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TABLES

NONE

FIGURES

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2. ORGANIZATION AND ADMINISTRATION

This chapter of the GE-Hitachi Global Laser Enrichment LLC (GLE) Commercial Facility License Application (LA) presents the organizations responsible for managing the design, construction, operation, and decommissioning of the GLE Commercial Facility. Key management and supervisory positions and functions are described, including personnel qualifications for each key position. This chapter also describes the management system and administrative procedures for effective implementation of Environmental, Health, and Safety (EHS) functions at the GLE Commercial Facility.

It is a GLE policy to maintain a safe work place for employees and assure operational compliance within the terms and conditions of the license and applicable regulations. The GLE Facility Manager has overall operational responsibility for safety and compliance to this GLE policy. In particular, GLE employs the principle of keeping radiation exposures to employees and the general public as low as reasonably achievable (ALARA).

2.1 ORGANIZATIONAL STRUCTURE

2.1.1 Corporate Functions, Responsibilities, and Authority

GLE supports the national energy security goal of maintaining a reliable and secure domestic source of enriched uranium. GLE uses the laser-based technology, which represents a cost-effective and efficient technology for the enrichment of uranium for domestic and foreign nuclear power plants.

GLE is a limited liability corporation formed to provide uranium enrichment services for commercial nuclear power plants. The GLE partnership is described in GLE LA Section 1.2, *Institutional Information*. GLE's immediate parent company, GE-Hitachi Nuclear Energy Americas LLC (GEH), is the parent company of U.S. Nuclear Regulatory Commission (NRC) licensees whom are licensed under 10 CFR 50, *Domestic Licensing of Production and Utilization Facilities (Ref. 2-1)*, 10 CFR 70, *Domestic Licensing of Special Nuclear Material (Ref. 2-2)*, and 10 CFR 72, *Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor Related Greater Than Class C Waste (Ref. 2-3)*, at facilities in Sunol, California; Wilmington, North Carolina; and Morris, Illinois. The GLE President and Chief Executive Officer (CEO) reports to, and receives policy direction from, the GEH Fuel Cycle Senior Vice President; who in turn, reports to the President and CEO of GEH.

The GLE President and CEO provides overall direction and management with respect to design, construction, operation, and decommissioning activities. Figure 2-1, *GLE Organizational Structure During Design and Construction*, details the organization of GLE during design and construction. Figure 2-2, *GLE Organizational Structure during Operations*, details the organization of GLE during operations.

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2.1.2 GLE Design and Construction Organizational Structure

As the owner and operator, GLE is responsible for the design, construction, operation, maintenance, modification, and testing of the GLE Commercial Facility. The GLE President and CEO is responsible for ensuring the facility complies with applicable regulatory requirements and establishing the basic policies of the QA Program. These policies are described in the Quality Assurance Program Description (QAPD) document, are transmitted to all levels of management, and are implemented through approved written procedures.

The Engineering Manager is responsible for developing the conceptual design for the facility, which includes the development of design requirements, design bases, and design criteria for the enrichment process and supporting systems. An architect/engineering (A/E) firm has been contracted to further specify structures and systems, as well as to ensure the design meets applicable U.S. codes and standards. A contractor specializing in site evaluations has been contracted to perform the site evaluation. Nuclear consultants have been contracted to support the Integrated Safety Analysis (ISA) and to support the development of the LA. During the construction phase, preparation of construction documents, in addition to construction itself, is completed utilizing qualified contractors. The GLE QA function reviews and approves contractor QA Programs. Approval of contractor QA Programs shall be obtained prior to commencing work activities.

As shown in Figure 2-1, the Commercial Facility Project Manager (CFPM) is responsible for managing the design, construction, initial startup, and procurement activities. In addition to managing A/E and construction contracts, the CFPM also manages a group of Project Managers, the Project Controls Manager, the Configuration Management (CM) Manager, and the ISA Manager. The Project Managers are responsible for implementing procurement, construction, engineering, project engineering, project controls, and startup.

The lines of communication of key management positions during design and construction are shown in Figure 2-1. The GLE EHS and QA Organizations support the CFPM; however, the organizations are independent allowing for objective audit, review, and control activities. During design and construction, the GLE QA and Infrastructure Manager reports to the GLE President and CEO.

Position descriptions of key personnel, during the design and construction phase, shall be accessible to affected personnel and the NRC.

2.1.3 Operations Organizational Structure

The GLE organizational structure during operations is shown in Figure 2-2. GLE has direct responsibility for preoperational testing, initial startup, operation, and maintenance of the GLE Commercial Facility. The GLE Facility Manager reports to the GLE President and CEO and is responsible for the overall operation, administration, and regulatory compliance of the GLE Commercial Facility. In the discharge of these responsibilities, the GLE Facility Manager directs the activities of the following: QA, Operations, Technical Services, Business/Administration, EHS, and the Facility Safety Review Committee (FSRC).

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The responsibilities, authorities, and lines of communication of key management positions within the Operations Organization are discussed in Section 2.2, *Key Management Positions, Responsibilities, and Qualifications*.

During operations, the GLE QA Manager reports to the GLE Facility Manager; however, the GLE QA Manager has the authority and responsibility to directly contact the GLE President and CEO with any QA concerns during operations. Likewise, the GLE EHS Manager has the authority and responsibility to directly contact the GLE President and CEO with any EHS concerns during operations.

