Additionally, the reporting requirements of Section 6.9.1.8 and 6.9.1.9 have been revised to include the guidance information contained in Regulatory Guide 1.16, and they are consistent with those of the H. B. Robinson Unit No. 2 Technical Specifications, Docket No. 50-261.

In an effort to avoid duplication of wording, the Appendix B Technical Specifications have been revised to reflect the review processes and PNSC activities of Appendix A.

The attached package contains Appendix A, Section 6 and Appendix B, Section 5 of Technical Specifications; these sections are applicable to both Brunswick units except certain unit-specific pages which are also attached. The entire sections are included for clarity even though some pages are not revised; changes are indicated by vertical lines in the right-hand margins of the affected pages.

The requested technical specifications changes constitute one Class III amendment and one Class I amendment in accordance with 10CFR170.22. Accordingly, our check for $4400 is enclosed.

It is requested that you expedite your review of these requested changes in order to permit CP&L to implement these revised Quality Assurance and on-site and off-site safety review functions which we feel will enhance the safe operation of BSEP. We are anxious to implement these changes and wish to avoid the substantial period of time approval of such changes has historically taken. If a meeting with your Staff to discuss these changes would be helpful in this regard, we will be glad to meet with your staff on a prompt basis.

Should you have any questions regarding this matter, please contact my staff.

Yours very truly,

E. E. Utley

E. E. Utley
Executive Vice President
Power Supply and
Engineering & Construction

WD/JM/jc (N#66)
Attachments

Sworn to and subscribed before me this 28th day of July, 1981

Franklin Murray
Notary Public

My commission expires: October 4, 1981

FRANKLIN MURRAY
NOTARY
PUBLIC
WAKE COUNTY, N. C.

8108030146 810728
PDR ADOCK 05000324
P PDR

6.0 ADMINISTRATIVE CONTROLS

6.1 RESPONSIBILITY

6.1.1 The General Manager shall be responsible for overall facility operation and shall delegate in writing the succession to this responsibility during his absence.

6.2 ORGANIZATION

OFFSITE

6.2.1 The offsite organization for facility management and technical support shall be as shown on Figure 6.2.1-1.

FACILITY STAFF

6.2.2 The Facility organization shall be as shown on Figures 6.2.2-1 and 6.2.2-2 and:

a. Each on duty shift shall be composed of at least the minimum shift crew composition shown in Table 6.2.2-1.

b. At least one licensed Operator shall be in the control room for each reactor containing fuel.

c. At least two licensed Operators shall be present in the control room for each reactor in the process of start-up, scheduled reactor shutdown and during recovery from reactor trips.

d. An individual qualified to implement radiation protection procedures shall be on site when fuel is in either reactor.

e. All CORE ALTERATIONS shall be directly supervised by either a licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling who has no other concurrent responsibilities during this operation.

f. A Fire Brigade of at least five members shall be maintained onsite at all times. The Fire Brigade shall not include the minimum shift crew shown in Table 6.2.2-1 or any personnel required for other essential functions during a fire emergency.

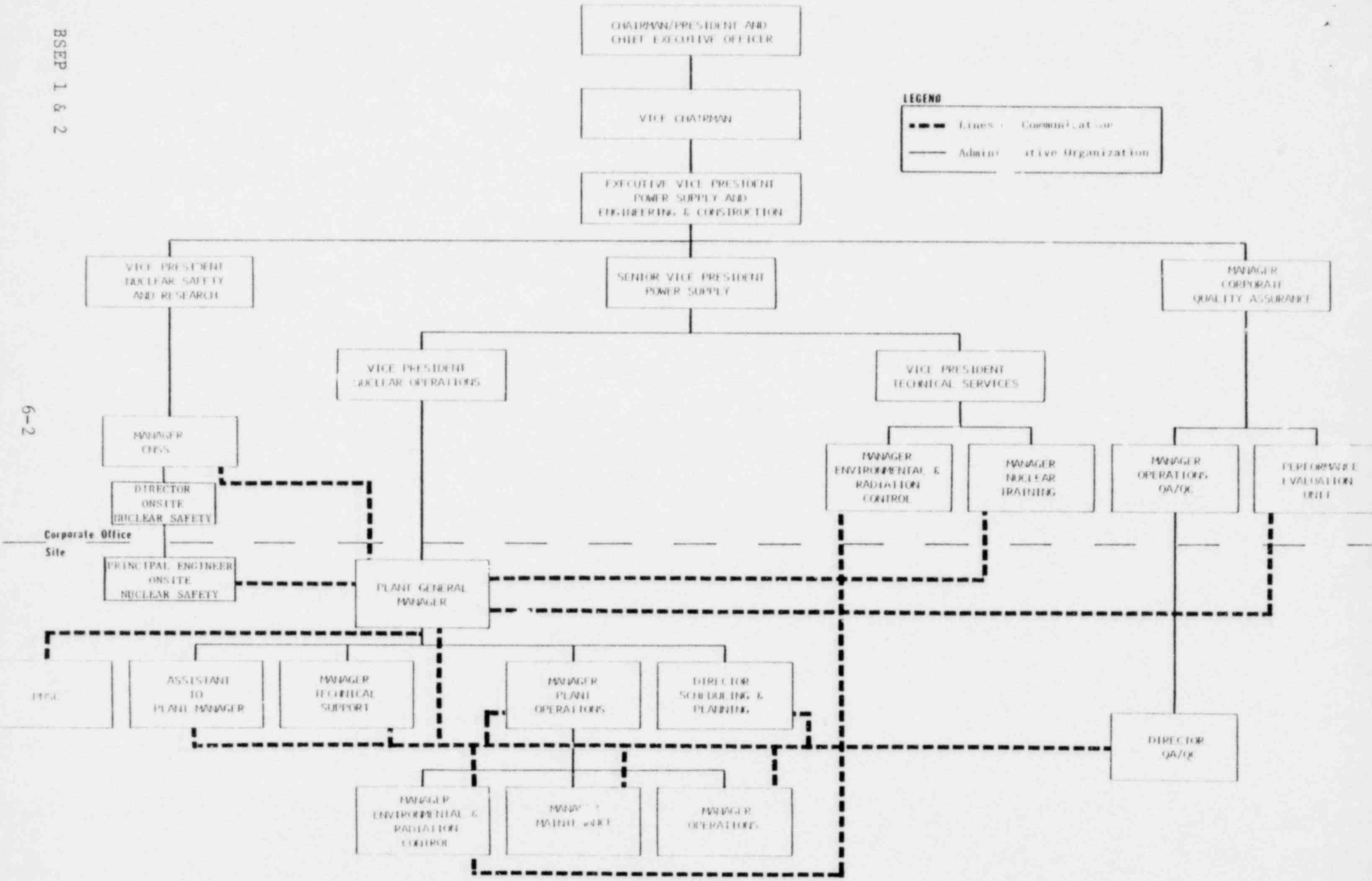
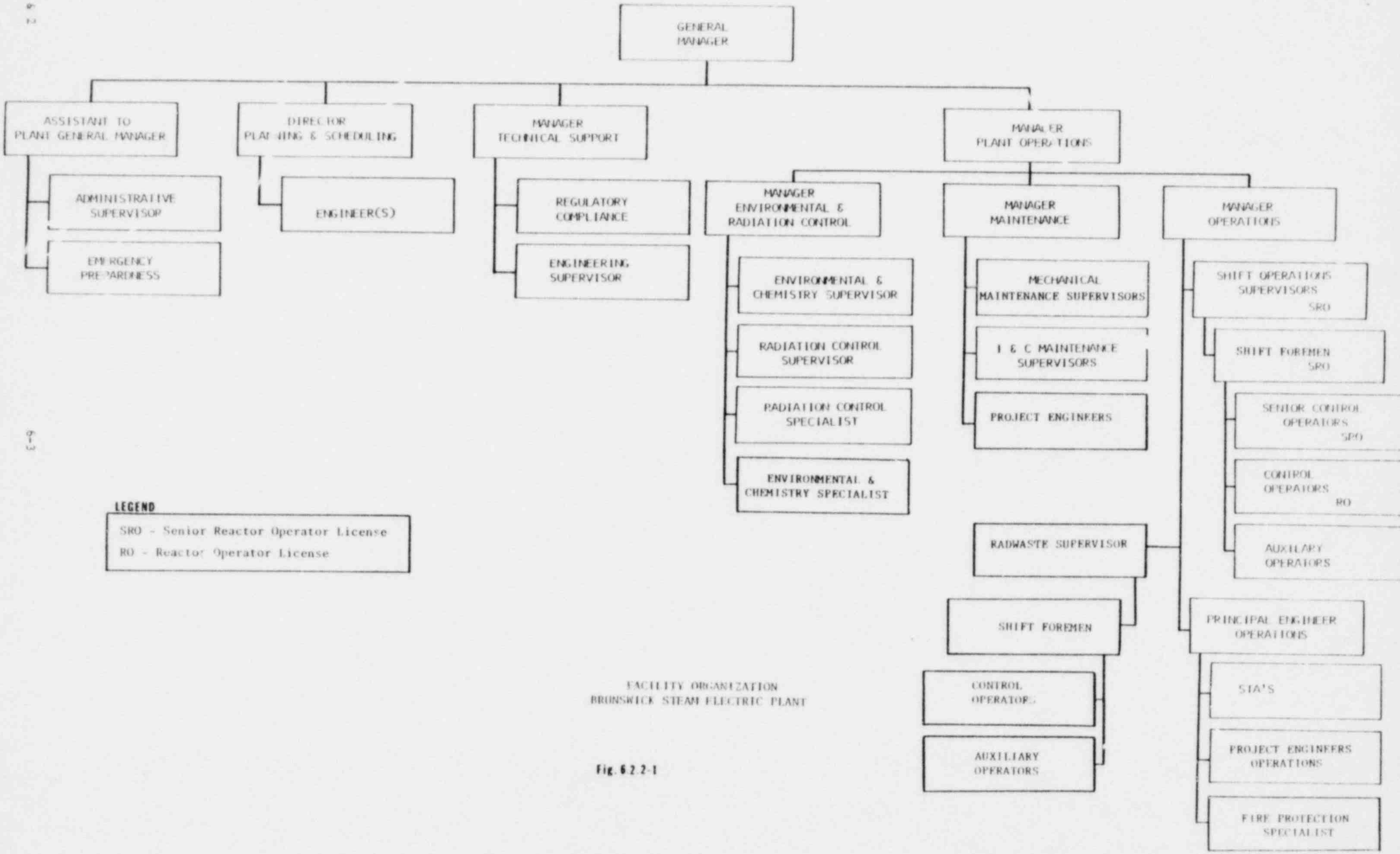

