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Form NRC-489
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U. S. NUCLEAR REGULATORY COMMISSION
NRC MANUAL
TRANSMITTAL NOTICE

CHAPTER NRC-0123 ORGANIZATION AND FUNCTIONS
OFFICE OF NUCLEAR REACTOR REGULATION

SUPERSEDED:

TRANSMITTED:

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REMARKS:

This revision of Chapter and Appendix NRC-0123 reflects the transfer of Office of Special Projects functions and responsibilities to the Director, NRR, effective January 1, 1989 and changes which resulted from the EDO reorganization, effective February 5, 1989.

**U.S. NUCLEAR REGULATORY COMMISSION
NRC MANUAL**

Volume: 0000 General Administration
Part : 0100 Organization

NRR

**CHAPTER 0123 ORGANIZATION AND FUNCTIONS
OFFICE OF NUCLEAR REACTOR REGULATION**

0123-01 SUPERVISION

The Office of Nuclear Reactor Regulation is headed by a Director who reports to the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research.

0123-02 FUNCTIONS

Has principal responsibility for implementing regulations, and developing and implementing policies, programs, and procedures for all aspects of licensing and inspection of:

- a. production and utilization facilities, except for those concerning fuel reprocessing plants and isotopic enrichment plants;
- b. receipt, possession, and ownership of source, byproduct, and special nuclear material used or produced at facilities licensed under 10 CFR Part 50;
- c. operators of such facilities;
- d. emergency preparedness at such facilities; and
- e. contractors and suppliers of such facilities.

Identifies and takes action regarding conditions and license performance that may adversely affect public health and safety, the environment, or the safeguarding of nuclear facilities; and assesses and recommends or takes action regarding incidents or accidents. Provides special assistance as required in matters involving reactor facilities exempt from licensing. Provides guidance and implementation direction to Regional Offices on reactor licensing and inspection programs assigned to the Regions, and appraises Regional program performance in terms of effectiveness and uniformity. Performs other functions required for implementation of the reactor licensing and inspection programs.

Specifically, the Office:

021 reviews, evaluates, and processes all aspects of applications for licenses and amendments to such licenses for:

a. the construction, operation, safeguarding, and environmental protection of utilization and production facilities subject to licensing, except for fuel reprocessing plants and isotopic enrichment plants; and

b. operator licenses at such facilities.

022 reviews and evaluates emergency plans associated with construction permits and operating licenses (OLs) and amendments to OLs for reactors. Reviews and evaluates Federal Emergency Management Agency's (FEMA) findings and determinations relating to offsite responses by State and local governments. Develops overall NRC evaluation of reactor licensee/applicant onsite/offsite emergency preparedness plans.

023 reviews and evaluates the safeguards performance of reactor licensees and the adequacy of existing safeguards requirements for licensed reactor facilities, including the conduct of onsite reviews and adequacy assessments, and ensures the development and adequacy of licensee-level safeguards contingency plans for licensed reactor facilities.

024 conducts the indemnification program in accordance with the provisions of the Price Anderson Act, including Section 170.C and K of the Atomic Energy Act of 1954, as amended.

025 reviews, evaluates, and makes safety findings on problems and incidents that result from the construction and operation of utilization and production facilities subject to licensing, except for fuel reprocessing plants and isotopic enrichment plants.

026 develops policies, regulations, and procedures regarding prompt identification of reactor generic problems. Evaluates notifications and information concerning events at NRC reactor licensees through systematic review and analysis performed by NRR and other Offices, and develops and disseminates generic correspondence regarding their technical resolution.

027 develops and administers programs and procedures for implementation of the Commission's policy on standardization (10 CFR Part 50, Appendixes M, N, and O) of utilization and production facilities other than fuel reprocessing plants and isotopic enrichment plants; and reviews, evaluates, and processes applications for licenses and amendments to such licenses in accordance with such policies.

028 develops and directs the implementation of policies and programs for Regional inspection of NRC reactor licensees, applicants for an NRC reactor license, and contractors and suppliers to NRC licensees, to ensure compliance with NRC requirements for public health and safety, the environment, protection against radiological sabotage, and protection of material from diversion to unauthorized uses.

029 performs special inspections of NRC reactor licenses and applicants, and contractors and suppliers to NRC licensees and applicants.

0210 exercises oversight of all reactor inspection and licensing programs in the Regions. Provides programmatic and implementation direction to Regional Offices in the conduct of reactor inspection and licensing programs.

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OFFICE OF NUCLEAR REACTOR REGULATION

NRC-0123-0211

0211 prepares and issues, in conjunction with the Deputy Executive Director for Nuclear Reactor Regulation, Regional Operations and Research, delegations and assignments of authority to Regional Administrators for the implementation of specific Office of Nuclear Reactor Regulation (NRR) programs described in Chapter NRC-0123-03. Establishes broad policy guidance and criteria for implementation of each of these NRR programs in the Regions. Assesses the effectiveness of each established program and determines whether the Regions are implementing the programs in a technically adequate and consistent manner, and whether program requirements are being met.

0212 develops and implements a comprehensive NRC program for the inspection of vendors throughout the U.S. and foreign countries who supply goods and services to NRC-licensed reactor projects/facilities.

0213 ensures that a comprehensive quality assurance program is applied to design, fabrication, construction, testing, and operation of licensed nuclear reactor facilities in accordance with NRC requirements. This encompasses licensees, vendors, architect-engineers, constructors, and other licensee agents.

0214 evaluates, as requested, the nuclear safety aspects of proposals to build or significantly modify any DOE-owned reactor, reactor-related facility, or other system exempt from licensing.

0215 evaluates, as requested, the nuclear safety aspects of the design of Department of Defense (DOD) power, testing, and research reactors exempt from licensing; and reviews and evaluates the health and safety aspects of the location and operation of reactor facilities of the DOD and their general nuclear safety standards and instructions.

0216 provides advice and assistance to the Office of Nuclear Regulatory Research (RES) in the development of regulations, standards, guides, codes, and policies, and resolution of generic safety issues.

0217 identifies research needs required for NRR programs and makes appropriate recommendations to RES.

0218 serves as the principal point of contact for the NRC with the Advisory Committee on Reactor Safeguards for matters under review by NRR.

0219 coordinates with States on guidance for need for power determination.

0220 develops procedures to assure the timely scheduling, review, and processing of all matters under review by the Office.

0221 supervises, directs, coordinates, and approves the activities, including administrative functions, of the various organizational units within the Office.

0222 performs such other functions as may be assigned.

Approved: July 13, 1989

0123-03 DELEGATION OF AUTHORITY TO THE DIRECTOR

The Director is authorized and directed to:

AP 031 take such action as is necessary to carry out the functions assigned by this chapter or other official directives or communications, subject to the limitations prescribed therein. ((Delegations of authority for specific actions and applicable limitations are contained in manual chapters or other directives covering specific subjects. In addition, delegations of authority for actions not within the scope of other manual chapters or other directives are given in succeeding paragraphs in this section.))

032 take action to:

- a. issue, renew, and amend licenses for manufacture, construction, possession, use, acquisition, and operation of utilization and production facilities other than fuel reprocessing plants and isotopic enrichment plants required by the Atomic Energy Act of 1954, as amended; sections 202(1), 202(2), and 203 of the Energy Reorganization Act of 1974; and 10 CFR Part 50, including amendments to such licenses with respect to safeguards matters and transportation within the site boundary;
- b. issue, renew, and amend licenses for operators of utilization and production facilities, except for fuel reprocessing plants and isotopic enrichment plants; and
- c. issue and amend limited work authorizations pursuant to 10 CFR section 50.10(e);

except where the decision rests with an Administrative Law Judge, an Atomic Safety and Licensing Board, the Atomic Safety and Licensing Appeal Board, or the Commission, after a hearing pursuant to 10 CFR Part 2. This authority may include the licensing of byproduct, source, and special nuclear material used or produced in, and used in the operation of or stored at, utilization and production facilities other than fuel reprocessing and isotopic enrichment plants.

033 issue amendments to licenses changing the technical specifications for utilization and production facilities other than fuel reprocessing plants and isotopic enrichment plants; authorizing changes in the facility or facility procedures; or authorizing the conduct of tests and experiments, in accordance with 10 CFR Part 50.

034 consistent with NRC regulations, grant exemptions from NRC regulations or impose special conditions on licensees of utilization and production facilities, except for fuel reprocessing plants and isotopic enrichment plants.

