.8.3 Temporary changes to procedures of Specification 6.8.1 may be made provided:

- a. The intent of the original procedure is not altered;
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Operator license on the unit affected; and
- c. The change is documented, reviewed, and approved by the Station Manager; or by: (1) Operating Superintendent, (2) Technical Services Superintendent, (3) Maintenance Superintendent, or (4) Superintendent of Integrated Scheduling, as previously designated by the Station Manager; within 14 days of implementation.

6.8.4 The following programs shall be established, implemented, and maintained:

- a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the containment spray, Safety Injection, chemical

\*Review and approval may be performed by the Superintendent of Station Services.



ADMINISTRATIVE CONTROLS

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PROCEDURES AND PROGRAMS (Continued)

and volume control, and nuclear sampling. The program shall include the following:

- 1) Preventive maintenance and periodic visual inspection requirements, and
- 2) Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- 1) Training of personnel,
- 2) Procedures for monitoring, and
- 3) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- 1) Identification of a sampling schedule for the critical variables and control points for these variables,
- 2) Identification of the procedures used to measure the values of the critical variables,
- 3) Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,
- 4) Procedures for the recording and management of data,
- 5) Procedures defining corrective actions for all off-control point chemistry conditions, and
- 6) A procedure identifying: (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

d. Backup Method for Determining Subcooling Margin

A program which will ensure the capability to accurately monitor the Reactor Coolant System subcooling margin. This program shall include the following:

- 1) Training of personnel, and
- 2) Procedures for monitoring.

ADMINISTRATIVE CONTROLS

PROCEDURES AND PROGRAMS (Continued)

e. Post-Accident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- 1) Training of personnel,
- 2) Procedures for sampling and analysis, and
- 3) Provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the NRC Regional Office unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of plant startup and power escalation testing shall be submitted following (1) receipt of an Operating License, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit.

6.9.1.2 The Startup Report shall address each of the tests identified in the Final Safety Analysis Report and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

6.9.1.3 Startup Reports shall be submitted within: (1) 90 days following completion of the Startup Test Program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of Startup Test Program, and resumption or commencement of commercial operation), supplementary reports shall be submitted at least every 3 months until all three events have been completed.

ATTACHMENT 2

Justification and Safety Analysis

Proposed Technical Specifications Changes  
Review and Approval of Applied Science Center Procedures  
Implementing Offsite Activities  
(T.S. 6.8.2)

Description of Proposed Technical Specification Changes for  
McGuire/Catawba:

Technical Specification 6.8.2 is modified by adding an additional individual in order to allow the Manager of Production Environmental Services or a designated Technical System Manager in the Production Support Department to review and approve Applied Science Center procedures which implement offsite environmental, technical, and laboratory activities. The Manager of Production Environmental Services or the designated Technical System Manager in the Production Support Department may review and approve these procedures in lieu of the Station Manager or the designated Superintendents.

Background/Justification:

The Duke Power Company Nuclear Production and Production Support Departments were created in August 1982 following the reorganization of the Steam Production Department. The purpose of this reorganization was to more closely focus on the operational requirements for nuclear and fossil station generation and on the technical support and laboratory activities associated with them. The laboratory and field support activities related to nuclear operations were assigned to the Production Support Department's Applied Science Center, a central laboratory and field scientific support facility located at Lake Norman near McGuire Nuclear Station, where they could be implemented and closely monitored by the technical supervision and management responsible for these activities. This assured that these specialized functions focused on the technical requirements of the scientific and environmental work activities supporting the nuclear stations.

The quality assurance program and procedures governing the Applied Science Center are implemented and performed in accordance with Duke Power Company's QA Topical Report (which was originally approved via NRC letter dated April 17, 1975), and comply with the appropriate Regulatory Guides and federal regulations. The procedures and programs implemented at the Applied Science Center are audited internally by laboratory quality assurance specialists and by Duke Power Company's Quality Assurance Department, as well as externally by the NRC, INPO, and others. Cross-disciplinary reviews by station and corporate office specialists are performed as needed to ensure proper organizational interface. Numerous audits by the NRC have been conducted since the creation of the Production Support Department. The activities performed by Applied Science Center personnel have been examined during NRC inspections.