CHAIRMAN/PRESIDENT AND CHIEF EXECUTIVE OFFICER
VICE CHAIRMAN
EXECUTIVE VICE PRESIDENT POWER SUPPLY AND ENGINEERING & CONSTRUCTION
LEGEND
Lines of Communication
Administrative Organization
VICE PRESIDENT NUCLEAR SAFETY AND RESEARCH
SENIOR VICE PRESIDENT POWER SUPPLY
MANAGER CORPORATE QUALITY ASSURANCE
VICE PRESIDENT NUCLEAR OPERATIONS
VICE PRESIDENT TECHNICAL SERVICES
MANAGER CNSS
DIRECTOR ONSITE NUCLEAR SAFETY
MANAGER ENVIRONMENTAL & RADIATION CONTROL
MANAGER NUCLEAR TRAINING
MANAGER OPERATIONS QA/QC
PERFORMANCE EVALUATION UNIT
Corporate Office
Site
PRINCIPAL ENGINEER ONSITE NUCLEAR SAFETY
PLANT GENERAL MANAGER
PNSC
ASSISTANT TO PLANT MANAGER
MANAGER TECHNICAL SUPPORT
MANAGER PLANT OPERATIONS
DIRECTOR SCHEDULING & PLANNING
DIRECTOR QA/QC
MANAGER ENVIRONMENTAL & RADIATION CONTROL
MANAGER OPERATIONS