035 issue, pursuant to 10 CFR Part 2, notices of denial or the proposed denial of: (a) applications for licenses for utilization and production facilities, except for fuel reprocessing plants and isotopic enrichment plants; (b) applications for operator licenses for utilization and production

**ORGANIZATION AND FUNCTIONS
OFFICE OF NUCLEAR REACTOR REGULATION**

NRC-0123-036

facilities, except for fuel reprocessing plants and isotopic enrichment plants; and (c) applications for amendment or renewal of such licenses.

036 take necessary or appropriate action in accordance with decisions of an Administrative Judge, an Atomic Safety and Licensing Board, ~~the Atomic Safety and Licensing Appeal Board~~, or the Commission after a hearing pursuant to 10 CFR Part 2.

037 pursuant to provisions of 10 CFR sections 2.202, 2.204, and 2.206, issue orders for imposing requirements and other appropriate orders for modification, suspension, and revocation of licenses, concerning: (a) the manufacture, construction, and operation of utilization and production facilities, except for fuel reprocessing plants and isotopic enrichment plants and materials used or produced in such facilities; (b) operators of such facilities; and (c) use of source, byproduct, and special nuclear materials, except where the decision rests with an Administrative Law Judge, an Atomic Safety and Licensing Board, ~~the Atomic Safety and Licensing Appeal Board~~, or the Commission after a hearing pursuant to the Act and 10 CFR Part 2, other than action related to any alleged violations of the Atomic Energy Act of 1954, as amended, the regulations in 10 CFR Chapter 1, and any orders or conditions of licenses.

038 carry out antitrust reviews of license applications for nuclear facilities, pursuant to Section 105 of the Atomic Energy Act of 1954, as amended, and 10 CFR Part 50, and ensure that activities under facility licenses would not create or maintain a situation inconsistent with the antitrust laws specified in Section 105a.

039 execute indemnification agreements with licensees pursuant to Sections 170c and 170k of the Atomic Energy Act of 1954, as amended.

0310 pursuant to 10 CFR Part 51, prepare and circulate draft and final environmental impact statements and environmental appraisals on licensing actions within delegated authority.

0311 in conjunction with the Regional Offices, determine NRC response to reactor incidents and events that do not result in activation of the NRC Operation Center.

0312 evaluate, as requested, the nuclear safety aspects of proposals to build or significantly modify any DOE-owned reactor, reactor-related facility, or other system exempt from licensing.

0313 evaluate, as requested, the nuclear safety aspects of the design of Department of Defense (DOD) power, testing, and research reactors exempt from licensing; review and evaluate the health and safety aspects of the location and operation of reactor facilities of the Department of Defense (DOD) and their general nuclear safety standards and instructions; and review reports submitted by the DOD in connection with this program, including operating reports, inspection reports, safety evaluation reports, and reports of potential health and safety problems and other significant events or conditions involving health and safety considerations.

Approved: July 13, 1989

0314 serve as the principal point of contact for the NRC with the Advisory Committee on Reactor Safeguards for matters under review by NRR.

0315 develop policy options for Commission consideration on matters within delegated authority.

0316 perform, on behalf of the NRC, all functions of the Federal "Agency Official," as that term is defined in 36 CFR Part 800, and execute, on behalf of the NRC, such Memoranda of Agreement as are prescribed by those procedures.

0317 issue appropriate Federal Register notices in connection with the actions delegated under this chapter, including notices which offer an opportunity for public hearing in connection with the action proposed to be taken whether or not required by statute or the Commission's regulations.

0318 enter into, extend, modify, and terminate orders and agreements with other agencies, as appropriate, and settle terminations thereof.

0319 issue letters, bulletins, or other notices to reactor licensees or applicants with respect to activities that may affect or have the potential for affecting safety of operations, and provide policy and procedures for the issuance of letters and notices to reactor licensees by Regional Offices concerning an inspection or licensing matter.

0320 supervise, direct, coordinate, and approve the activities of the various organizational units within the Office.

0123-04 DELEGATION OF AUTHORITY TO THE DEPUTY DIRECTOR

B The Deputy Director is authorized and directed to act in the stead of the Director during the absence of the Director.

0123-05 REDELEGATION OF AUTHORITY BY THE DIRECTOR

B The Director may, except where expressly prohibited, redelegate to others authority delegated to the Director by this or other official directives or communications as the Director may deem necessary.

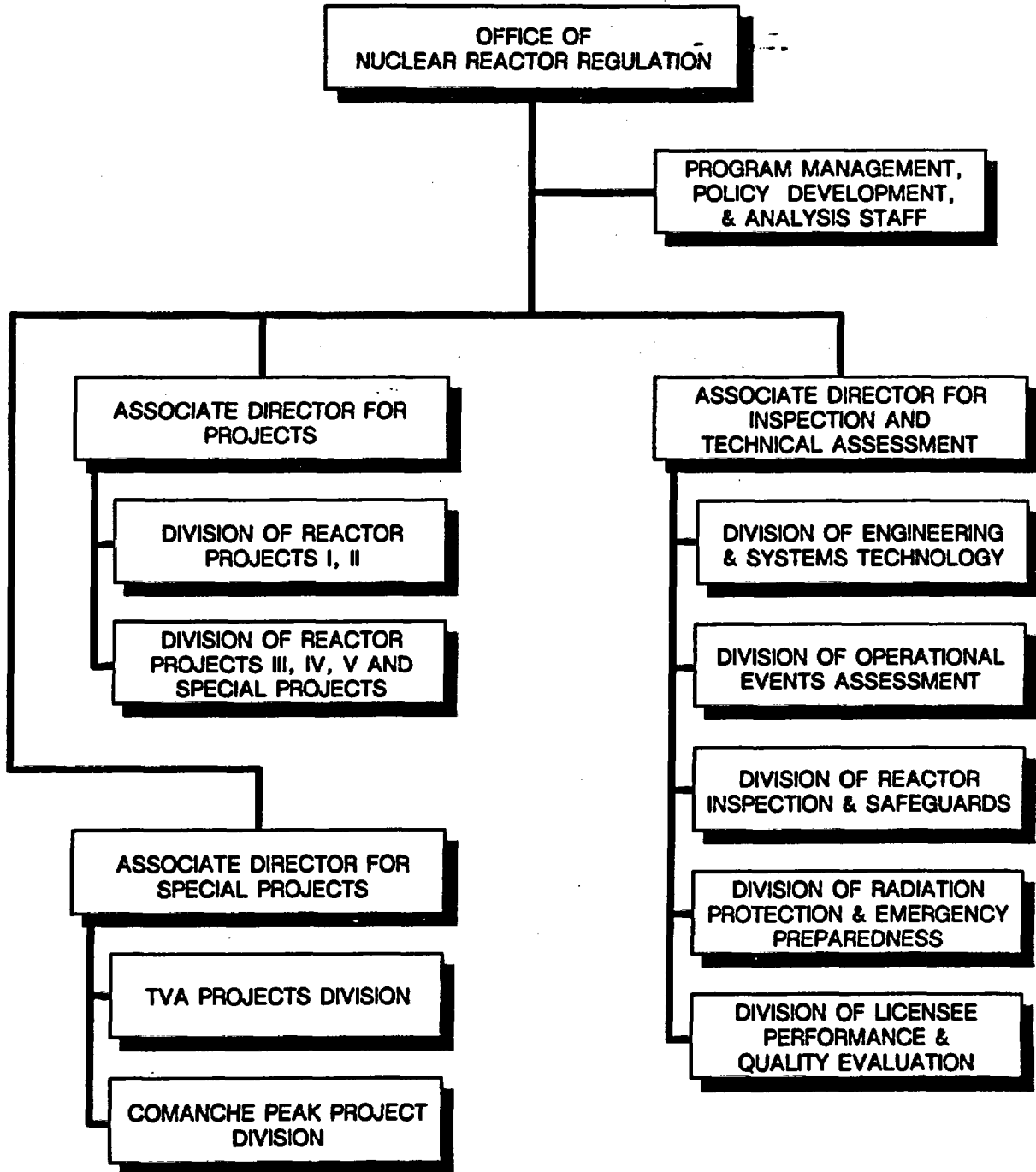
051 Such re delegation must be made in writing and a copy filed with the Office of the Executive Director for Operations, the Secretary of the Commission, the Office of the General Counsel, and the Office of Personnel.