A change to Technical Specification 6.8.2 for McGuire and Catawba Nuclear Stations is being submitted in order to designate the preparation, review, and approval of offsite environmental,

technical, and laboratory procedures to the Production Environmental Services group at the Applied Science Center. We believe that Duke Power Company is unique regarding this type of organizational structure and that this proposed Technical Specification amendment is justified.

As currently written, McGuire and Catawba Technical Specification 6.8.2 does not explicitly specify that these procedures can be reviewed and approved by Production Support Department management, even though they are the most technically qualified positions. Some examples of analytical and offsite field procedures for which this responsibility needs to be clarified include: environmental sample collection procedures for McGuire and Catawba, laboratory sample preparation and disposal procedures, procedures for the preparation of reagents, count room procedures, and the McGuire Land Use Census procedure (this procedure is used to assess the location of milk and drinking water supplies).

Because these types of procedures are performed offsite by non-station personnel and because most are generic to all three of Duke Power Company's nuclear stations, the McGuire and Catawba Technical Specifications, as currently written, create difficulty and an unnecessary administrative burden in obtaining procedure review and approval. Also, the specifications do not ensure that the procedure review and approval is performed by the most technically qualified positions.

#### Bases/Safety Analysis:

The technical adequacy of procedure review and approval by Applied Science Center personnel is assured by supervisors responsible for specific disciplines. Each discipline is staffed by qualified professionals and technicians who coordinate closely with station and corporate office personnel to assure that all regulatory and quality assurance requirements are being met. The final approval for procedures is assigned by the Manager of Production Environmental Services at the Applied Science Center to the appropriate Technical System Manager responsible for the functional area activities.

The organizational illustration provided in Figure 1 depicts the relationship of Production Support and Nuclear Production department management in implementing quality assurance activities for the Health Sciences unit radiological environmental monitoring procedures associated with McGuire and Catawba Nuclear Stations (Technical Specification 6.8.1.g). Similar relationships exist for other chemical, physical, and biological sciences support activities at the Applied Science Center. This organizational arrangement provides a consistent approach for both the Nuclear Production and Production Support departments, with technical review by personnel responsible for performing the work activities, approval by a supervisor who is an expert in the field, and approval and authorization by Duke management at the appropriate level, thereby providing full accountability for organizational results.

Duke Power Company believes that this division of responsibilities, coupled with a centralized laboratory/scientific/environmental staff, most thoroughly assures operational quality for Duke Power Company's nuclear stations, and provides the means for action and accountability for Applied Science Center procedures on an equivalent level of technical management attention as currently exists within the Nuclear Production Department. This is important for the very specialized, specific laboratory and field procedural activities which:

- 1) are prepared, reviewed, approved, and maintained by Production Environmental Services under a valid, audited quality assurance program
- 2) are not performed onsite at McGuire or Catawba
- 3) are implemented exclusively by Production Environmental Services personnel under direct technical supervision and management in a similar reporting relationship with the Nuclear Production Department
- 4) are virtually all generic procedures; utilized to support all three of Duke Power Company's nuclear stations
- 5) are prepared and maintained by the Production Environmental Services staff, who are responsible for providing and are the company technical experts for the service
- 6) are audited by the Duke Power Company Quality Assurance Department per the same protocol, under the Duke Power Company QA Topical Report, as the Nuclear Production Department
- 7) do not require a duplicate review or approval by Nuclear Production Department directives and management

The qualifications for the position of Manager, Production Environmental Services enable the individual in the position to direct the design and implementation of Production Environmental Services programs in order to evaluate the impact of the nuclear stations on the environment, to monitor employee safety, and to assist in complying with government regulations. This is accomplished by:

- Directing the design and implementation of environmental monitoring programs to meet licensing requirements
- Managing the Applied Science Center's laboratory and field programs which monitor chemical, physical, biological, and radiological aspects of the environment
- Providing technical expertise and scientific support to the nuclear stations from the Applied Science Center by providing collection and analysis of samples, reporting of data to the nuclear stations, and other related activities

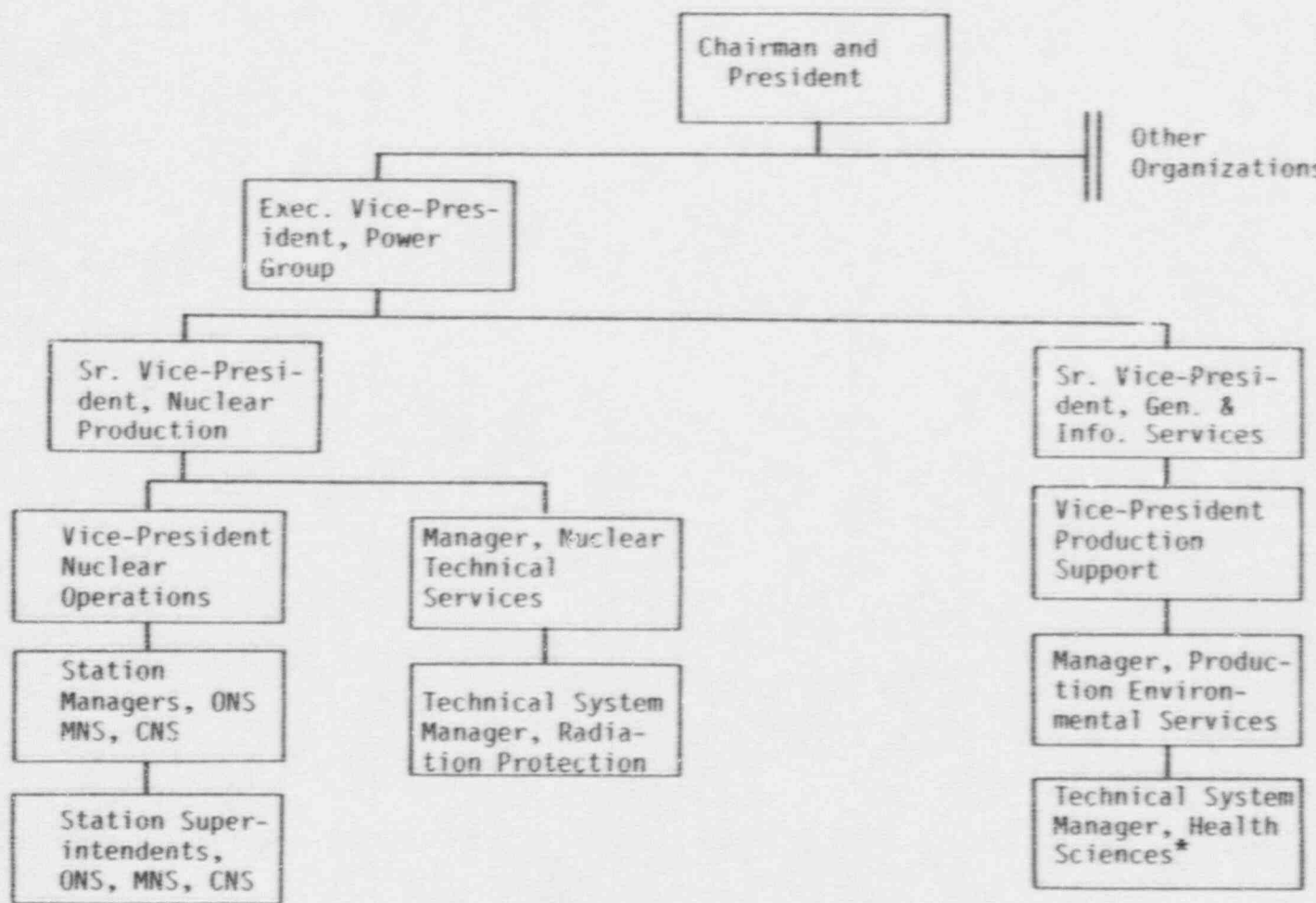
The qualifications for the position of Technical System Manager of the various sections within Production Environmental Services enable the individual in the position to perform specialized laboratory and offsite field activities in support of the Nuclear Production Department. These positions supervise the implementation of Applied Science Center procedures designed to provide quality results from central laboratories providing data on activities such as biological sciences (zoology, fish, toxicity bioassay effluent testing), chemical sciences (fuels, analytical laboratories, environmental chemistry), health sciences (dosimetry, radioanalysis, environmental radiological sample collection, radioactive material handling at the Applied Science Center, industrial health labs), and physical sciences (limnology, materials analysis, meteorology, offsite environmental engineering). This ensures that the proper level of management close to the Applied Science Center activities being implemented is involved with the day-to-day operations of these areas.