2.1.4 Transition From Design and Construction to Operations

GLE is responsible for the design, QA, construction, testing, initial startup, operation, and decommissioning of the GLE Commercial Facility. When the end of construction approaches, the focus of the organization will shift from design and construction to initial startup and operation. As facility construction nears completion, GLE will staff the Operations Organization to ensure a smooth transition from construction activities to operation activities. During this transition, the GLE EHS Manager position reports directly to the GLE President and CEO (as shown in Figure 2-1) for EHS matters related to design and construction and reports directly to the GLE Facility Manager (as shown in Figure 2-2) for EHS matters related to operations. This position is intentionally duplicated to provide significant continued focus on the EHS goals during design and construction when the Operating Organization is not yet fully developed and implemented. Similarly, the QA Manager position is duplicated during the transition from design and construction to operations to ensure quality is adequately maintained throughout the transition phase.

As the construction of systems is completed, the systems undergo acceptance testing as required by approved written procedures. Following successful completion of acceptance testing, systems are transferred from the Construction Organization to the Operations Organization by means of a detailed transition plan. The turnover includes the physical systems, corresponding design information, and records. Following turnover, the Operations Organization is responsible for system maintenance and CM. The design basis for the facility is maintained during the transition from construction to operations through the CM Program described in GLE LA Chapter 11, *Management Measures*.

2.2 KEY MANAGEMENT POSITIONS, RESPONSIBILITIES, AND QUALIFICATIONS

This section describes the key functional positions responsible for managing the safe operation of the GLE Commercial Facility. The responsibilities, authorities, and lines of communication for each key management position are provided in this section. Management responsibilities, supervisory responsibilities, and nuclear criticality safety (NCS) engineering staff responsibilities related to NCS are in accordance with American National Standards Institute (ANSI)/American Nuclear Society (ANS)-8.19-2005, *Administrative Practices for Nuclear Criticality Safety* (Ref. 2-4).

Responsibilities, authorities, and inter-relationships of the GLE organizational groups with responsibilities important to safety are specified in approved written position descriptions and procedures.

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Individuals who do not meet the qualification requirements described in this section are not automatically eliminated from a position if other factors provide sufficient demonstration of their abilities to fulfill the duties of the position. These factors shall be evaluated on a case-by-case basis, and approved and documented by the GLE Facility Manager.

2.2.1 Global Laser Enrichment President and Chief Executive Officer

The GLE President and CEO reports to, and receives policy direction from, the GEH Nuclear Energy Fuel Cycle Senior Vice President and is responsible for providing overall direction and management of GLE activities. The GLE President and CEO is also responsible for maintaining the basic policies of the QA Program, and ensuring those policies are transmitted to all levels of management and implemented appropriately through approved written procedures.

2.2.2 Global Laser Enrichment Facility Manager

The GLE Facility Manager reports to the GLE President and CEO and is the individual with the overall responsibility for safety and activities conducted at the GLE Commercial Facility. The activities of the GLE Facility Manager are performed in accordance with GLE’s policies, procedures, and work instructions. The GLE Facility Manager provides for safety, control of operations, and protection of the environment by delegating and assigning responsibility to qualified line management and area managers.

The GLE Facility Manager shall have, as a minimum, a bachelor’s degree in an engineering or scientific field and four years of experience in nuclear facility operations. The GLE Facility Manager shall be knowledgeable of the safety program concepts as applied to the overall safety of the facility, and has the authority to enforce the shutdown of any process or facility. The GLE Facility Manager must approve restart of an operation that he/she directs to be shutdown.

2.2.3 Global Laser Enrichment Quality Assurance Manager

The GLE QA Manager reports to the GLE Facility Manager and is responsible for establishing and maintaining the GLE QA Program. Line management and their staff, who are responsible for performing quality-affecting work, are responsible for ensuring implementation of and compliance with the GLE QA Program. The GLE QA Manager position is independent from other management positions at the facility to ensure the GLE QA Manager has access to the GLE Facility Manager for matters affecting quality. In addition, the GLE QA Manager has the authority and responsibility to contact the GLE President and CEO with any QA concerns.

The GLE QA Manager shall have, as a minimum, a bachelor’s degree in an engineering or scientific field and four years of supervisory nuclear experience in the implementation of a QA Program. The GLE QA Manager shall have at least two years experience in a QA Organization at a nuclear facility.

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2.2.4 Operations Organization

2.2.4.1 Operations Manager

The Operations Manager reports to the GLE Facility Manager and has the responsibility of directing the day-to-day operation of the facility. This includes activities such as ensuring the correct and safe operation of uranium hexafluoride (UF₆) processes, proper handling of UF₆, and the identification and mitigation of any off-normal operating conditions. In the absence of the GLE Facility Manager, the Operations Manager may assume the responsibilities and authorities of the GLE Facility Manager.

The Operations Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and four years of related nuclear experience.

2.2.4.2 Maintenance Manager

The Maintenance Manager reports to the Operations Manager and has the responsibility of directing and scheduling maintenance activities to ensure proper operation of the facility. Other Maintenance Manager responsibilities typically include, but are not limited to, activities such as: corrective and preventive maintenance of facility equipment; preparation and implementation of maintenance procedures; and coordinating and maintaining testing programs for the facility, to include testing of systems, structures, and components (SSCs) to ensure the SSCs are functioning as specified in design documents.