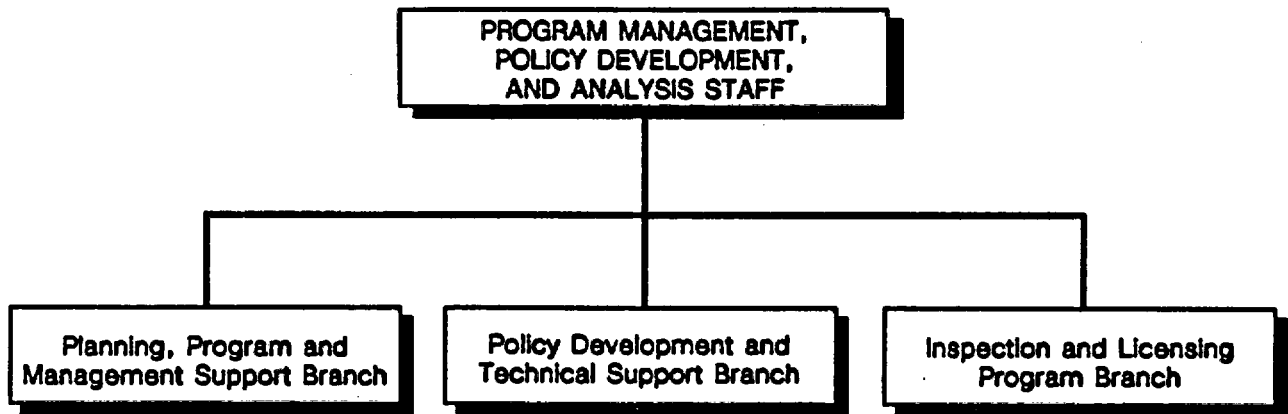
052 The Director must stipulate any limitations on further redelegations of authority which the Director redelegates.

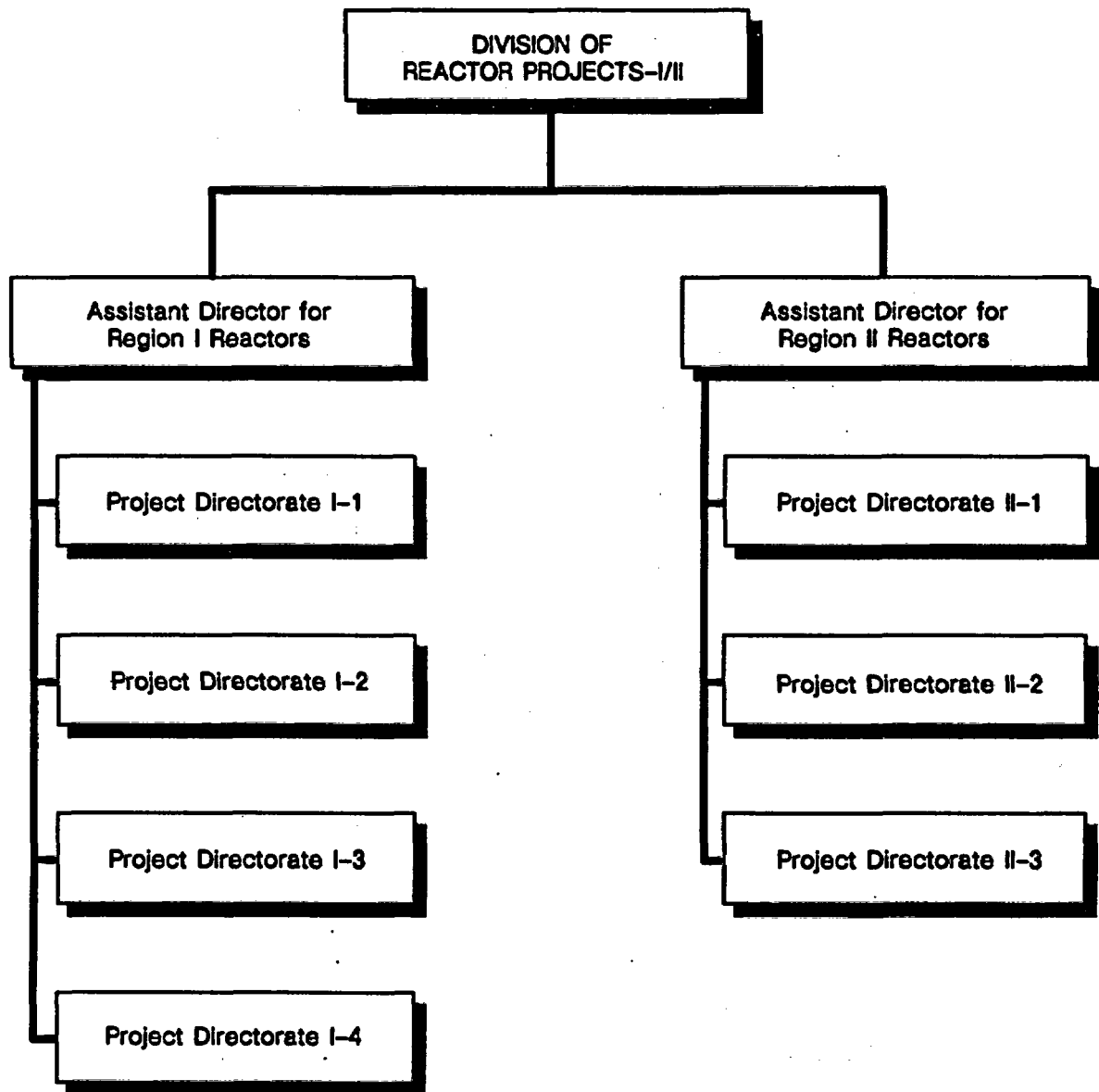
053 meeting 0123-06 ORGANIZATIONAL STRUCTURE AND INTERNAL ASSIGNMENTS

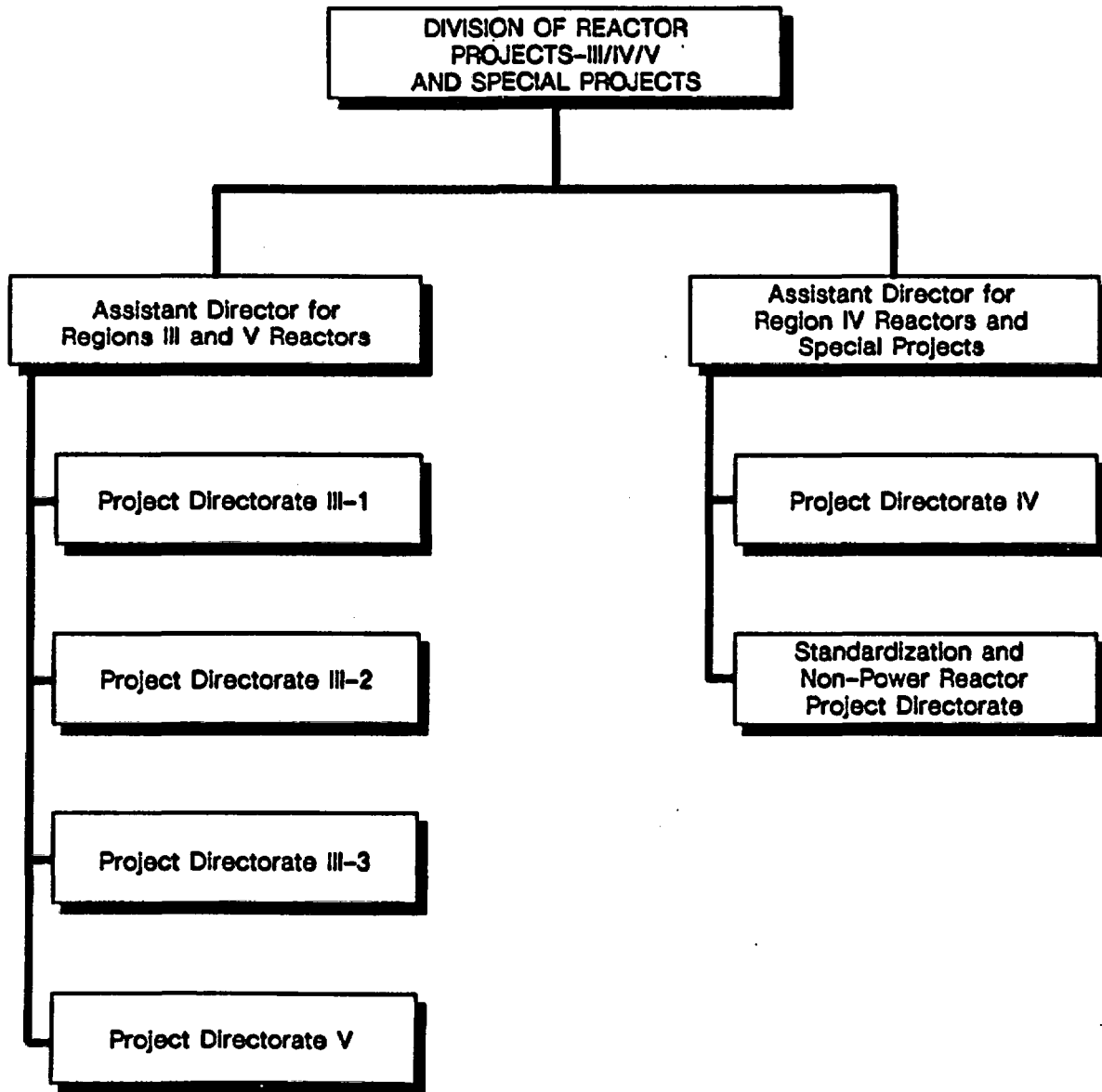
Organization charts showing internal organization of the Office and statements of functions of the subdivisions of the Office are issued as Appendix 0123, Parts I and II.