Fig. 6.2.1-1

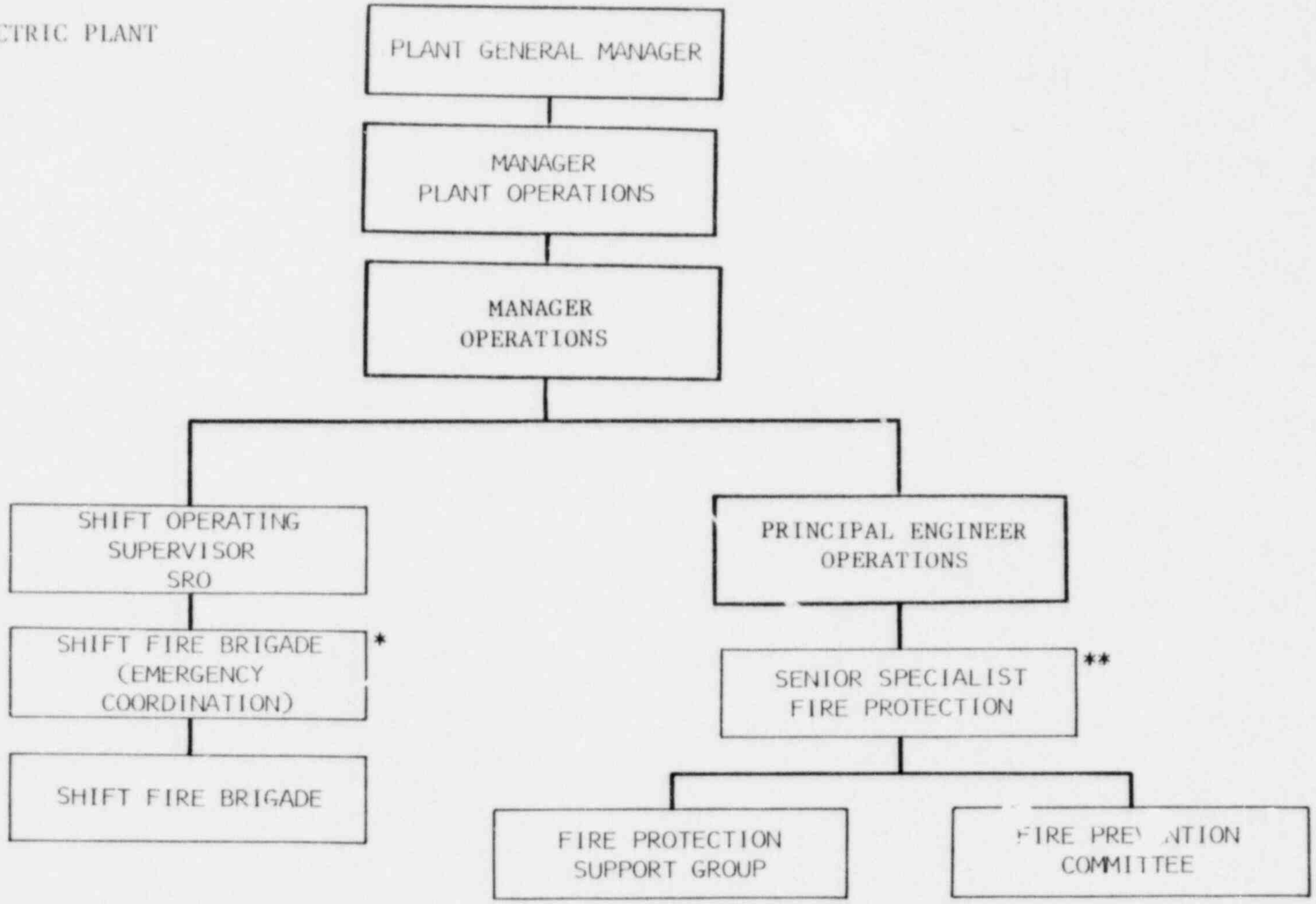


FACILITY ORGANIZATION
BRUNSWICK STEAM ELECTRIC PLANT

Fig. 6.2.2-1

PLANT FIRE PROTECTION ORGANIZATION

BRUNSWICK STEAM ELECTRIC PLANT



LEGEND

*Number of Brigade Fire Chiefs varies with shift organization.

**One Engineer is assigned the duties of the plant fire chief.

Fig. 6.2.2-2

TABLE 6.2.2-1

MINIMUM SHIFT CREW COMPOSITION #

Condition of Unit 1 - Unit 2 in CONDITION 1, 2, or 3

LICENSE CATEGORY	APPLICABLE OPERATIONAL CONDITIONS	
	1, 2, 3	4 & 5
SRO**	2	2*
RO**	3	3
Non-Licensed	4	3
Shift Technical Advisor	1	1

Condition of Unit 1 - Unit 2 in CONDITION 4 or 5

LICENSE CATEGORY	APPLICABLE OPERATIONAL CONDITIONS	
	1, 2, 3	4 & 5
SRO**	2	1*
RO**	3	2
Non-Licensed	3	3
Shift Technical Advisor	1	0

Condition of Unit 1 - No Fuel in Unit 2

LICENSE CATEGORY	APPLICABLE OPERATIONAL CONDITIONS	
	1, 2, 3	4 & 5
SRO	1	1*
RO	2	1
Non-Licensed	2	1
Shift Technical Advisor	1	0

* Does not include the licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising CORE ALTERATIONS.

**Assumes each individual is licensed on both plants.

Shift crew composition, including an individual qualified in radiation protection procedures, may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2.2-1.

TABLE 6.2.2-1

MINIMUM SHIFT CREW COMPOSITION

Condition of Unit 2 - Unit 1 in CONDITION 1, 2, or 3

LICENSE CATEGORY	APPLICABLE OPERATIONAL CONDITIONS	
	1, 2, 3	4 & 5
SRO**	2	2*
RO**	3	3
Non-Licensed	4	3
Shift Technical Advisor	1	1

Condition of Unit 2 - Unit 1 in CONDITION 4 or 5

LICENSE CATEGORY	APPLICABLE OPERATIONAL CONDITIONS	
	1, 2, 3	4 & 5
SRO**	2	1*
RO**	3	2
Non-Licensed	3	3
Shift Technical Advisor	1	0

Condition of Unit 2 - No Fuel in Unit 1

LICENSE CATEGORY	APPLICABLE OPERATIONAL CONDITIONS	
	1, 2, 3	4 & 5
SRO	1	1*
RO	2	1
Non-Licensed	2	1
Shift Technical Advisor	1	0

* Does not include the licensed Senior Reactor Operator or Senior Reactor Operator Limited to Fuel Handling, supervising CORE ALTERATIONS.

**Assumes each individual is licensed on both plants.

Shift crew composition, including an individual qualified in radiation protection procedures, may be less than the minimum requirements for a period of time not to exceed 2 hours in order to accommodate unexpected absence of on duty shift crew members provided immediate action is taken to restore the shift crew composition to within the minimum requirements of Table 6.2.2-1.

6.3 FACILITY STAFF QUALIFICATIONS

6.3.1 Each member of the facility staff shall meet or exceed the minimum qualifications of ANSI N18.1-1971 for comparable positions, except for (1) the Radiation Control Supervisor who shall meet or exceed the qualifications of Regulatory Guide 1.8, September 1975 and (2) (2) the Shift Technical Advisor who shall have a bachelor's degree or equivalent in a scientific or engineering discipline with specific training in plant design, and response and analysis of the plant for transients and accidents.

6.4 TRAINING

6.4.1 A retraining and replacement training program for the facility staff shall be maintained and shall meet or exceed the requirements and recommendations of Section 5.5 of ANSI N18.1-1971 and Appendix "A" of 10CFR Part 55.

6.4.2 A training program for the Fire Brigade shall be maintained and shall meet or exceed the requirements of Section 27 of the NFPA Code-1975.

6.5 REVIEW AND AUDIT

6.5.1 The licensee organization's review and approval process shall assure that the nuclear safety of the facility is maintained.

6.5.1.1 Procedures, Tests, and Experiments

6.5.1.1.1 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, Rev. 2, February 1978.

b. Refueling operations.

c. Surveillance and test activities of safety-related equipment.

d. Security Plan implementing procedures.

e. Emergency Plan implementing procedures.

f. Fire Protection Program implementation.

6.5.1.1.2 A safety analysis shall be prepared for all procedures, tests, and experiments covering the activities identified in 6.5.1.1.1 and procedures that affect nuclear safety. The analysis shall include a written determination of whether or not the procedure, test, or experiment is a change in the facility as described in the FSAR, involves a change to the Technical Specification, or constitutes an unreviewed safety question as defined in 10CFR50.59(a)(2). A first party review of this analysis must be performed by a qualified individual under 6.5.1.5.1; this qualified individual may be the preparer.

6.5.1.1.3 Prior to approval, a second safety review shall be performed on all procedures, tests, or experiments that affect nuclear safety. This review shall be performed by a qualified individual other than the individual who was the original preparer.

6.5.1.1.4 Following the two-party review, procedures, tests, and experiments and permanent changes thereto (other than editorial or typographical) which have been determined neither to involve an unreviewed safety question as defined in 10CFR50.59(a)(2), nor a change to the Technical Specifications, shall be approved prior to implementation by one of the following:

a. Plant General Manager, or

b. The Manager of the functional area affected by the procedures tests, and experiments and permanent changes thereto, or

c. In the event of the absence of the Manager of the functional area, an alternate designated by the General Manager in writing.

The individual approving the procedure, test, or experiment or change thereto shall be other than those who performed the required reviews.

6.5.1.1.5 Temporary changes to procedures, tests, or experiments may be approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator License on the unit affected, if such change does not change the intent of the original procedure, test, or experiment. Temporary changes shall be documented and, within 21 days of receiving approval, be reviewed and incorporated as a permanent change or deleted per 6.5.1.1.4.