The Maintenance Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and four years of related nuclear experience.

2.2.4.3 Configuration Management Manager

The CM Manager reports to the Operations Manager and is responsible for establishing and maintaining a CM Program for uranium enrichment equipment and safety controls, including related record retention.

The CM Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and two years experience in related assignments; or a high school diploma with eight years of related experience. The CM Manager shall have experience in the understanding and management of the assigned programs.

2.2.4.4 Area Managers

Area managers report to the Operations Manager. Area managers are the designated individuals responsible for ensuring activities necessary for safe operations and protection of the environment are conducted properly, within their assigned area(s) of the facility, in which uranium materials are processed, handled, or stored. Designated area manager responsibilities typically include, but are not limited to, the following:

- Assure safe operation, maintenance, and control of activities;
- Assure safety of the environs as influenced by operations;

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- Assure performance of ISA for the assigned facility area, as required;
- Assure application of management measures and QA elements to safety controls, as appropriate;
- Assure configuration control for Items Relied on for Safety (IROFS) in the assigned facility area, as required;
- Ensure use of approved written procedures which incorporate safety controls and limits; and
- Provide adequate operator training.

The area managers shall have, as a minimum, a bachelor's degree (or equivalent) in a technical field, and two years of experience in operations, one of which is in fuel cycle facility operations; or a high school diploma with five years of operations experience, two of which are in fuel cycle facility operations. Area managers shall be knowledgeable of the safety program procedures (including Industrial Safety, Radiation Protection [RP], NCS, and Environmental Protection) and shall have experience in the application of the program controls and requirements, as related to their assigned area of responsibility. The GLE Facility Manager shall approve the assignment of individuals to the position of area manager. A listing of area managers, by area of responsibility, shall be maintained current at the facility.

2.2.4.5 Shift Supervisors

Shift supervisors report to the Operations Manager and are the interface between management and facility operators. Designated shift supervisor responsibilities typically include, but are not limited to, the following:

- Provide day-to-day work direction to operators and other assigned workers;
- Assure safe operation and control of activities;
- Assure adherence to approved written procedures and controls;
- Provide adequate operator oversight and guidance; and
- Identify and communicate off-normal conditions.

The shift supervisors shall have, as a minimum, a high school diploma and three years of experience in a technical field. Shift supervisors shall be knowledgeable of the applicable safety program procedures (including Industrial Safety, RP, NCS, and Environmental Protection).

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2.2.4.6 Integrated Safety Analysis Manager

The ISA Manager reports to the Operations Manager. ISA Manager responsibilities typically include, but are not limited to, the following:

- Establish and maintain the ISA program;
- Identify IROFS;
- Identify the management measures and QA elements to be applied to safety controls; and
- Provide advice and counsel to area managers on matters of the ISA program.

The ISA Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and four years experience in related assignments. The ISA Manager shall have experience in the understanding and management of the assigned programs.

2.2.5 Technical Services Organization

2.2.5.1 Technical Services Manager

The Technical Services Manager reports to the GLE Facility Manager and has the responsibility of providing technical support to the GLE Commercial Facility. The Technical Services Manager is responsible for providing support for facility modifications; engineering support for operations and maintenance; operation of the laboratories; and information technology support. In the absence of the GLE Facility Manager, the Technical Services Manager may assume the responsibilities and authorities of the GLE Facility Manager.

The Technical Services Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and five years of related experience. The Technical Services Manager shall have experience in the understanding and management of the assigned programs.

2.2.5.2 Projects Manager

The Projects Manager reports to the Technical Services Manager and has the responsibility for the implementation of facility modifications. The Projects Manager also provides engineering support, as needed, to support operations, maintenance, and performance testing of systems and equipment.

The Projects Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and five years of related nuclear experience.

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2.2.5.3 Engineering Manager

The Engineering Manager reports to the Technical Services Manager and has the responsibility for providing engineering support for the GLE Commercial Facility. The responsibilities of the Engineering Manager include, but are not limited to, the following: ensuring the safe operation of enrichment and support equipment; providing maintenance support for equipment and systems; and supporting the development of operating and maintenance procedures. The Engineering Manager is responsible for the development of design changes to the facility.

The Engineering Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and a minimum of five years of related nuclear experience in implementing and supervising a nuclear engineering program.

2.2.5.4 Chemistry Manager

The Chemistry Manager reports to the Technical Services Manager and has the responsibility for the implementation of chemistry analysis programs and procedures for the GLE Commercial Facility. The Chemistry Manager's responsibilities typically include, but are not limited to, chemical analysis of samples and maintaining the laboratories.

The Chemistry Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and a minimum of three years of related nuclear experience associated with implementation of a chemistry program.

2.2.6 Business Organization

2.2.6.1 Business Manager

The Business Manager reports to the GLE Facility Manager and has the responsibility of providing business and administrative support to the GLE Commercial Facility. The Business Manager's responsibilities typically include, but are not limited to, procurement (sourcing), document control, records management, finance, training, and human resources.

The Business Manager shall have, as a minimum, a bachelor's degree (or equivalent) in Personnel Management, Business Administration, or a related field, and three years of related experience in implementing and supervising administrative responsibilities at a nuclear facility.

2.2.6.2 Document Control Manager

The Document Control Manager reports to the Business Manager and has the responsibility for establishing and maintaining a Document Control System for adequately controlling documentation at the GLE Commercial Facility.