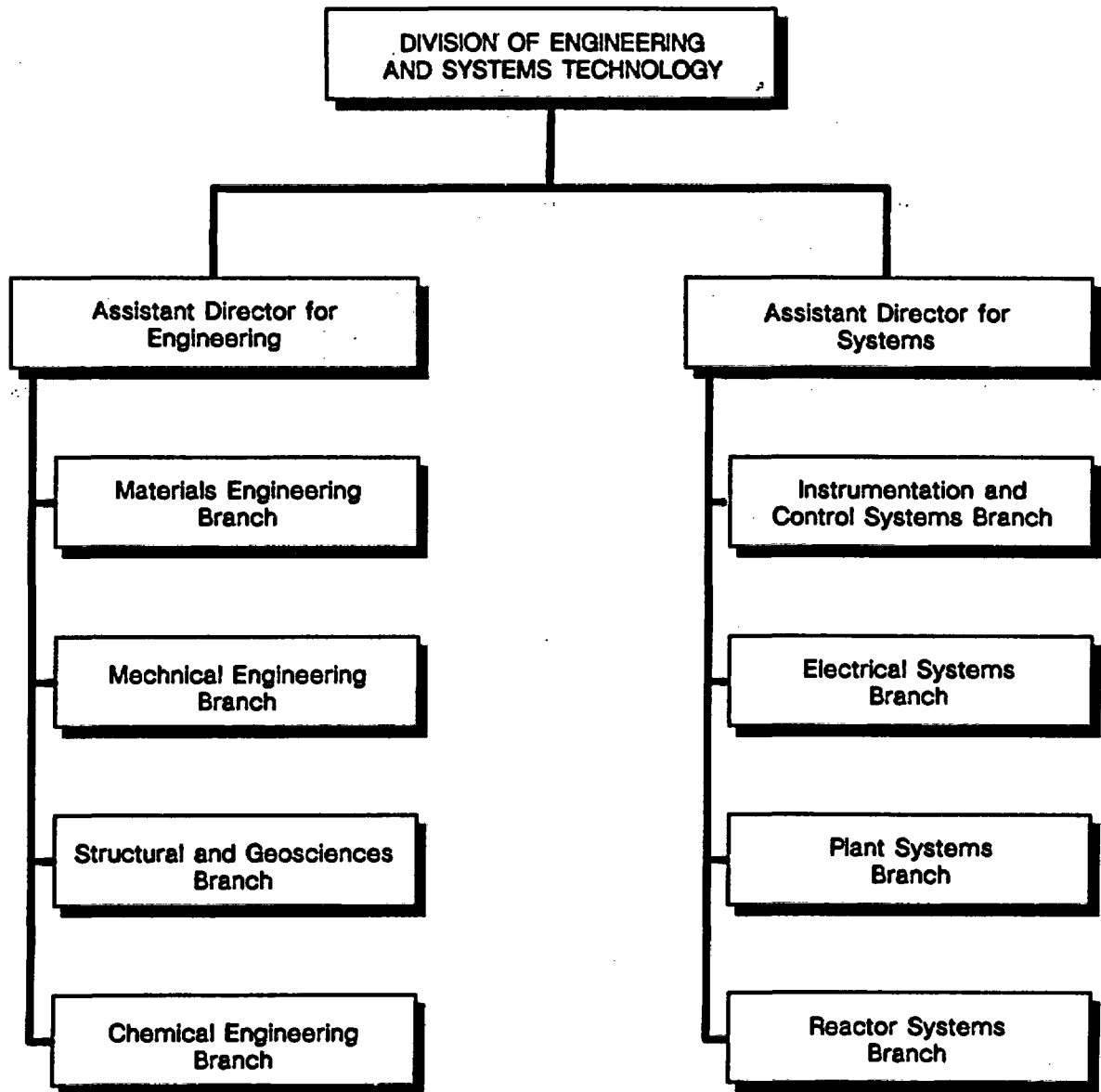
PART I
ORGANIZATION CHARTS

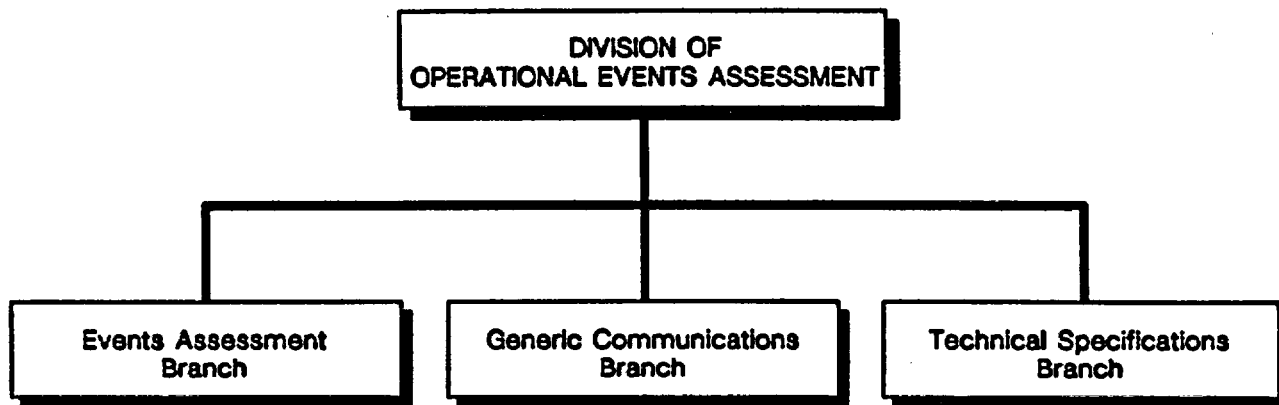


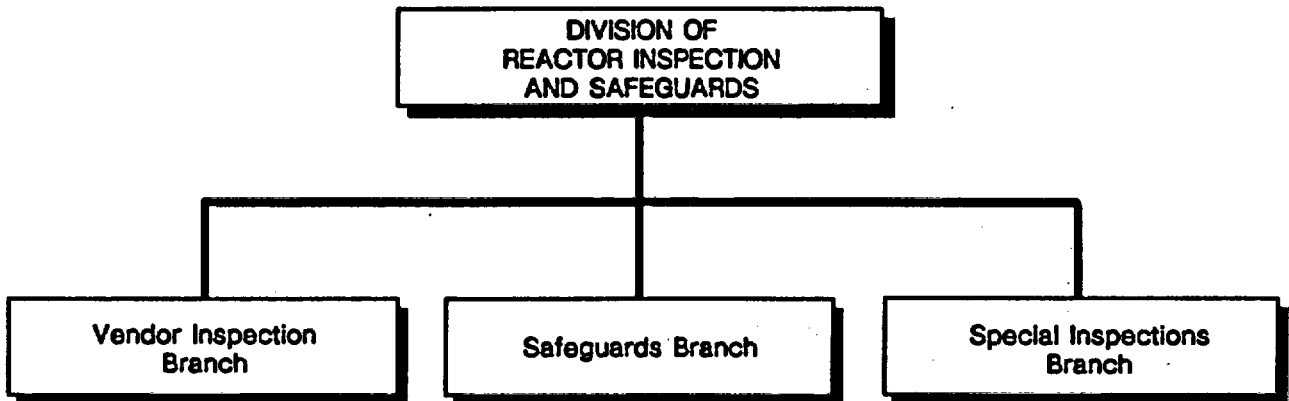


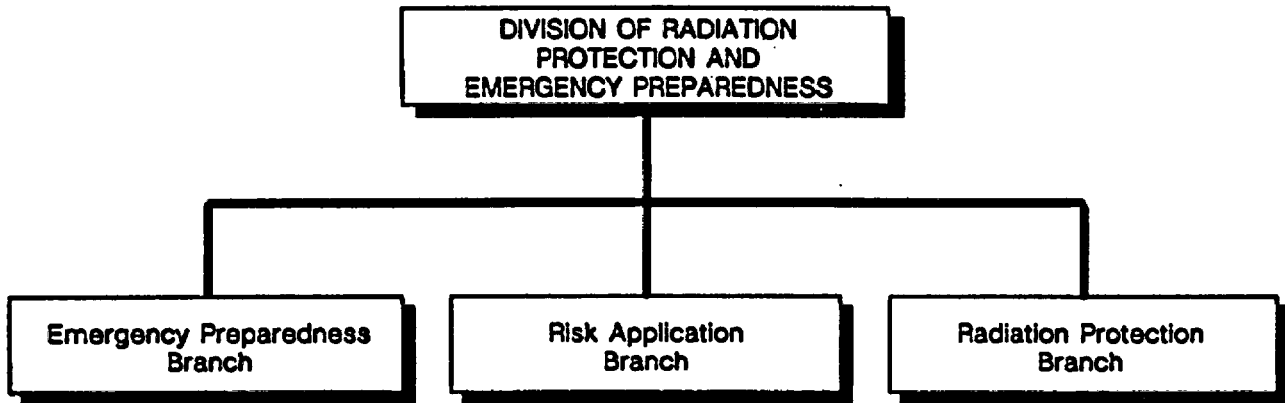


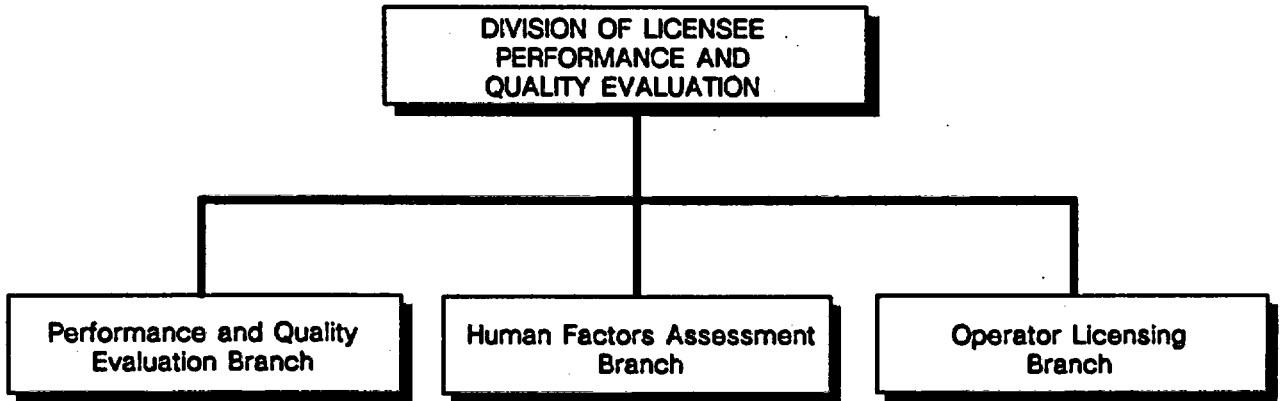


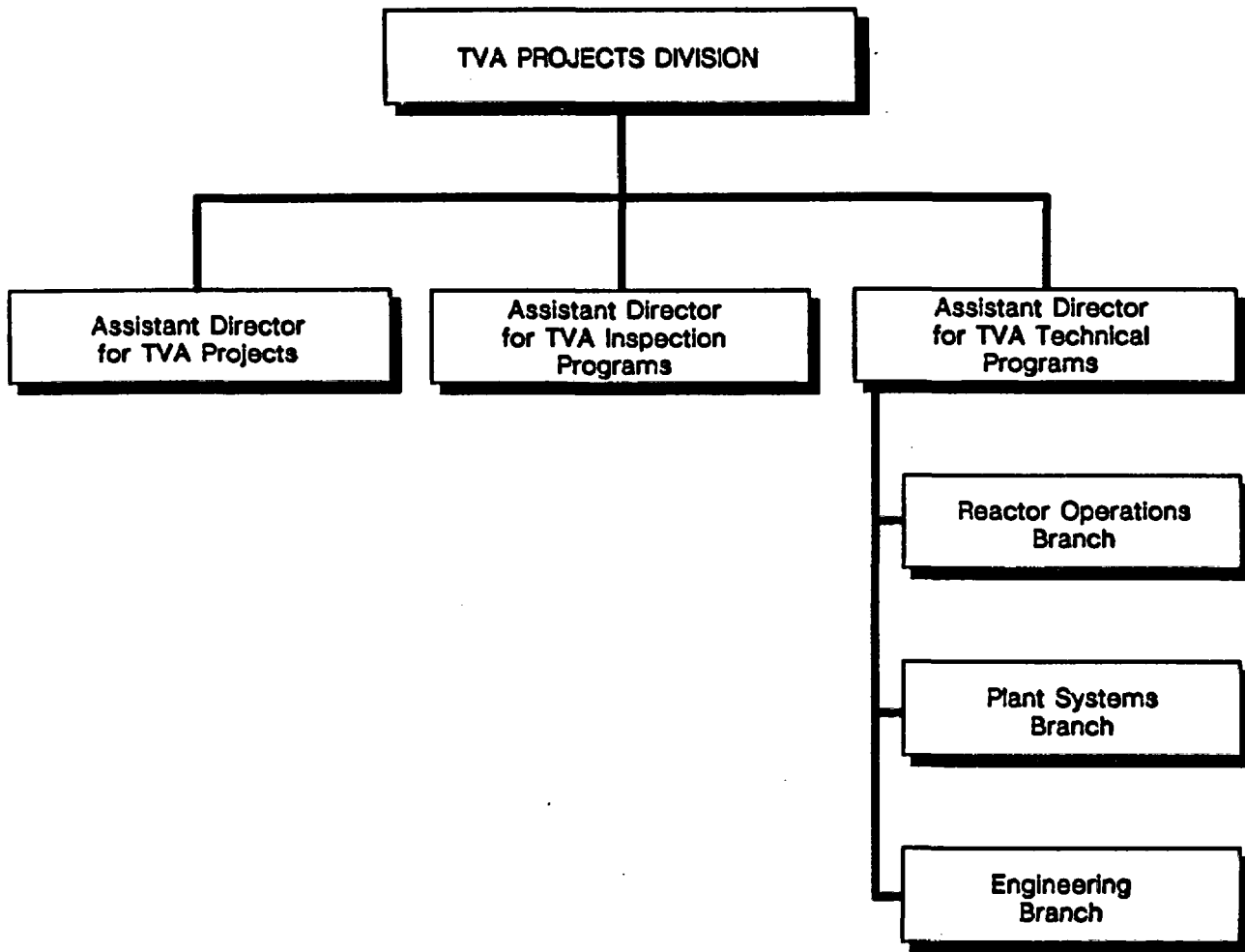


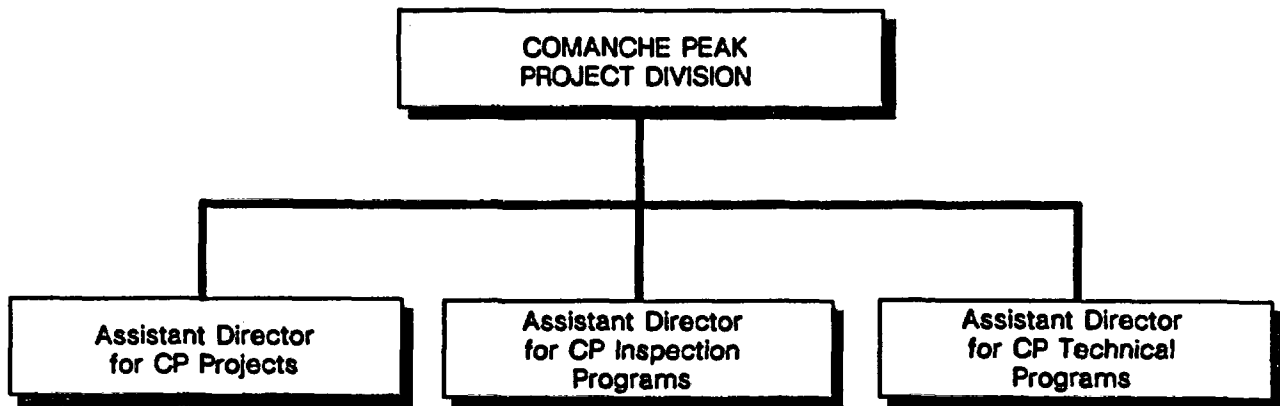












PART II

DISTRIBUTION OF FUNCTIONS

A. THE DIRECTOR:

1. Administers regulations, policies, and procedures governing all aspects of the licensing and inspection of:
 - a. manufacturing, utilization, and production facilities except for those concerning fuel reprocessing plants and isotopic enrichment plants;
 - b. receipt, possession, and ownership of source, byproduct, and special nuclear material used or produced at facilities licensed under 10 CFR Part 50;
 - c. operators of such facilities;
 - d. emergency preparedness at such facilities; and
 - e. contractors and suppliers of such facilities.
2. Provides special assistance, as requested, in matters involving facilities exempt from licensing and performs other functions required for implementation of the licensing program.
3. Provides guidance and implementation direction to Regional Offices on reactor licensing and inspection programs assigned to the Region, and appraises Regional program performance in terms of effectiveness and uniformity.
4. Establishes or recommends internal organization, functional assignments, policies, and procedures as required to carry out functions involving reactor licensing and inspection.
5. Performs other functions required for implementation of the reactor licensing and inspection programs.