6.5.1.1.6 Those procedures, tests, or experiments and changes thereto that constitute an unreviewed safety question, or involve a change to Technical Specifications shall be reviewed by the Plant Nuclear Safety Committee and submitted to the NRC for approval prior to implementation. All such procedures, tests, or experiments and changes shall be reviewed by the Corporate Nuclear Safety Section prior to implementation.

6.5.1.1.7 Procedures, tests, or experiments, which constitute a change to the FSAR shall also be reviewed by the Corporate Nuclear Safety Section. These reviews may be conducted after plant Management approval, and implementation may proceed prior to completion of review as provided for by 10CFR50.59(a)(1).

6.5.1.2 Modifications

6.5.1.2.1 A safety analysis shall be prepared for all modifications that affect nuclear safety. The analysis shall include a written determination of whether or not the modification is a change in the facility as described in the FSAR, involves a change to the Technical Specification, or constitutes an unreviewed safety question as defined in 10CFR50.59(a)(2).

A first party review of this analysis must be performed by a qualified individual under 6.5.1.5.1; this qualified individual may be the preparer.

6.5.1.2.2 Prior to approval, a second safety review shall be performed on all modifications that affect nuclear safety. This review shall be performed by a qualified individual other than the individual who was the original preparer.

6.5.1.2.3 Following the two party review, modifications that have been determined neither to involve an unreviewed safety question as defined in 10CFR50.59(a)(2) nor a change to the Technical Specifications shall be approved, prior to implementation, by one of the following:

a. Plant General Manager, or

b. An alternate designated by the General Manager in writing.

The individual approving these modifications shall be other than those who performed the required reviews.

6.5.1.2.4 Modifications that are determined to either constitute an unreviewed safety question, as defined in 10CFR50.59(a)(2), or a change to the Technical Specifications, shall be reviewed by the Plant Nuclear Safety Committee and submitted to the NRC for approval prior to implementation. All such modifications shall be approved by the Corporate Nuclear Safety Section prior to implementation.

6.5.1.2.5 Modifications which constitute changes to the facility as described in the FSAR shall also be reviewed by the Corporate Nuclear Safety Section. This review may be conducted after plant Management approval, and implementation may proceed prior to completion of review as provided for by 10CFR50.59(a)(1).

6.5.1.3 Technical Specification and License Changes

6.5.1.3.1 Each proposed Technical Specification or Operating License change shall be reviewed by the Plant Nuclear Safety Committee and submitted to the NRC for approval.

6.5.1.4 Review of Technical Specification Violations

6.5.1.4.1 Violations of Technical Specifications that constitute incidents reportable pursuant to Technical Specifications 6.6 and 6.7 shall be investigated and a report prepared that evaluates the occurrence and that provides recommendations to prevent recurrence. Such reports shall be approved by the Plant General Manager or his designee and submitted to the Vice President - Nuclear Operations and to the Manager - Corporate Nuclear Safety.

6.5.1.5 Nuclear Safety Review Qualification

6.5.1.5.1 Qualified individuals shall be designated by the Plant General Manager for the reviews of Specifications 6.5.1.1.2, 6.5.1.1.3, 6.5.1.2.1, and 6.5.1.2.2.

6.5.1.6 Plant Nuclear Safety Committee (PNSC)

6.5.1.6.1 a. As an effective means for the regular overview, evaluation, and maintenance of plant operational safety, a Plant Nuclear Safety Committee (PNSC) is established.

b. The committee shall function through the utilization of subcommittees, audits, investigations, reports, and/or performance of reviews as a group.

6.5.1.6.2 The PNSC shall be composed of the following:

Chairman - Plant General Manager

Vice Chairman - Manager - Plant Operations (Member when not serving as Chairman), or as designated by the Plant General Manager

Secretary - Administrative Supervisor or as designated by the Chairman or Vice Chairman

Member - Manager - Technical Support or designated alternate

Member - Operations Manager or designated alternate

Member - Maintenance Manager or designated alternate

Member - Environmental & Radiation Control Manager or designated alternate

Member - Engineering Supervisor or designated alternate

Member - Assistant to Plant General Manager

Member - Director - QA/QC or designated alternate

6.5.1.6.3 Alternates shall be appointed in writing by the General Manager.

6.5.1.6.4 The PNSC shall meet at least once per calendar month and as convened by the PNSC Chairman or his designated alternate.

6.5.1.6.5 A quorum of the PNSC shall consist of the Chairman or Vice Chairman, Secretary, and three members. Of the five individuals constituting a quorum, no more than two may be alternates.

6.5.1.6.6 The PNSC activities shall include the following:

a. Perform an overview of Specifications 6.5.1.1, 6.5.1.2, 6.5.1.3, and 6.5.1.4 to assure the processes are effectively maintained.

b. Performance of special reviews, investigations, and reports thereon requested by the Manager - Corporate Nuclear Safety.

c. Annual review of the Security Plan and Emergency Plan.

d. Perform reviews of Specifications 6.5.1.1.6, 6.5.1.2.4, and 6.5.1.3.1.

6.5.1.6.7 In the event of disagreement between the recommendations of the Plant Nuclear Safety Committee and the actions contemplated by the General Manager, the course determined by the General Manager to be more conservative will be followed. The Vice President - Nuclear Operations and the Manager - Corporate Nuclear Safety will be notified within 24 hours of the disagreement and subsequent actions.

6.5.1.6.8 The PNSC shall maintain written minutes of each meeting that, at a minimum, document the results of all PNSC activities performed under the provisions of these Technical Specifications; and copies shall be provided to the Vice President -Nuclear Operations, and to the Manager - Corporate Nuclear Safety.

6.5.2 Corporate Nuclear Safety Section - Independent Review

The Corporate Nuclear Safety Section of the Corporate Nuclear Safety & Research Department shall provide independent review of significant plant changes, tests, and procedures; verify that reportable occurrences are investigated in a timely manner and corrected in a manner that reduces the probability of recurrence of such events; and detect trends that may not be apparent to a day-to-day observer. Specific review subjects are defined in Specification 6.5.2.1.d.

6.5.2.1 The Manager - Corporate Nuclear Safety, under the Vice President - Coporate Nuclear Safety & Research, is charged with the overall responsibility for administering the independent review function as follows:

a. Approves selection of the individuals to conduct safety reviews under Specification 6.5.2.

b. Has access to plant records and operating personnel in performing independent reviews.

c. Prepares and retains written records of reviews.

d. Assures independent reviews are conducted on the following subjects:

(1) Written safety evaluations of changes in the facility as described in the Safety Analysis Report, changes in procedures as described in the Safety Analysis Report, and tests or experiments not described in the Safety Analysis Report that are completed without prior NRC approval under the provisions of 10CFR50.59(a)(1). This review is to verify that such changes, tests, or experiments did not involve a change in the Technical Specifications or an unreviewed safety question as defined in 10CFR50.59(a)(2). These reviews may be conducted after appropriate management approval, and implementation may proceed prior to completion of the review.

(2) Proposed changes in procedures, proposed changes in the facility, or proposed tests or experiments, any of which involves a change in the Technical Specifications or an unreviewed safety question pursuant to 10CFR50.59(c). Matters of this kind shall be referred to the Corporate Nuclear Safety Section by the Plant General Manager or by other functional organizational units within Carolina Power & Light Company prior to implementation.

(3) Proposed changes to the Technical Specifications or this operating license, prior to implementation.