In general, the positions of Manager, Production Environmental Services and Technical System Manager of the various sections therein require a Bachelor of Science degree in a technical discipline and six to ten years of related experience.

#### Conclusions:

The proposed changes to the McGuire and Catawba Technical Specifications will ensure that the Applied Science Center procedures implementing offsite environmental, technical, and laboratory activities will be developed and maintained to the highest standards of quality. The changes will also ensure that the procedures are consistent with industry requirements, since the final responsibility for procedure review and approval will reside with the management most familiar with the technical issues involved. Finally, the proposed changes will result in improved efficiency and quality of Applied Science Center operation and of implementation of procedures for offsite environmental, technical, and laboratory activities.

Figure 1 - Relationship of Production Support and Nuclear Production Department Management



\*Equivalent Positions Exist for Biological Sciences, Chemical Sciences, and Physical Sciences

Relationships of Health Sciences, Production Environmental Services within Duke Power Company



ATTACHMENT 3

Analysis of Significant Hazards Consideration

### Analysis of Significant Hazards Consideration:

As required by 10CFR 50.91, this analysis is provided concerning whether the proposed amendments involve significant hazards considerations, as defined by 10CFR 50.92. Standards for determination that a proposed amendment involves no significant hazards considerations are if operation of the facility in accordance with the proposed amendment would not: 1) involve a significant increase in the probability or consequences of an accident previously evaluated; or 2) create the possibility of a new or different kind of accident from any accident previously evaluated; or 3) involve a significant reduction in a margin of safety.

The proposed amendments would change the administrative controls governing the review and approval of Applied Science Center procedures which implement offsite environmental, technical, and laboratory activities. The amendments would supplement the current requirement that these procedures be reviewed and approved by station management by allowing them to be approved by the Production Support Department management that has authority and responsibility concerning their use.

The proposed amendments would not involve an increase in the probability or consequences of an accident previously evaluated. The amendments have no impact upon station operation and do not involve any changes to the design or operation of any equipment. The activities that are governed by the affected Applied Science Center procedures are performed offsite in support of the stations. These include, but are not limited to, environmental sample collection procedures, procedures for laboratory sample preparation and disposal, preparation of reagents, and count room procedures. The proposed changes would result in procedures of higher quality, since final responsibility for procedure review and approval would reside with management who is most thoroughly familiar with the technical issues involved.

The proposed amendments would not create the possibility of a new or different kind of accident from any accident previously evaluated. The changes do not have any impact upon the design or operation of plant equipment; therefore, they cannot serve to initiate a new type of accident.

The proposed amendments would not involve a reduction in a margin of safety. The changes would not impact the design or operation of any plant systems or components. Improved Applied Science Center procedures will result in enhanced offsite environmental, technical, and laboratory activities.

Based upon the preceding analysis, Duke Power Company concludes that the proposed amendments do not involve a Significant Hazards Consideration.