The Document Control Manager shall have, as a minimum, a bachelor's degree (or equivalent) and a minimum of three years of related experience in implementing and supervising a document control program.

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2.2.7 Global Laser Enrichment Environmental, Health, and Safety Organization

The GLE EHS function is administratively independent of Operations but has the authority to enforce the shutdown of any process or facility in the event that controls for any aspect of safety are not assured.

2.2.7.1 Global Laser Enrichment Environmental, Health, and Safety Manager

The GLE EHS Manager reports to the GLE Facility Manager. In addition, the GLE EHS Manager has the authority and responsibility to contact the GLE President and CEO with any EHS concerns. The GLE EHS Manager has designated overall responsibility to establish and manage the Licensing, Security and Emergency Preparedness, Material Control and Accounting (MC&A), NCS, Industrial Safety, Environmental Protection, and RP Programs to ensure compliance with applicable federal, state, and local regulations and laws. These programs are designed to ensure the health and safety of employees and the public, as well as the protection of the environment. The GLE EHS Manager must approve restart of any operation shutdown by the EHS function.

The GLE EHS Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and five years of management experience in assignments involving regulatory activities. The manager of the GLE EHS function shall have experience in the understanding and management of NCS, Environmental Protection, and Industrial Safety programs.

2.2.7.2 Nuclear Criticality Safety Function

The NCS function is administratively independent of Operations and has the authority to shutdown potentially unsafe operations. The NCS Manager reports to the GLE EHS Manager and must approve restart of any operation shutdown by the NCS function. Designated responsibilities of the NCS Manager typically include, but are not limited to, the following:

- Establish the NCS program, to include design criteria, procedures, and training;
- Provide NCS support for operations including ISAs and configuration control;
- Assess normal and credible abnormal conditions;
- Determine NCS limits for controlled parameters;
- Perform methods development and validation to support NCS analyses;
- Perform neutronics calculations, develop criticality safety analyses (CSAs), and approve proposed changes in process conditions or equipment involving fissionable material;
- Specify NCS control requirements and functionality;
- Provide advice and counsel to area managers on NCS control measures, to include review and approval of operating procedures;

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- Support emergency response planning and events; and
- Assess the effectiveness of the NCS program through audit programs.

The NCS Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field, at least four years of experience in assignments involving regulatory activities, and experience in the understanding, application, and direction of NCS programs.

A Senior Engineer, within the NCS function, shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field with three years of nuclear-related experience in criticality safety. A senior engineer shall have experience in the assigned safety function, and has the authority and responsibility to conduct activities assigned to the NCS function.

An Engineer, within the NCS function, shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and experience in the assigned safety function. An NCS Engineer shall have the authority and responsibility to conduct activities assigned to the NCS function with the exception of independent verification of NCS analyses.

2.2.7.3 Material Control and Accounting Manager

The MC&A Manager reports to the GLE EHS Manager and has the responsibility for proper implementation and control of the Fundamental Nuclear Material Control Plan (FNMCP). This position is separate from, and independent of, the Operations and Technical Services Organizations to ensure a definite division between the MC&A function and the other organizations.

The MC&A Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and five years of experience in the management of a safeguards program for special nuclear material (SNM), to include responsibilities for material control and accountability. No credit for academic training may be taken toward fulfilling this experience requirement.

2.2.7.4 Security and Emergency Preparedness Manager

The Security and Emergency Preparedness functions are administratively independent of Operations. The Security and Emergency Preparedness Manager reports to the GLE EHS Manager and has designated responsibilities that typically include, but are not limited to, the following:

- Provide physical security for the GLE Site;
- Establish and maintain the Emergency Preparedness Program, to include training and program evaluations;

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- Provide advice and counsel to area managers on matters of physical security and emergency preparedness; and
- Maintain agreements and preparedness with offsite emergency support groups.

The Security and Emergency Preparedness Manager shall have, as a minimum, a bachelor's degree (or equivalent) in a related field and two years of experience in related assignments; or a high school diploma with eight years of experience in related assignments.

2.2.7.5 Licensing Function

The Licensing function reports to the GLE EHS Manager and has responsibility for coordinating facility activities to ensure compliance with applicable NRC requirements. The Licensing function is also responsible for ensuring abnormal events are reported to the NRC in accordance with NRC regulations.

2.2.7.6 Industrial Safety Manager

The Industrial Safety Manager is administratively independent of Operations and has the authority to shutdown operations when potentially hazardous health and safety conditions are identified. The Industrial Safety Manager reports to the GLE EHS Manager and must approve restart of any operation shutdown by the Industrial Safety function. Designated responsibilities of the Industrial Safety Manager typically include, but are not limited to, the following:

- Identify fire protection requirements from federal, state, and local regulations which govern GLE Commercial Facility operations;
- Ensure proper implementation of the GLE Fire Protection Program and maintain the performance of the fire protection systems;
- Develop practices regarding non-radiation chemical safety affecting nuclear activities;
- Provide advice and counsel to area managers on matters of industrial safety;
- Provide consultation and review of new, existing, or revised equipment, processes, and procedures regarding industrial safety; and
- Provide industrial safety support for ISAs and configuration control.

The Industrial Safety Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and two years of experience in related assignments; or a high school diploma and eight years of related experience.