(4) Violations, deviations, and reportable events that require reporting to the NRC within 24 hours, such as:

a. Violations of applicable codes, regulations, orders, Technical Specifications, license requirements, or internal procedures or instructions having safety significance; and

b. Significant operating abnormalities or deviations from normal or expected performance of plant safety-related structures, systems, or components.

Review of events covered under this paragraph shall include the results of any investigations made and the recommendations resulting from such investigations to prevent or reduce the probability of recurrence of the event.

(5) Any other matter involving safe operation of the nuclear power plant that the Manager - Corporate Nuclear Safety Section, deems appropriate for consideration or which is referred to the Manager - Corporate Nuclear Safety Section, by the on-site operating organization or by other functional organizational units within Carolina Power & Light Company.

(6) Reports and minut ,f the PNSC.

6.5.2.2 Results of Corporate Nuclear Safety reviews, including recommendations and concerns, shall be documented.

a. Copies of documented reviews shall be retained in the CNS files.

b. Recommendations and concerns shall be submitted to the plant General Manager and Vice President - Nuclear Operations, within 14 days of dete .nation.

c. A summation of Corporate Nuclear Safety recommendations and concerns shall be submitted to the Chairman/ President and Chief Executive Officer; Vice Chairman; Executive Vice President - Power Supply and Engineering and Construction; Senior Vice President - Power Supply; Vice President - Nuclear Operations; Vice President -

Nuclear Safety & Research, plant General Manager; and others, as appropriate on at least a bimonthly frequency.

d. The Corporate Nuclear Safety review program shall be conducted in accordance with written, approved procedures.

6.5.2.3 Personnel

a. Personnel assigned responsibility for independent reviews shall be specified in technical disciplines and shall collectively have the experience and competence required to review problems in the following areas:

(1) Nuclear power plant operations
(2) Nuclear engineering
(3) Chemistry and radiochemistry
(4) Metallurgy
(5) Instrumentation and control
(6) Radiological safety
(7) Mechanical and electrical engineering
(8) Administrative controls
(9) Seismic and environmental
(10) Quality assurance practices

b. The following minimum experience requirements shall be established for those persons involved in the independent safety review program:

(1) Manager of CNSS - Bachelor of Science in engineering or related field and ten (10) years related experience, including five (5) years' involvement with operation and/or design of nuclear power plants.

(2) Reviewers - Bachelor of Science in engineering or related field or equivalent and five (5) years related experience.

c. An individual may possess competence in more than one specialty area. If sufficient expertise is not available within the Corporate Nuclear Safety Section, competent individuals from other Carolina Power & Light Company organizations or outside consultants shall be utilized in performing independent reviews and investigations.

d. At least three persons, qualified as discussed in Specification 6.5.2.3.b, shall review each item submitted under the requirements of Section 6.5.2.1.d.

e. Independent safety reviews shall be performed by personnel not directly involved with the activity or responsible for the activity.

6.5.3 Performance Evaluation Unit

6.5.3.1 The Performance Evaluation Unit of the Corporate Quality Assurance Department shall perform audits of plant activities. These audits shall encompass:

a. The conformance of facility operation to all provisions contained within the Technical Specifications and applicable license conditions at least once per 12 months.

b. The training and qualifications of the entire facility staff at least once per 12 months.

c. The results of actions taken to correct deficiencies occurring in facility equipment, structures, systems, or method of operation that affect nuclear safety at least once per 6 months.

d. The verification of compliance and implementation of the requirements of the Quality Assurance Program to meet the criteria of Appendix B, 10CFR50, at least once per 24 months.

e. The Emergency Plan and implementing procedures at least once per 24 months.

f. The Security Plan and implementing procedures at least once per 24 months.

g. The Facility Fire Protection Program and implementing procedures at least once per 24 months.

h. Any other area of facility operation considered appropriate by the Corporate Quality Assurance Performance Evaluation Unit.

6.5.3.2 a. Audit personnel shall be independent of the area audited. Selection for auditing assignments is based on experience or training that establishes that their qualifications are commensurate with the complexity or special nature of the activities to be audited. In selecting auditing personnel, consideration shall be given to special abilities, specialized technical training, prior pertinent experience, personal characteristics, and education.

b. Qualified outside consultants or other individuals independent from those personnel directly involved in plant operation, shall be used to augment the audit teams when necessary. Individuals performing the audits may be members of the audited organization; however, they shall not audit activities for which they have immediate responsibility, and while performing the audit, they shall not report to a management representative who has immediate responsibility for the activity audited.

6.5.3.3 Results of plant audits are approved by the Principal QA Specialist - Performance Evaluation Unit, and transmitted to the Executive Vice President - Power Supply and Engineering & Construction; the Senior Vice President - Power Supply; Vice President - Nuclear Operations; Plant General Manager; and the Vice President - Nuclear Safety & Research; and others, as appropriate, within 30 days after the completion of the audit.

6.5.3.4 The Corporate Quality Assurance Audit Program shall be conducted in accordance with written, approved procedures.

6.5.4 Outside Agency Inspection and Audit Program

6.5.4.1 An independent fire protection and loss prevention inspection and audit shall be performed at least once per 12 months utilizing either qualified offsite personnel or an outside fire protection firm.

6.5.4.2 An inspection and audit of the fire protection and loss prevention program shall be performed by a qualified outside fire consultant at least once per 36 months.

6.6 REPORTABLE OCCURRENCE ACTION

6.6.1 The following actions shall be taken for REPORTABLE OCCURRENCES:

a. The NRC shall be notified and/or a report submitted pursuant to the requirements of Specification 6.9.1.7.

b. Each REPORTABLE OCCURRENCE requiring 24-hour notification to the NRC shall be reviewed by the plant General Manager and submitted to the Manager - Corporate Nuclear Safety Section, and the Vice President - Nuclear Operations.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The facility shall be placed in at least HOT SHUTDOWN within two hours.

b. The Safety Limit violation shall be reported to the Commission, the Vice President - Nuclear Operations, and to the Manager - Corporate Nuclear Safety Section, within 24 hours.

c. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the plant General Manager. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon facility components, systems, or structures, and (3) corrective action taken to prevent recurrence.

d. The Safety Limit Violation Report shall be submitted to the Commission, the Vice President - Nuclear Operations, and the Manager - Corporate Nuclear Safety Section, within 14 days of the violation.

6.8 NOT USED

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

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 Director of the Regional Office of Inspection and Enforcement unless otherwise noted.

START-UP 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.

6.9.1.2 The start-up report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operation 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 Start-up 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 power operation), supplementary reports shall be submitted at least every three months until all three events have been completed.

ANNUAL REPORTS

6.9.1.4 Annual reports covering the activities of the unit as described below during the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

6.9.1.5 Reports required on an annual basis shall include a tabulation of the number of station, utility and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated man rem exposure according to work and job functions, e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignment to various duty functions may be estimates based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total whole body dose received from external sources shall be assigned to specific major work functions.

MONTHLY OPERATING REPORT

6.9.1.6 Routine reports of operating statistics and shutdown experience shall be submitted on a monthly basis to the Office of Inspection and Enforcement, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, with a copy to the Regional Office, to arrive no later than the tenth of each month following the calendar month covered by the report.

REPORTABLE OCCURRENCES

6.9.1.7 The RE ,RTABLE OCCURRENCES of Specifications 6.9.1.8 and 6.9.1.9 below, including corrective actions and measures prevent recurrence, shall be reported to the NRC. Supplemental reports may be required to fully describe final resolution of occurrence. In case of corrected or supplemental reports, a licensee event report shall be completed and reference shall be made to the original report date.