B. THE DEPUTY DIRECTOR:

Assists the Director in the accomplishment of Office functions, and oversees direction of management activities related to the Office's assigned missions. During the absence of the Director, acts for the Director with full and complete responsibility for the activities of the Office.

C. THE DIRECTOR, PROGRAM MANAGEMENT, POLICY DEVELOPMENT, AND ANALYSIS STAFF:

Provides overall policy and management direction for office administration, resource management information, technical support to the Director, NRR, and policy development activities; and interacts with the Associate Directors to resolve or recommend resolution of policy and office-level programmatic issues.

Coordinates reactor licensing and inspection policies, programs, and guidance. Provides office focal point for RES activities which affect office programs. Performs reviews and evaluations related to licensee financial insurance, indemnity, and antitrust matters.

1. The Planning, Program, and Management Support Branch

Provides administrative management and coordination of the programs and resources of the office. Establishes priorities, schedules, and resource allocations; performs long and short-range planning, budget development, and execution. Provides administrative and management support, including personnel management, training, and management information systems. Manages NRR contracts.

2. The Policy Development and Technical Support Branch

Identifies and recommends office-level policy and responds to external policy-related inquiries. Provides technical assistance and support to the Director, NRR. Serves as NRR staff interface with organizations such as ACRS and ACNW; coordinates the NRC allegation programs; and performs reviews and evaluations related to licensee financial insurance, indemnity, and antitrust matters. Provides office focal point for RES activities which affect licensing, inspection, and regulation of nuclear reactors.

3. The Inspection and Licensing Program Branch

Develops, implements, and integrates the Reactor Inspection Program and the Reactor Licensing Program. Manages the development of Inspection Manual changes and Temporary Instructions. Develops new reactor inspection program initiatives. Reviews Regional procedures and initiatives for incorporation into the Reactor Inspection Program. Maintains the Reactor Inspection Manual and the Standard Review Plan. Manages the NRR review of the inspection program operating plans (e.g., INS) submitted by the Regions. Evaluates Regional implementation of all NRR programs. Analyzes and evaluates the effectiveness of the Reactor Inspection Program. Performs special reviews and analyses, and participates in inspections as necessary to coordinate policy, procedures, guidance, and programs.

D. THE ASSOCIATE DIRECTOR FOR PROJECTS:

Is responsible for overall project management activities related to licensing and inspection of power and non-power reactors and standard reactor designs; and interactions with the other Associate Directors and Staff Director to resolve or recommend resolution of policy and office-level programmatic issues.

1. THE DIRECTOR, DIVISION OF REACTOR PROJECTS-I/II:

Implements the policy, programs, and activities, including coordinating licensing, inspection, technical review, and licensee performance associated with the overall safety and environmental project management for individual power reactors located in Regions I and II. Participates in TMI-2 clean up, special team inspections, and assessing Regional project activities.

a. The Assistant Director for Region I Reactors

Plans, directs, and supervises the project management activities and monitors daily reactor operations for power reactors located in Region I.

Project Directorates I-1 through I-4

Perform the overall safety and environmental project management and monitor daily operations of power reactors in Region I. (Reactors owned by one utility or related utilities will be assigned to the same Project Directorate.) Manage the review and processing of applications for limited work authorizations, construction permits, operating licenses, implementation of agency approval requirements, and license amendments. Serve as Headquarters contact with licensees and applicants. Coordinate the preparation of Safety Evaluation Reports, Environmental Impact Statements, and routine inspections. Coordinate and provide presentations to the Commission, ACRS, industry groups, and other government offices on specific projects and subjects. Participate in special inspections and TMI-2 clean up.

b. The Assistant Director for Region II Reactors

Plans, directs, and supervises the project management activities and monitors daily reactor operations for power reactors located in Region II, except for the reactors assigned to the Associate Director for Special Projects.

Project Directorates II-1 through II-3

Perform the overall safety and environmental project management and monitor daily operations of power reactors in Region II.

(Reactors owned by one utility or related utilities will be assigned to the same Project Directorate.) Manage the review and processing of applications for limited work authorizations, construction permits, operating licenses, implementation of agency approval requirements, and license amendments. Serve as Headquarters contact with licensees and applicants. Coordinate the preparation of Safety Evaluation Reports, Environmental Impact Statements, and routine inspections. Coordinate and provide presentations to the Commission, ACRS, industry groups, and other government offices on specific projects and subjects. Participate in special inspections.

2. THE DIRECTOR, DIVISION OF REACTOR PROJECTS-III/IV/V AND SPECIAL PROJECTS:

Implements the policy, programs, and activities, including coordinating licensing inspection, technical review, and licensee performance associated with the overall safety and environmental project management for individual power reactors located in Regions III, IV, and V; non-power reactors; DOE/DOD reviews; reactors whose construction has been indefinitely deferred; decommissioned reactors; and standard plant designs. Participates in special team inspections, and assesses Regional project activities.

a. The Assistant Director for Regions III and V Reactors

Plans, directs, and supervises the project management activities and monitors daily reactor operation for power reactors located in Regions III and V.

Project Directorates III-1 through III-3 and V

Perform the overall safety and environmental project management and monitor daily operation for power reactors in Regions III and V. (Reactors owned by one utility or related utilities will be assigned to the same Project Directorate.) Manage the review and processing of applications for limited work authorizations, construction permits, operating licenses, implementation of agency approval requirements, and license amendments. Serve as Headquarters contact with licensees and applicants. Coordinate the preparation of Safety Evaluation Reports, Environmental Impact Statements, and routine inspections. Coordinate and provide presentations to the Commission, ACRS, industry groups, and other government offices on specific projects and subjects. Participate in special inspections.

b. The Assistant Director For Region IV Reactors and Special Projects

Plans, directs, and supervises the project management activities and monitors daily operation of power reactors located in Region IV, except for the reactors assigned to the

Associate Director for Special Projects; nonpower reactors; DOE/DOD reviews; reactors whose construction is indefinitely deferred; decommissioned reactors; and standard plant designs.

(1) The Project Directorate IV

Performs the overall safety and environmental project management and monitors daily operation for power reactors in Region IV. Manages the review and processing of applications for operating licenses, implementation of agency approval requirements, and license amendments. Serves as Headquarters contact with licensees and applicants. Coordinates the preparation of Safety Evaluation Reports and routine inspections. Coordinates and provides presentations to the Commission, ACRS, industry groups, and other government offices on specific projects and subjects. Participates in special inspections.

(2) The Standardization and Non-power Reactor Project Directorate

Performs overall safety and environmental project management for standard plant design reviews; directs, coordinates, and performs NRR review activities for DOE and DOD facilities exempt from licensing; performs project management and technical reviews for non-power reactors, indefinitely deferred construction projects, projects being decommissioned, and standard plant designs. Serves as Headquarters contact with licensees and applicants.

E. THE ASSOCIATE DIRECTOR FOR INSPECTION AND TECHNICAL ASSESSMENT:

Is responsible for management direction of technical evaluations, inspections, operator licensing, and licensee management performance; assessment of assigned technical activities; and interactions with the other Associate Directors and Staff Director to resolve or recommend resolution of policy or major office level programmatic issues.