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2.2.7.7 Environmental Protection Function

The Environmental Protection Manager is administratively independent of Operations and has the authority to shutdown operations with potentially adverse environmental impacts. The Environmental Protection Manager must approve restart of any operation shutdown by the Environmental Protection function. Designated responsibilities of the Environmental Protection Manager typically include, but are not limited to, the following:

- Identify Environmental Protection requirements from federal, state, and local regulations which govern the facility operation;
- Establish systems and methods to measure and document adherence to regulatory Environmental Protection requirements and license conditions;
- Provide advice and counsel to area managers on matters of Environmental Protection;
- Evaluate and approve new, existing, or revised equipment, processes, and procedures involving Environmental Protection activities;
- Provide Environmental Protection support for ISAs and configuration control; and
- Assure proper federal and state permits, licenses, and registrations are obtained for non-radiation discharges from the GLE Commercial Facility.

The Environmental Protection Manager shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and two years of experience in assignments involving regulatory activities (or equivalent); or a high school diploma and eight years of experience in assignments involving regulatory activities.

2.2.7.8 Radiation Protection Function

The RP function is administratively independent of Operations and has the authority to shutdown potentially unsafe operations. The RP Manager must approve restart of any operation shutdown by the RP function. Designated responsibilities for the RP Manager typically include, but are not limited to, the following:

- Establish and maintain the RP Programs, procedures, and training;
- Evaluate radiation exposures of employees and visitors, and ensure the maintenance of related records;
- Conduct radiation and contamination monitoring and control programs;
- Evaluate the integrity and reliability of radiation detection instruments;
- Provide RP support for ISAs and configuration control;
- Provide advice and counsel to area managers on matters of RP;

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- Support emergency response planning; and
- Assess the effectiveness of the RP Program through audit programs.

The RP Manager shall have, as a minimum, a bachelor's degree in an engineering or scientific field, three years of experience that includes assignments involving responsibility for RP, and experience in the understanding, application, and direction of RP Programs.

A senior engineer of the RP function shall have, as a minimum, a bachelor's degree (or equivalent) in an engineering or scientific field and two years of nuclear industry experience in the assigned function. Alternate minimum experience qualification for a senior member of the RP function is a professional certification in health physics. A senior member shall have experience in the assigned safety function, and has authority and responsibility to conduct activities assigned to the RP function.

2.2.8 Safety Committees

2.2.8.1 Facility Safety Review Committee

The FSRC provides the GLE Facility Manager with an independent overview of the safety of operations, and provides management with guidance relative to involvement in safety risks. The committee shall provide professional advice and counsel on Environmental Protection, NCS, RP, and Industrial Safety issues affecting nuclear activities.

A review of the ALARA program and projects shall be conducted annually. This ALARA review shall consider:

- Programs and projects undertaken by the RP function and the Radiation Safety Committee (RSC);
- Performance including, but not limited to, trends in airborne concentrations of radioactivity, personnel exposures, and environmental monitoring results; and
- Programs for improving the effectiveness of equipment used for effluent and exposure control.

The FSRC is responsible to the GLE Facility Manager. The committee's proceedings, findings and recommendations are reported in writing to the GLE Facility Manager, appropriate line management, and appropriate area manager(s) responsible for operations. Such reports shall be retained for a minimum of three years.

The committee shall consist of the Chairman and five members, at a minimum. The committee shall include competence in the applicable scientific and engineering disciplines and shall be staffed with members outside of the GLE Operations Organization. The committee shall hold a minimum of three meetings each calendar year with a maximum interval of 180 days between any two consecutive meetings.

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2.2.8.2 Radiation Safety Committee

The objective of the RSC is to maintain occupational radiation exposures ALARA through improvements in operations. The committee meets monthly to maintain a continual awareness of the status of projects, performance measurement and trends, and the current radiological safety conditions of site activities. The maximum interval between meetings shall not exceed 60 days. A written report of each RSC meeting is forwarded to the appropriate line management, area managers, and the GLE EHS Manager. Records of the committee proceedings are maintained for a minimum of three years. The committee consists of managers or representatives from key functions with activities affecting radiological safety. GLE LA Chapter 4, *Radiation Protection*, provides further information regarding the RSC.

2.2.8.3 Chemical Review Committee

Before a new chemical is ordered, the requester must obtain approval from the Chemical Review Committee. The Chemical Review Committee is comprised of a representative of the EHS Organization, an area manager, and others as deemed appropriate by the EHS representative. The EHS representative leads the review and is a qualified chemical safety reviewer. The process for approval includes reviewing the health and safety risks of the chemical, as well as appropriate handling, storage, and disposal information. Every effort is made to limit the amount of hazardous chemicals used, including identifying feasible alternative chemicals or processes. GLE LA Chapter 6, *Chemical Process Safety*, provides further information on the Chemical Review Committee.

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2.3 MANAGEMENT MEASURES

Management measures for the conduct and maintenance of GLE's EHS Programs are contained in approved written procedures as described in GLE LA Chapter 11. Such practices are part of a Document Control Program, and appropriately span the organizational structure and major facility activities to control inter-relationships and specify program objectives, responsibilities, and requirements. Personnel are appropriately trained to the requirements of these management controls, and compliance is monitored through internal and independent audits and assessments.