6.9.1.8 Prompt Notification With Written Follow-up

The types of events listed below shall be reported within 24 hours by telephone and confirmed by telegraph, mailgram, or facsimile transmission to the Director of the appropriate Regional Office of Inspection and Enforcement or his designate no later than the first working day following the event, with a written follow-up report within two weeks. The written follow-up report shall include, as a minimum, a completed copy of the licensee event report form.

Information provided on the licensee event report shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

(a) Failure of the reactor protection system, or other systems subject to limiting safety system settings to initiate the required protective function by the time a monitored parameter reaches the set point specified as the limiting safety system setting in the Technical Specifications or failure to complete the required protective function.

Note: Instrument drift discovered as a result of testing need not be reported under this item (but see 6.9.1.8(e), 6.9.1.8(f), and 6.9.1.9(a) below.)

(b) Operation of the unit or affected systems when any parameter or operation subject to a limiting condition for operation is less conservative than the least conservative aspect of the limiting condition for operation established in the Technical Specifications.

Note: If specified action is taken when a system is found to be operating between the most conservative and least conservative aspects of a limiting condition for operation listed in Technical Specifications, the limiting condition for operation is not considered to have been violated and no report need be submitted under this section (but see 6.9.1.9(b) below.)

(c) Abnormal degradation discovered in fuel cladding, reactor coolant pressure boundary, or primary containment.

Note: Leakage of valve packing or gaskets within the limits for identified leakage set forth in Technical Specifications need not be reported under this section.

(d) Reactivity anomalies involving disagreement with predicted value of reactivity balance under steady-state conditions during power operation greater than or equal to 1% $\Delta k/k$; a calculated reactivity balance indicating a SHUTDOWN MARGIN less conservative than specified in the Technical Specifications; short-term reactivity increases that correspond to a reactor period of less than 5 seconds, or if subcritical, an unplanned reactivity insertion of more than 0.5% $\Delta k/k$; or any unplanned criticality.

(e) Failure or malfunction to one or more components that prevents or could prevent, by itself, the fulfillment of the functional requirements of systems required to cope with accidents analyzed in the SAR.

(f) Personnel error or procedural inadequacy which prevents or could prevent, by itself, the fulfillment of the

functional requirements of systems required to cope with accidents analyzed in the SAR.

Note: For 6.9.1.8(e) and 6.9.1.8(f), reduced redundancy that does not result in loss of system function need not be reported under this section (but see 6.9.1.9(b) and 6.9.1.9(c) below.)

(g) Conditions arising from natural or man-made events that, as a direct result of the event, require plant shutdown, operation of safety systems, or other protective measures required by Technical Specifications.

(h) Errors discovered in the transient or accident analyses or in the methods used for such analyses as described in the safety analysis report or in the bases for the Technical Specifications that have or could have permitted reactor operation in a manner less conservative than assumed in the analyses.

(i) Performance of structures, systems, or components that requires remedial action or corrective measures to prevent operation in a manner less conservative than assumed in the accident analyses in the safety analysis report or Technical Specifications bases or

discovery during plant life of conditions not specifically considered in the safety analysis report or Technical Specifications that require remedial action or corrective measures to prevent the existence or development of an unsafe condition.

Note: This item is intended to provide for reporting of potentially generic problems.

6.9.1.9 Thirty-Day Written Reports

The reportable occurrences discussed below shall be the subject of written reports to the Director of the appropriate Regional Office within thirty days of occurrence of the event. The written report shall include, as a minimum, a completed copy of the licensee event report form. Information provided on the licensee event report form shall be supplemented, as needed, by additional narrative material to provide complete explanation of the circumstances surrounding the event.

(a) Reactor protection system or engineered safety feature instrument settings which are found to be less conservative than those established by the Technical Specifications but which do not prevent the fulfillment of the functional requirements of affected systems (but see 6.9.1.8(a) and 6.9.1.8(b) above.)

(b) Conditions leading to operation in a degraded mode permitted by a limiting condition for operation or plant shutdown required by a limiting condition for operation (but see 6.9.1.8(b) above.)

Note: Routine surveillance testing, instrument calibration, or preventive maintenance that require configurations described in 6.9.1.9(a) and 6.9.1.9(b) above need not be reported except where test results themselves reveal a degraded mode as described above.

(c) Observed inadequacies in the implementation of administrative or procedural controls that threaten to cause reduction of degree of redundancy provided in reactor protection systems or engineered safety feature systems (but see 6.9.1.8(f) above.)

(d) Abnormal degradation of systems other than those specified in 6.9.1.8(c) above designed to contain radioactive material resulting from the fission process.

Note: Sealed sources or calibration sources are not included under this item. Leakage of valve packing or gaskets within the limits for identified leakage set forth in Technical Specifications need not be reported under this item.

SPECIAL REPORTS

6.9.2 Special reports shall be submitted to the Director of the Office of Inspection and Enforcement Regional Office within the time period specified for each report. These reports shall be submitted covering the activities identified below pursuant to the requirements of the applicable reference specification:

a. Inoperable Seismic Monitoring Instrumentation, Specification 3.3.5.1.

b. Seismic event analysis, Specification 4.3.5.1.2.

c. Reactor coolant specific activity analysis, Specification 3.4.5.

d. Fire detection instrumentation, Specification 3.3.5.7.

e. Fire suppression systems, Specifications 3.7.7.1, 3.7.7.2, 3.7.7.3, and 3.7.7.5.

f. ECCS actuation, Specifications 3.5.3.1 and 3.5.3.2.

g. Fire barrier penetration, Specification 3.7.8.

6.10 RECORD RETENTION

6.10.1 The following records shall be retained for at least five years:

a. Records and logs of facility operation covering time interval at each power level.

b. Records and logs of principal maintenance activities, inspections, repair and replacement of principal items of equipment related to nuclear safety.

c. ALL REPORTABLE OCCURRENCE submitted to the Commission.

d. Records of surveillance activities, inspections, and calibrations required by these Technical Specifications.

e. Records of changes made to Operating Procedures.

f. Records of radioactive shipments.

g. Records of sealed source and fission detectors leak tests and results.

h. Records of annual physical inventory of all sealed source material of record.

6.10.2 The following records shall be retained for the duration of the Facility Operating License:

a. Records and drawing changes reflecting facility design modifications made to systems and equipment described in the Final Safety Analysis Report.

b. Records of new and irradiated fuel inventory, fuel transfers and assembly burnup histories.

c. Records of facility radiation and contamination surveys.

d. Records or radiation exposure for all individuals entering radiation control areas.

e. Records of gaseous and liquid radioactive material released to the environs.

f. Records of transient or operational cycles for those facility components identified in Table 5.7.1-1.

g. Records of reactor tests and experiments.

h. Records of training and qualification for current members of the plant staff.

i. Records of inservice inspections performed pursuant to these Technical Specifications.

j. Records of Quality Assurance activities required by the QA Manual.

k. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59.

l. Records of (1) meetings of the PNSC, (2) meetings of the previous off-site review organization, the Company Nuclear Safety Committee (CNSC), and (3) the independent reviews performed by the Corporate Nuclear Safety Section.

m. Records for Environmental Qualification which are covered under the provisions of paragraph 6.13.