1. The Director, Division of Operational Events Assessment:

Implements programs and procedures to systematically assess and screen daily reactor licensee events; provide daily reports; recommend immediate corrective plant-specific and generic actions; and coordinate the follow-up to events by assigning and tracking follow-up actions to other divisions. Maintains and administers "on-call officer" roster to ensure notification of responsible NRR project management for events requiring prompt attention, and provides NRR focal point for interface with AEOD on their studies and operation of the Incident Response Center. Serves as the Information Assessment Team contact. Develops and issues NRC correspondence (e.g., generic letters, information notices, and bulletins) to address generic concerns resulting from event assessment.

Develops programs and guidelines to improve generic technical specifications, and develops technical specifications for plants under operating license review. Participates in special inspections.

a. The Events Assessment Branch

Systematically assesses and screens nuclear power reactor operating experience and vendor reports of equipment deficiencies to identify significant events; performs or requests the Regions to perform detailed safety assessment of significant events to determine plant specific and generic safety implications; and recommends immediate corrective action where appropriate. Develops presentation for and chairs the daily operating reactor event briefings; serves as the NRR focal point for interface and contact with AEOD, Regions, other NRC Offices, and industry for operating event-related issues. Maintains and administers "on-call officer" roster to ensure notification of project management for events requiring prompt action. Responds to emergencies, and serves as the Information Assessment Team (IAT) contact.

b. The Generic Communications Branch

Develops guidance and guidelines for immediate corrective actions (e.g., generic letters, bulletins, and information notices) resulting from screening of operational events. Analyzes vendor and construction deficiency reports, significant event-related generic safety issues, and potential generic safety questions identified by Regional Offices; and identifies appropriate agency actions to minimize the recurrence of similar events. Prepares and coordinates all NRC information notices and bulletins related to power reactors; coordinates preparation and issuance of generic letters, including all NRR activities and interactions with CRGR; and tracks bulletins and generic letters through closeout.

c. The Technical Specifications Branch

Develops, maintains, and updates standard technical specifications based on new regulatory requirements, new technical considerations, and operating experience; develops technical specification implementation guidance; develops and evaluates technical specifications for plants under operating license review; and provides NRR interpretation of specific technical specifications requirements.

2. THE DIRECTOR, DIVISION OF ENGINEERING AND SYSTEMS TECHNOLOGY:

Performs systems and engineering related safety evaluations of licensee implementation of approved NRC requirements, changes to existing licenses, and applications for new facilities or designs; and provides technical expertise for special inspections, projects, programs, and policy activities.

a. The Assistant Director for Engineering

Plans, directs, and supervises the technical reviews related to the engineering disciplines; and provides technical expertise for special inspections, projects, programs, and policy activities.

(1) The Materials Engineering Branch

Reviews and evaluates materials engineering, in-service inspection, and materials integrity related aspects of design and performance of components and systems. Reviews special fabrication problems and monitors component behavior.

(2) The Mechanical Engineering Branch

Reviews design criteria and loads, and static and dynamic analysis methods and in-service testing for mechanical systems and components. Reviews and evaluates seismic and dynamic qualifications of equipment. Verifies integrity, capacity, and margins associated with mechanical equipment. Reviews and evaluates conditions associated with various postulated events, such as earthquakes, man-related hazards, floods, and pipe breaks, and their threat to the functional integrity of components.

(3) The Structural and Geosciences Branch

Reviews design criteria and loads, analysis methods, and in-service testing for structures. Verifies integrity, capacity, and margins associated with structures. Reviews and evaluates conditions associated with various postulated events such as earthquakes, and their threat to the integrity and functional performance of structures. Reviews and evaluates issues related to geologic, seismologic, and hydrologic characteristics of a reactor site.

(4) The Chemical Engineering Branch

Reviews and evaluates issues related to chemical engineering and fire protection, including hydrogen generator, post accident sampling, water chemistry, corrosion, decontamination, and decommissioning.

b. The Assistant Director for Systems

Plans, directs, and supervises the technical reviews related to instrumentation, control, electrical, plant, and reactor systems; and provides technical expertise for special inspections, projects, programs, and policy activities.

(1) The Instrumentation and Control Systems Branch

Reviews and evaluates functional performance requirements, design, and performance of reactor trip systems, engineered safety features actuation systems, actuation instrumentation for essential auxiliary support systems, and instrumentation and control systems provided to initiate and regulate the operation of safe shutdown systems. Reviews and evaluates functional performance requirements, design, and performance of plant instrumentation providing information regarding manually initiated and controlled safety functions.

(2) The Electrical Systems Branch

Reviews design and operation of offsite power grid systems with regard to inter-relationships between the nuclear unit, the utility grid, and interconnecting grids. Reviews and evaluates functional performance requirements, design, and operation of onsite power systems, and the interface between the offsite and onsite power systems.

(3) The Plant Systems Branch

Reviews and evaluates functional performance requirements, design, and performance of (1) essential auxiliary and support systems; including fire protection; (2) reactor containment and associated support systems; and (3) design features provided to ensure operator protection from releases of toxic and radioactive gases. Reviews the design of new and spent fuel storage and load handling systems. Reviews radioactive source terms, equipment qualification, and post-fire safe shutdown; and reviews and evaluates the design and performance of features provided to prevent the contamination of potentially radioactive systems with other plant systems.

(4) The Reactor Systems Branch

Reviews and evaluates design, process design parameters, and performance of reactor thermal-hydraulic systems (reactor coolant systems; normal and emergency core cooling systems under steady-state, transient, and accident conditions). Reviews analyses of anticipated operational occurrences, postulated accidents, and actual operating experience from the viewpoint of systems operation and transient dynamics. Reviews and evaluates nuclear and thermal-hydraulic aspects of the reactor core under steady-state, transient, and accident conditions.

Responsible for issues pertaining to core physics, fuel behavior, and core thermal-hydraulic performance.

3. THE DIRECTOR, DIVISION OF REACTOR INSPECTION AND SAFEGUARDS:

Performs special reactor inspections, vendor inspections, reactor safeguards licensing, regulatory effectiveness reviews (RER), and quality assurance reviews for reactors. Applies guidelines for implementing the licensing (e.g., SRP) and inspection programs (e.g., SALP and Inspection Manual). Provides team leaders for participating in special inspections and assesses effectiveness and uniformity of Regional implementation of programs assigned to the Regions.

a. The Vendor Inspection Branch

Develops and conducts inspections of (1) vendors and licensee contractors who supply safety-related products and services to the nuclear industry; and (2) licensee procurement programs and interfaces with vendors. Performs inspections in response to allegations and reports of defective and substandard components and equipment in nuclear service or being offered for nuclear service. Determines the safety significance and generic implications of these problems. Coordinates with other Federal agencies on misrepresented and substandard vendor products and assists with NRC investigations.

b. The Safeguards Branch

Conducts safeguards technical and regulatory reviews related to power and non-power reactors. Reviews physical security programs. Conducts onsite regulatory effectiveness reviews of safeguards systems as implemented at licensed nuclear power reactors, and recommends improvements, as appropriate. Reviews inspection and evaluation reports to identify generic reactor safeguards issues. Develops guidance for use by Regional Offices, and assesses effectiveness and uniformity of Regional Office implementation of programs assigned to the Regions, including fitness for duty.

c. The Special Inspection Branch

Develops and conducts programs for major team inspections at licensee facilities which involve use of a number of engineering and operational specialties. These inspections are in-depth examinations of selected plant systems and licensee programs, including detailed review of design, system and component tests, training, maintenance, operations, and facility modifications, as appropriate for the particular type of inspection. Identifies the strengths and weaknesses of licensee performance in the areas examined during the course of the inspection. Assesses Regional performance of team inspections that carry out programs developed by the Branch.

4. THE DIRECTOR, DIVISION OF RADIATION PROTECTION AND
EMERGENCY PREPAREDNESS:

Performs licensing reviews and safety evaluation and interface with FEMA for emergency preparedness at reactor facilities; develops approaches for applying PRA results for inspection and licensing; develops policy and guidelines and performs technical reviews in radiological protection areas; and provides technical expertise for special inspection.

a. Emergency Preparedness Branch

Plans and directs the licensing and inspection programs for emergency preparedness at reactor facilities. Develops policies, programs, and guidance for emergency preparedness areas. Provides technical expertise for Regional inspections and the evaluation of licensee exercises. Reviews and evaluates emergency plans for research and test reactors. Identifies the need for revision of emergency preparedness regulations. Coordinates with the Federal Emergency Management Agency on emergency preparedness matters, and reviews and evaluates FEMA findings and determinations relating to the offsite preparedness of State and local governments.

b. The Risk Application Branch

Applies the methods and results of partial and full scope PRAs to Regional and resident inspection activities. Develops approaches and guidance for the use of PRA by NRR technical review branches. Applies PRA to decisions on plant performance, technical specifications, and other licensing actions. Maintains oversight of Severe Accident implementation, including accident management. Promotes the use of PRA as a safety tool by NRR and Regional staffs and by the industry.

c. The Radiation Protection Branch

Develops policy, programs, and guidelines for radiation protection areas; provides technical expertise for radiological issues, interpretations, and Regional assistance; conducts technical reviews of applications and amendments for radiation protection areas and meteorological considerations. Reviews and evaluates radiation health effects on the public and plant personnel resulting from postulated accidents and normal operations. Provides radiological expertise for special inspections conducted by Headquarters and the Regions. Maintains technical contacts with other Federal agencies, national and scientific advisory groups, and industry on radiological protection developments. Assesses effectiveness and uniformity of Regional implementation of radiation protection programs.