2.3.1 Configuration Management

CM is provided for IROFS throughout facility design, construction, testing, and operation. CM provides oversight and control of design information, safety information, and records of modifications (both temporary and permanent) that could impact the ability of IROFS to perform their safety functions when needed. During design and construction, the CFPM has responsibility for CM. Selected documentation is controlled under the CM Program in accordance with appropriate QA procedures associated with design control, document control, and records management. Design changes to IROFS undergo formal review, including interdisciplinary reviews as appropriate, in accordance with approved written procedures. As the project progresses from design and construction to operation, the Operations Organization will maintain the CM Program. See GLE LA Section 11.1, *Configuration Management*, for additional details on CM.

2.3.2 Maintenance

The GLE Maintenance Program shall be implemented for the operations phase of the GLE Commercial Facility. Preventive maintenance activities, surveillance, and performance trending provide reasonable and continuing assurance that IROFS will be available and reliable to perform their safety functions when needed. Maintenance activities include: corrective and preventive maintenance, surveillance/monitoring, and functional testing. These maintenance activities are discussed in further detail in GLE LA Section 11.2, *Maintenance*.

2.3.3 Training and Qualifications

Personnel training is conducted, as necessary, to provide reasonable assurance that individuals are qualified and continue to understand and recognize the importance of safety while performing assigned activities. Training is provided for each individual working at the GLE Commercial Facility, commensurate with assigned duties. Training and qualification requirements are met prior to personnel fully assuming the duties of safety-significant positions, and before assigned tasks are independently performed. The system established for training and retraining is described in GLE LA Section 11.3, *Training and Qualifications*.

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2.3.3.1 Nuclear Safety Training

GLE training policy requires that employees complete formal nuclear safety training prior to unescorted access to Radiological Controlled Areas (RCAs). Formal training relative to nuclear safety includes, but is not limited to, the following topics:

- Radiation and radioactive materials,
- Risks involved in receiving low-level radiation exposure in accordance with 10 CFR 19.12, *Instruction to Workers (Ref. 2-5)*,
- Basic criteria and practices for RP,
- Industrial safety,
- Maintaining radiation exposures ALARA,
- Maintaining radioactivity in effluents ALARA, and
- Emergency response; and
- Applicable NCS objectives contained in ANSI/ANS-8.19-2005 and ANSI/ANS-8.20-1991, *Nuclear Criticality Safety Training (Ref. 2-6)*.

2.3.3.2 Operator Training

Operator training is performance-based and incorporates the structured elements of analysis, design, development, implementation, and evaluation. Job-specific training includes applicable procedures, safety provisions, and requirements. Emphasis is placed on safety requirements where human actions are important to safety. Operator training and qualification requirements are met prior to safety-related tasks being independently performed or before startup following significant changes to safety controls.

2.3.4 Procedures

GLE Commercial Facility activities are conducted through the use of approved written procedures. Applicable procedure and training requirements are satisfied before use of any procedure. Approved written procedures are used to control activities to ensure the activities are carried out in a safe manner.

Procedures are categorized as either operating procedures or management control procedures. Operating procedures provide specific direction for task-based work. Management control procedures describe administrative and general facility practices approved and issued by cognizant management at a level appropriate to the scope of the practice. These procedures direct and control activities across the various process functions and assign functional responsibilities and requirements for these activities.

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Additional details on the use of procedures, including the preparation of procedures in accordance with the Document Control Program are provided in GLE LA Section 11.4, *Procedures*.

2.3.5 Audits and Assessments

The GLE QA Program requires periodic audits and assessments to confirm activities affecting quality comply with the QA Program and that the QA Program is being implemented effectively. Additional details on audit and assessments are provided in GLE LA Section 11.5, *Audits and Assessments*.

2.3.5.1 Facility Safety Review Committee

The FSRC provides technical and administrative reviews of facility operations that could affect facility and worker safety. The FSRC shall review audit findings and performance, including external inspections, for adequacy and timeliness of corrective actions and for trends or overall weaknesses as indicated by audit findings.

2.3.5.2 Quality Assurance Organization

The QA Organization conducts periodic audits of activities associated with the GLE Commercial Facility to verify the facility's compliance with established procedures.

2.3.5.3 Audited Organization

Audited organizations shall assure that deficiencies identified are corrected in a timely manner. Audited organizations shall transmit a response to each audit report within the time period specified in the audit report. For each identified deficiency, the response shall identify the corrective action taken or to be taken. For each identified deficiency, the responses shall also address whether or not the deficiency is considered to be indicative of other problems (for example, a specific audit finding may indicate a generic problem) and the corrective action taken or to be taken for any such identified problems. Copies of audit reports and responses are maintained in accordance with the Records Management Program.

2.3.6 Incident Investigations

Incident investigations are performed to assure that the upset condition(s) is understood, and appropriate corrective actions are identified and implemented to prevent recurrence. GLE Management measures include documenting process-upset conditions in Unusual Incident Reports (UIRs). UIRs are documented and the associated corrective actions are tracked to completion. The objectives of the incident investigation and reporting procedure(s) are to: establish the validity of the data related to the incident; develop and implement corrective action plans, as appropriate; document an event which was or could become a danger to persons or property; and ensure that proper levels of GLE management and public agencies are notified. Additional details on Incident Investigations are provided in GLE LA Section 11.6, *Incident Investigations*.