6.11 RADIATION PROTECTION PROGRAM

Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR Part 20 and shall be approved, maintained and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 In lieu of the "control device" or "alarm signal" required by paragraph 20.203(c)(2) of 10 CFR 20, each High Radiation Area in which the intensity of radiation is 1000 mrem/hr or less shall be barricaded and conspicuously posted as a

high radiation area and entrance thereto shall be controlled by requiring issuance of a Radiation Work Permit*. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

a. A radiation monitoring device which continuously indicates the radiation dose rate in the area.

b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate level in the area has been established and personnel have been made knowledgeable of them.

c. An individual qualified in radiation protection procedures who is equipped with a radiation dose rate monitoring device. This individual shall be responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the facility Health Physicist in the Radiation Work Permit.

*Health Physics personnel shall be exempt from the RWP issuance requirement during the performance of their assigned radiation protection duties, provided they comply with approved radiation protection procedures for entry into high radiation areas.

6.12.2 The requirements of 6.12.1, above, shall also apply to each high radiation area in which the intensity of radiation is greater than 1000 mrem/hr. In addition, locked doors shall be provided to prevent unauthorized entry into such areas and the keys shall be maintained under the administrative control of the Shift Foreman on duty and/or the Plant Health Physicist.

6.13 ENVIRONMENTAL QUALIFICATION

A. By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment", December 1979. Copies of these documents are attached to Order for Modification of License DPR-71 dated October 24, 1980.

B. By no later than December 1, 1980, complete and auditible records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.

6.13 ENVIRONMENTAL QUALIFICATION

A. By no later than June 30, 1982 all safety-related electrical equipment in the facility shall be qualified in accordance with the provisions of: Division of Operating Reactors "Guidelines for Evaluating Environmental Qualification of Class IE Electrical Equipment in Operating Reactors" (DOR Guidelines); or, NUREG-0588 "Interim Staff Position on Environmental Qualification of Safety-Related Electrical Equipment", December 1979. Copies of these documents are attached to Order for Modification of License DPR-62 dated October 24, 1980.

B. By no later than December 1, 1980, complete and auditible records must be available and maintained at a central location which describe the environmental qualification method used for all safety-related electrical equipment in sufficient detail to document the degree of compliance with the DOR Guidelines or NUREG-0588. Thereafter, such records should be updated and maintained current as equipment is replaced, further tested, or otherwise further qualified.

Appendix B

BRUNSWICK STEAM ELECTRIC PLANT, UNITS 1 & 2

ENVIRONMENTAL TECHNICAL SPECIFICATIONS

TABLE OF CONTENTS

LIST OF FIGURES

APPENDIX B

Section 5.0

ADMINISTRATIVE CONTROLS

Objective

This section describes the administrative controls and procedures necessary to implement the Environmental Technical Specifications.

5.1 ORGANIZATION AND REVIEW

The plant General Manager is directly responsible for the safe operation of the facility as shown in Appendix A, Figure 6.2.2-1. In all matters pertaining to the operation of the plant and to the Environmental Technical Specifications, the plant General Manager is directly responsible to the Vice President - Nuclear Operations. The Environmental and Radiation Control Manager is directly responsible to the plant General Manager for all Environmental Technical Specifications applicable to the plant, radiological and otherwise. In the Technical Services Department, the Manager - Environmental and Radiation Control and his staff function in a staff capacity to assist in the proper implementation of the Environmental Technical Specifications.

Review of plant operations and the Technical Specifications shall be accomplished as organizationally described in Appendix A to the facility operating license. Audits of plant operations shall be performed by the Performance Evaluation Unit as described in Appendix A to the facility operating license.

Review and audit functions are defined as follows:

a. Review of proposed changes to the Environmental Technical Specifications and the evaluated impact of the change as described in Appendix A to the facility operating license.

b. Review of changes or modifications to plant systems or equipment that are determined to have a significant adverse effect on the environment and the evaluated impact of the change as described in Appendix A to the facility operating license.

c. Review of written procedures and changes thereto as described in Appendix A to the facility operating license.

d. Investigation of reported instances where an environmental protection limit is exceeded or the occurrence of an unusual environmental event associated with operation of the plant which involves a significant environmental impact. The report and recommendations that result from

the investigation will be reviewed by the Corporate Nuclear Safety Section.

e. Corporate quality assurance audit of plant operations and written procedures for implementation of these Technical Specifications by the Performance Evaluation Unit as described in Appendix A to the facility operating license.

5.2 ACTION TO BE TAKEN IN THE EVENT OF AN ENVIRONMENTAL EVENT DURING PLANT OPERATIONS

5.2.1 An environmental event shall be reported promptly to the Vice President - Nuclear Operations, and reviewed by the Corporate Nuclear Safety Section. The plant General Manager shall take action to abate any impact, immediately following his determination of appropriate action permitted by the Technical Specifications.

5.2.2 As specified in Section 5.4.2, a report for each environmental event shall be prepared.

5.2.3 Copies of all such reports shall be submitted to the Vice President - Nuclear Operations, and the Manager of Corporate Nuclear Safety Section, for review.

5.2.4 The circumstances of any environmental event shall be reported to the NRC as specified in Section 5.4.2.

5.3 OPERATING PROCEDURES

5.3.1 Written procedures shall be prepared and approved as specified in Section 5.3.2 for operation to ensure compliance with the environmental protection conditions and associated surveillance requirements of Sections 2 and 3. Procedures will include monitoring, sample collection, sample analysis, and actions to be taken when environmental protection conditions are exceeded. These procedures include quality checks and will be audited by the Corporate Quality Assurance Department in accordance with 6.5.3.1.a of Appendix A of these Technical Specifications. Testing frequency of any alarms will also be included.

5.3.2 Procedures described in Section 5.3.1 above, and changes thereto, shall be reviewed and approved as specified in Appendix A of this license.

5.3.3 Written procedures shall be prepared and approved as specified in Section 5.3.4 for operation and carrying out the Environmental Surveillance Programs described in Section 4 and those surveillance programs described in Section 3, which are not associated with the environmental protection conditions. Procedures will include sampling and analysis. Procedures shall be developed that will assure the accuracy of the results obtained.

5.3.4 The Environmental Surveillance Programs may be carried out by the plant organization, another organization within the

Company, or by a contractor. For those programs carried out by the plant staff, the procedures and changes thereto will be reviewed and approved as described in Section 5.3.2. For those programs carried out off site, a procedure review and approval program will be established adequate to ensure the accuracy of the program and results.

5.4 PLANT REPORTING REQUIREMENTS

5.4.1 Routine Reports

5.4.1.1 A semiannual report covering the previous six months' operation shall be submitted within 60 days after January 1 and July 1 of each year. The first such period shall begin with the semiannual period following that in which the Environmental Technical Specifications are issued. These reports shall include the following:

a. A summary of the quantities of radioactive effluents released from the plant and potential doses, as outlined in the NRC Regulatory Guide 1.21.

b. Summary of meteorological data as outlined in NRC Regulatory Guide 1.21.

c. Records of changes as described in Section 5.4.2.c(1) and (2).

d. Records of maintenance dredging performed in the canals including: dates, locations, types of dredging, disposition of spoil material (location and, if available, an estimate of the amount of spoil material).

e. The results of any thermal monitoring in the ocean outfall area that is required by the State of N[illegible] Carolina during the period covered by the report.