5. THE DIRECTOR, DIVISION OF LICENSEE PERFORMANCE AND QUALITY EVALUATION:

Evaluates effectiveness of licensee performance by integrating input from programs and activities such as SALP, enforcement, performance indicators, AEOD analyses, event assessment, operator examination, and licensing and inspection. Develops programs for assuring quality and reliability of operations and construction. Assesses effectiveness and uniformity of Regional Office implementation of the programs assigned to the Regions, and provides technical expertise for special inspections.

a. The Performance and Quality Evaluation Branch

Evaluates the effectiveness of licensee performance by integrating input from programs and activities such as SALP, enforcement, performance indicators, AEOD trends analysis, event evaluation, operator examinations, and licensing and inspection. Develops final materials for use at semi-annual senior management meeting. Identifies the need for and recommends special inspection for input to performance evaluations. Performs the project management function for maintenance team inspections. Monitors and evaluates industry maintenance initiatives and performance. Develops and implements a program for assuring quality and reliability of reactor licensee facilities design, fabrication, construction, testing, and operation. Reviews and evaluates quality assurance aspects of operating licenses. Reviews and evaluates initial/preoperational test programs and special test programs. Provides technical expertise for plant inspections.

b. The Human Factors Assessment Branch

Reviews training and qualifications programs at nuclear reactors, and monitors and evaluates industry initiatives regarding personnel training. Reviews and evaluates normal operating procedures and guidelines, off-normal, and emergency procedures and guidelines. Provides technical expertise for special inspections, projects, programs, and policy activities in the areas of human performance, management effectiveness, training, and human machine interfaces. Reviews human factors engineering design of the control room, SPDS, and control centers outside of the main control room. Reviews organizational environment/operator culture issues and management concerns at operating reactors. Develops and evaluates implementation of policy such as training, working hours, and NPP personnel conduct.

c. The Operator Licensing Branch

Is responsible for overall licensing and regulatory policy pertaining to licensing of operators pursuant to 10 CFR Part 55.

Provides program guidance to Regional Offices for administration of examinations of operators and senior operators and evaluation of requalification programs. Develops and validates testing techniques and standards for evaluating candidates. Evaluates adequacy of facilities and simulators used in the conduct of operator examinations. Assesses effectiveness and uniformity of Regional Office implementation and programs assigned to the Regions.

F. THE ASSOCIATE DIRECTOR FOR SPECIAL PROJECTS:

Implements the policy, programs, and activities, including coordinating licensing, inspection, and technical review associated with the overall safety and environmental project management for the TVA and Comanche Peak projects.

Identifies and takes action regarding conditions and licensee performance that may adversely affect public health and safety, the environment, or the safeguarding of the assigned nuclear reactor facilities. Provides guidance and implementation direction to Regional Offices on reactor licensing and inspection programs assigned to the Regions for the TVA and Comanche Peak projects. Performs other functions required for implementation of the reactor licensing and inspection programs for the TVA and Comanche Peak projects.

1. THE DIRECTOR, TVA PROJECTS DIVISION:

Performs the overall safety and environmental project management and selected technical reviews and inspections, and monitors daily operations of power reactors owned by TVA.

a. The Assistant Director for TVA Projects

Performs the overall safety and environmental project management and monitors daily operations of TVA power reactors. Manages the review and processing of applications for limited work authorizations, construction permits, operating licenses, implementation of agency approval requirements, and license amendments. Coordinates the preparation of Safety Evaluation Reports, Environmental Impact Statements, and routine inspections. Coordinates and provides presentations to the Commission, ACRS, and other government offices on specific projects and subjects. Participates in special inspections.

b. The Assistant Director for TVA Inspection Programs

Performs routine, reactive, and special reactor inspections. Applies guidelines for implementing the Region-based inspection programs (e.g., SALP and Inspection Manual).

c. The Assistant Director for TVA Technical Programs

Performs systems and engineering related safety evaluations of licensee implementation of approved NRC requirements and changes to existing permits and licenses; and provides technical expertise for special inspections, projects, programs, and policy activities.

(1) The Reactor Operations Branch

Reviews and evaluates design, process design parameters, and performance of reactor thermal-hydraulic systems (reactor coolant systems; normal and emergency core cooling systems under steady-state, transient, and accident conditions). Reviews analyses of anticipated operational occurrences, postulated accidents, and actual operating experience from the viewpoint of systems operation and transient dynamics. Reviews and evaluates nuclear and thermal-hydraulic aspects of the reactor core under steady-state, transient, and accident conditions. Responsible for issues pertaining to core physics, fuel behavior, and core thermal-hydraulic performance.

Reviews design and operation of offsite power grid systems with regard to interrelationships between the nuclear unit, the utility grid, and interconnecting grids. Reviews and evaluates functional performance requirements, design, and operation of onsite power systems.

Reviews and evaluates functional performance requirements, design and performance of reactor trip systems, engineering safety features actuation systems, actuation instrumentation for essential auxiliary support systems, and instrumentation and control systems provided to initiate and regulate the operation of safe shutdown systems. Reviews and evaluates functional performance requirements, design, and performance of plant instrumentation providing information regarding manually initiated and controlled safety functions.

(2) The Plant Systems Branch

Reviews and evaluates functional performance requirements, design, and performance of (1) essential auxiliary and support systems, including fire protection; (2) reactor containment and associated support systems; (3) design features provided to ensure operator protection from releases of toxic and radioactive gases; (4) plant systems and equipment under conditions of postulated design basis accidents; and (5) quality assurance, equipment qualification, and human factors aspects

of the plant design. Reviews the design of new and spent fuel storage and load handling systems. Reviews and evaluates the design and performance of features provided to prevent the contamination of potentially radioactive systems with other plant systems.

(3) The Engineering Branch

Reviews and evaluates materials engineering, inservice inspection, and materials integrity related aspects of design and performance of components and systems. Reviews special fabrication problems and monitors component behavior.

Reviews design criteria and loads, analysis methods, and inservice inspections and testing for components, systems, and structures. Verifies integrity, capacity, and margins associated with structures. Reviews and evaluates conditions associated with various postulated events such as earthquakes, and their threat to the integrity and functional performance of structures. Reviews and evaluates issues related to geological, seismologic, and hydrologic characteristics of a reactor site.

Reviews design criteria and loads, and static and dynamic analysis methods and inservice testing for mechanical systems and components. Reviews and evaluates seismic and dynamic qualifications of equipment. Verifies integrity, capacity, and margins associated with mechanical equipment. Reviews and evaluates conditions associated with various postulated events, such as earthquakes, man-made hazards, floods, and pipe breaks, and their threat to the functional integrity of components.

2. THE DIRECTOR, COMANCHE PEAK PROJECT DIVISION:

Performs the overall safety and environmental project management and selected technical reviews for Comanche Peak.

a. The Assistant Director for CP Projects

Performs the overall safety and environmental project management for the Comanche Peak Project. Manages the review and processing of applications for limited work authorizations, construction permits, operating licenses, implementation of agency approval requirements, and license amendments. Coordinates the preparation of Safety Evaluation Reports and Environmental Impact Statements. Coordinates and provides presentations to the Commission, ACRS, and other government offices on specific projects and subjects. Participates in special inspections.

b. The Assistant Director for CP Inspection Programs

Performs routine, reactive, and special reactor inspections. Applies guidelines for implementing the inspection programs (e.g., SALP and Inspection Manual).

c. The Assistant Director for CP Technical Programs

Performs systems and engineering related safety evaluations of licensee implementation of approved NRC requirements and changes to existing permits and licenses; and provides technical expertise for special inspections, projects, programs, and policy activities.