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2.3.7 Records Management

Approved written procedures that control the process for submittal, receipt, processing, retention, maintenance, and storage of facility documents or records are established. Details on the Records Management Program are provided in GLE LA Section 11.7, *Records Management*.

2.4 EMPLOYEE CONCERNS

GLE is committed to providing a safe and productive work environment that encourages employees to raise issues or concerns related to the design, construction, or operation of the GLE Commercial Facility. Employees who feel that safety or quality is being compromised have the right and responsibility to initiate the "stop work" process in accordance with the applicable project or facility procedures to ensure the work environment is placed in a safe condition. Employees also have access to various resources to ensure their safety or quality concerns are addressed, including:

- Line management or other facility management (for example, ESH Manager, GLE Facility Manager, QA Manager),
- The facility safety personnel (that is, any of the safety engineers or managers);
- NRC's requirements under 10 CFR 19, *Notices, Instructions, and Reports to Workers: Inspection and Investigations (Ref. 2-7)*.

In addition to the above, GLE has established an employee concerns program to provide an avenue for employees to obtain an independent evaluation of concerns.

GLE Management is committed to investigating and resolving employee concerns in an effective manner and providing timely resolutions to issues. The employee concerns program provides methods for establishing a work environment in which employees feel free to raise concerns to their management or the NRC without fear of reprisal.

2.5 WRITTEN AGREEMENTS WITH OFFSITE EMERGENCY RESOURCES

The plans for responding to emergencies at the GLE Commercial Facility are presented in detail in the Radiological Contingency and Emergency Plan (RC&EP). The RC&EP includes a description of the facility Emergency Response Organization and interfaces with offsite emergency response organizations. The RC&EP includes references to agreements with applicable offsite emergency response organizations.

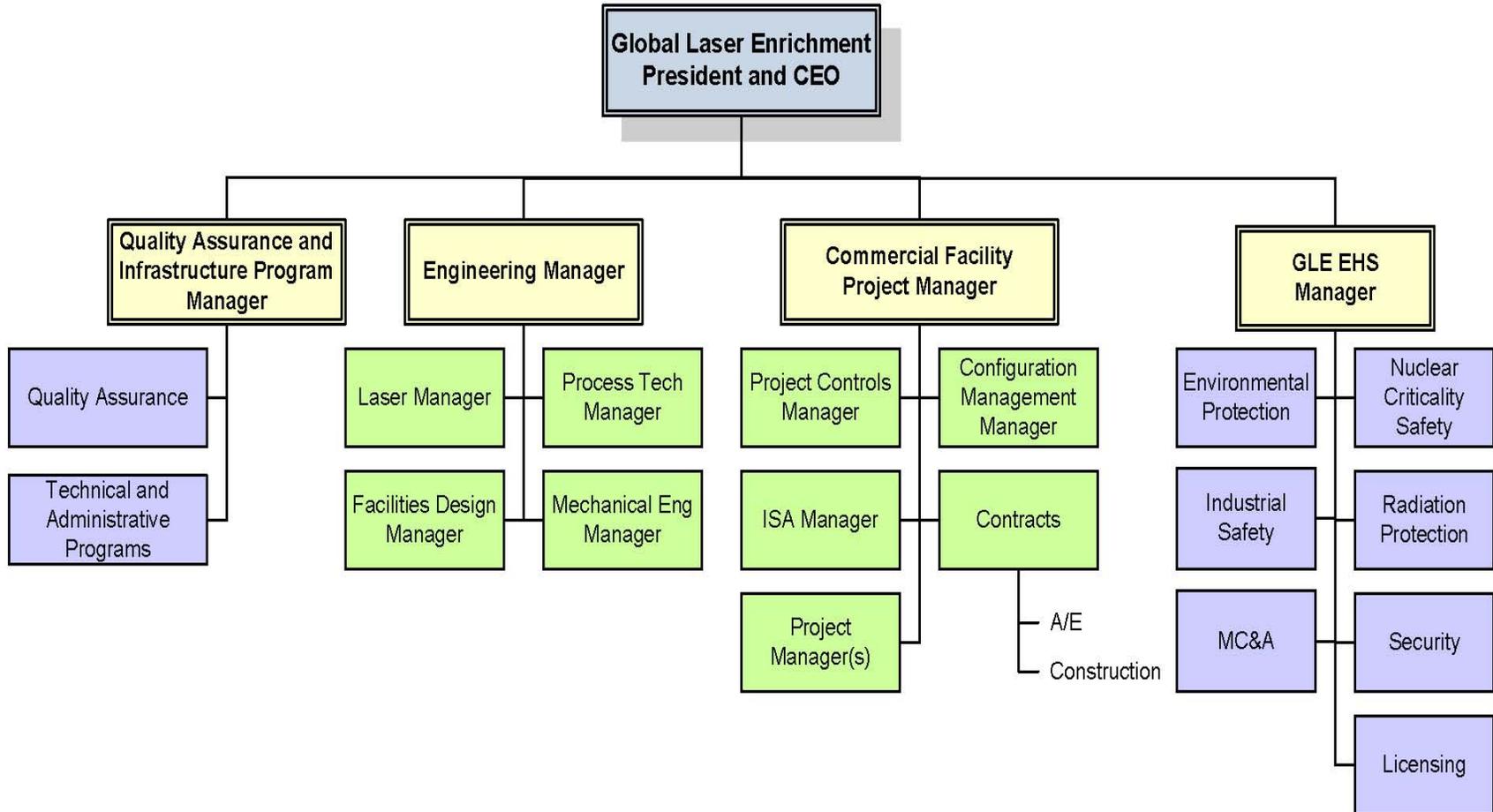
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2.6 REFERENCES