5.4.1.2 A separate annual environmental radiological report covering the previous 12 months of operation shall be submitted within 90 days after January 1 of each year. The first such report shall be submitted for the 12-month calendar period during which initial criticality is achieved. Data not available for inclusion in the report will be submitted as soon as possible in a supplementary report. The report shall include the following:

a. Summary records of monitoring requirements, surveys and samples.

b. Analysis of environmental data.

5.4.1.3 A copy of each quarterly progress report on nonradiological monitoring and special studies, sent to the Interagency Review Committee, shall also be submitted within 15 days to the NRC, Division of Licensing.

5.4.2 Non-Routine Reports

a. Nonradiological Reports

A written report shall be made to the Director of the appropriate regional office (copy to the Director of Nuclear Reactor Regulation), within 14 days of a nonradiological environmental event.

The written report shall (a) describe, analyze, and evaluate the event, including extent and magnitude of the impact; (b) describe the cause of the event, and (c) indicate the corrective action (including any significant changes made in procedures) taken to preclude repetition of the event and to prevent similar events involving similar components or systems.

b. Radiological Reports

Violations of an Environmental Technical Specification, including unplanned release of radioactive materials of significant quantities from the site shall be reported in the same manner as described in Section 5.4.2.a. (Non-radiological Reports). The environmental protection conditions for radiological discharges are

described in Section 2.5. The radiological environmental monitoring is described in Section 4.2.

Analyses of environmental samples that exceed the larger of either the control station value (Table 4.2-5) or the minimum detection limit by a factor of 10 or more for that same sample type and time period will be identified, and, if determined to be attributable to the operation of the Brunswick Plant, a written report shall be submitted to the Director of the appropriate regional office (copy to the Director of Nuclear Reactor Regulation) within 30 days after confirmation.* The test for exceeding the guide value will be a T test at 99.5% confidence. The test will be considered positive when:

$$X_i - (10\ X_c) > T_{99.5\%} \sqrt{\sigma_i^{\ 2} + \sigma_c^{\ 2}\ (100)}$$

where:

$T_{99.5\%}$ = 1 tail T test (2.2414)

X_i = value obtained at station i

*A confirmatory reanalysis of the original, a duplicate or a new sample may be desirable, as appropriate. The results of the confirmatory analysis shall be completed at the earliest time consistent with the analysis, but in any case, within 30 days. If the high value is real, the report to the NRC shall be submitted.

X_c = either value obtained at control station or minimum detection limit (mdl), whichever is larger.

σ_i = standard deviation of station i value

σ_c = standard deviation of control station

If milk samples collected over a calendar quarter show average I-131 concentrations of 4.8 picocuries per liter or greater and the increase is determined to be attributable to the operation of the Brunswick Plant, a written report shall be submitted to the Director of the appropriate regional office (copy to the Director of Nuclear Reactor Regulation) within 30 days, and should include an evaluation of any release conditions, environmental factors, or other aspects necessary to explain the anomalous results.

c. Miscellaneous Reports

(1) When a change to the plant design, to the plant operation, or to the procedures described in Section 5.3 is planned that would have a significant adverse effect on the environment or that involves a significant environmental matter or question not previously

reviewed and evaluated by the NRC as determined by the review processes of Appendix A, Specifications 6.5.1.1 and 6.5.1.2, a report on the change shall be submitted to the NRC for information prior to implementation. The report shall include description and evaluation of the impact of the change.

(2) Request for changes in Environmental Technical Specifications shall be submitted to the Director of Nuclear Reactor Regulation, NRC, for prior review and authorization. The request shall include an evaluation of the impact of the change.

5.5 RECORDS RETENTION

5.5.1 Records and logs relative to the following areas shall be retained for the life of the plant:

a. Records and drawing changes reflecting plant design modifications made to systems and equipment as described in Section 5.4.2.c(1).

b. Records of required environmental surveillance data.

c. Records to demonstrate compliance with the environmental protection limits in Section 5.2.

5.5.2 All other records and logs relating to the Environmental Technical Specifications shall be retained for five years.

APPENDIX B

Figure 5.1-1

D E L E T E D

TABLE 3.3.5.7-1

FIRE DETECTION INSTRUMENTS

INSTRUMENT LOCATION		MINIMUM INSTRUMENTS OPERABLE		
		FLAME	HEAT	SMOKE
1. Reactor Building #1				
Zone 1	-17'	0	0	1
Zone 2	-17'	0	0	1
Zone 3	-17'	0	0	6
Zone 4	-17'	0	0	6
Zone 5	20'	0	0	7
Zone 6	20'	0	0	9
Zone 7	20'	0	0	6
Zone 8	50	0	0	5
Zone 9	50	0	0	7
Zone 10	80'	0	0	6
Zone 11	80'	0	0	6
Zone 12	98'	0	0	3
Zone 13	117'	0	0	1
Zone 14	117'	0	0	35
Zone 15	77'	0	0	3
2. Control Building				
Zone 1	70'	0	0	7
Zone 2	49'	0	0	5
Zone 3	49'	0	0	5
Zone 4	49'	0	0	12
Zone 5	49'	0	0	14
Zone 6	49'	0	0	1
Zone 7	23'	0	0	1
Zone 8	23'	0	0	1
Zone 9	23'	0	0	15
Zone 10	23'	0	0	14
Zone 11	23'	0	0	1
Zone 12	23'	0	0	1
Zone 13	49'	0	0	10
Zone 14	49'	0	0	10
3. Diesel Generator Building				
Zone 1	2'	0	0	7
Zone 2	2'	0	0	7
Zone 3	50'	0	0	6
Zone 4	23'	0	0	3
Zone 5	23'	0	0	1
Zone 6	23'	0	0	1
Zone 7	23'	0	0	1
Zone 8	23'	0	0	1
Zone 9	23'	0	0	1
Zone 10	50'	0	0	6

TABLE 3.3.5.7-1

FIRE DETECTION INSTRUMENTS

INSTRUMENT LOCATION		MINIMUM INSTRUMENTS OPERABLE		
		FLAME	HEAT	SMOKE
1. Reactor Building #2				
Zone 1	-17'	0	0	1
Zone 2	-17'	0	0	1
Zone 3	-17'	0	0	6
Zone 4	-17'	0	0	6
Zone 5	20'	0	0	7
Zone 6	20'	0	0	9
Zone 7	20'	0	0	6
Zone 8	50	0	0	5
Zone 9	50	0	0	7
Zone 10	80'	0	0	6
Zone 11	80'	0	0	6
Zone 12	98'	0	0	3
Zone 13	117'	0	0	1
Zone 14	117'	0	0	35
Zone 15	77'	0	0	3
2. Control Building				
Zone 1	70'	0	0	7
Zone 2	49'	0	0	5
Zone 3	49'	0	0	5
Zone 4	49'	0	0	12
Zone 5	49'	0	0	14
Zone 6	49'	0	0	1
Zone 7	23'	0	0	1
Zone 8	23'	0	0	1
Zone 9	23'	0	0	15
Zone 10	23'	0	0	14
Zone 11	23'	0	0	1
Zone 12	23'	0	0	1
Zone 13	49'	0	0	10
Zone 14	49'	0	0	10
3. Diesel Generator Building				
Zone 1	2'	0	0	7
Zone 2	2'	0	0	7
Zone 3	50'	0	0	6
Zone 4	23'	0	0	3
Zone 5	23'	0	0	1
Zone 6	23'	0	0	1
Zone 7	23'	0	0	1
Zone 8	23'	0	0	1
Zone 9	23'	0	0	1
Zone 10	50'	0	0	6