- 2-1. 10 CFR 50, *Domestic Licensing of Production and Utilization Facilities*, U.S. Nuclear Regulatory Commission, 2008.
- 2-2. 10 CFR 70, *Domestic Licensing of Special Nuclear Material*, U.S. Nuclear Regulatory Commission, 2008.
- 2-3. 10 CFR 72, *Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor Related Greater Than Class C Waste*, U.S. Nuclear Regulatory Commission, 2008.
- 2-4. ANSI/ANS-8.19-2005, *Administrative Practices for Nuclear Criticality Safety*, American Nuclear Society, January 2005.
- 2-5. 10 CFR 19.12, *Instruction to Workers*, U.S. Nuclear Regulatory Commission, 2008.
- 2-6. ANSI/ANS-8.20-1991, *Nuclear Criticality Safety Training*, American Nuclear Society, January 1991.
- 2-7. 10 CFR 19, *Notices, Instructions, and Reports to Workers: Inspections and Investigations*, U.S. Nuclear Regulatory Commission, 2008.

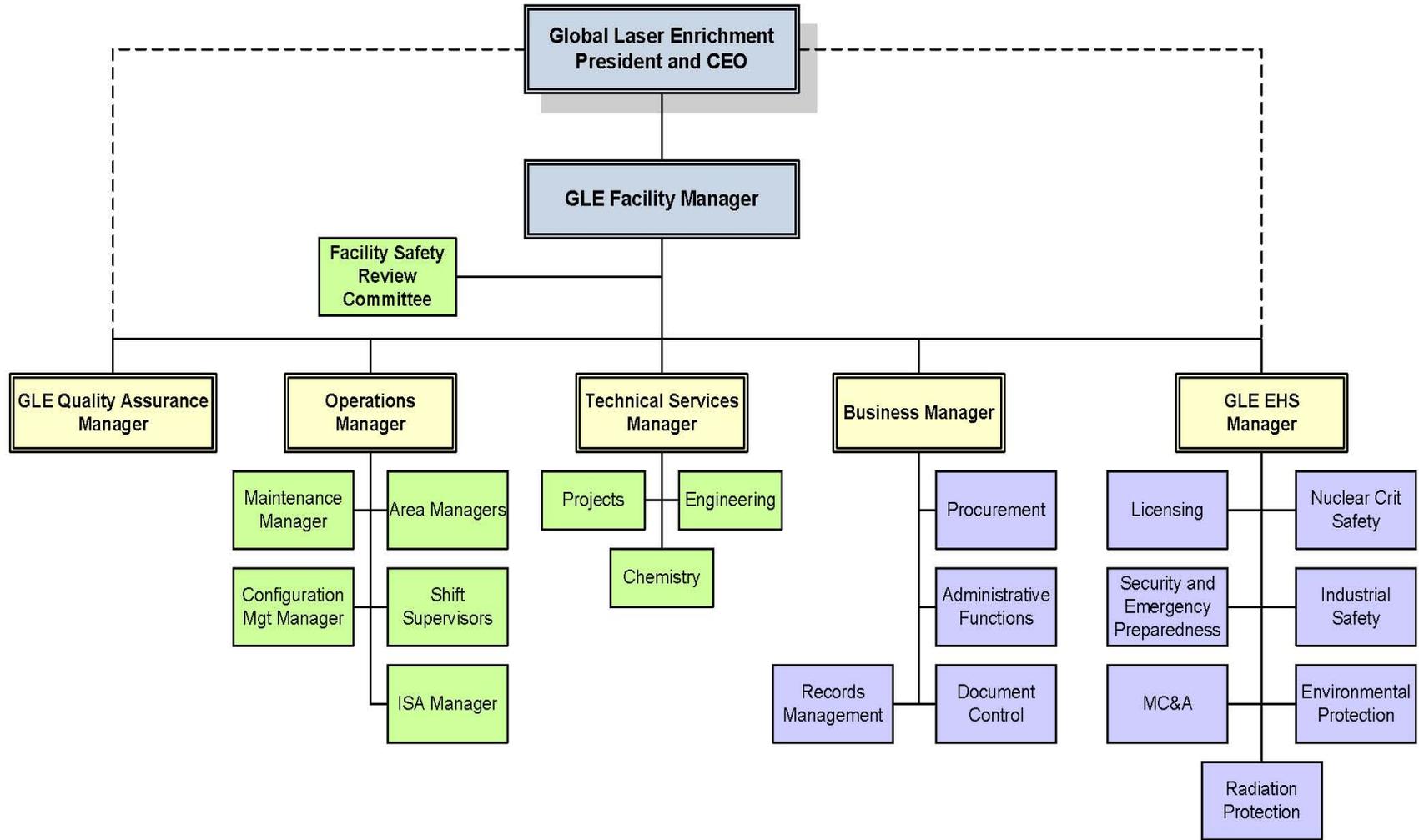
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Figure 2-1. GLE Organizational Structure During Design and Construction.



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Figure 2-2. GLE Organizational Structure During Operations.



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