

Nuclear Development Project Organization

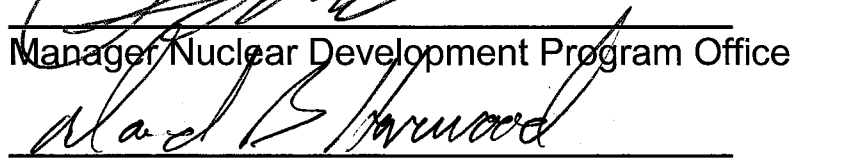
Procedure Number: NDP-NP 1.1
Revision 0

Owner:



Manager Nuclear Development Program Office

Approver:



Director & Project Manager Nuclear Development

Approved on:

1/23/08

Effective Date:

February 4, 2008

1.0 Purpose

This procedure establishes the organizational structure for the Nuclear Development Project and the respective functional responsibilities necessary for implementation of the Nuclear Development Project Quality Assurance Program Description.

2.0 Scope

This procedure applies to all professionals assigned to the Nuclear Development Project.

3.0 Responsibilities

Director & Project Manager Nuclear Development has final approval responsibility for this procedure and overall responsibility for the Nuclear Development Project and its activities.

Manager Nuclear Development Program Office is the owner of this procedure and is responsible for its revision, review, and approval.

Responsibilities for other Nuclear Development Project professionals are defined in this procedure.

4.0 Glossary

Nuclear Development Project: The Nuclear Development Project, under the Director & Project Manager Nuclear Development, is responsible for performing COL activities.

5.0 References

Quality Assurance Program Description (QAPD).

6.0 Procedure

6.1 General

The Nuclear Development Project organization charts are shown on Figure 1.1-1 and Figure 1.1-2. Policies for the Nuclear Development Project shall be administered by the Director & Project Manager Nuclear Development.

Individuals assigned to titled positions in Nuclear Development Project procedures may delegate their authority to perform work, but will retain responsibility for the work. The delegation of authority shall be documented; for example, by a memorandum to file.

Management of the organization's functional areas shall regularly assess the adequacy of the implementation of the activities for which they are responsible and shall ensure the effective implementation of the quality program.

Indoctrination and training, as necessary, shall be provided for professionals performing activities affecting quality to ensure that suitable proficiency is achieved and maintained.

6.2 Nuclear Development Project

The responsibility within the Nuclear Development Project shall be assigned as defined below. Designation of responsibility for implementation establishes authority for ensuring that work is performed in accordance with established procedures.

Senior Vice President is responsible for the administration of the Detroit Edison Nuclear Development QAPD. The SVP also directs the planning and development of the Detroit Edison Company (DECo) Nuclear Development staff, and organization resources.

Director & Project Manager Nuclear Development reports to the Senior Vice President and is responsible for the implementation of quality assurance requirements in the areas specified by the operations QAPD.

Director Nuclear Development Licensing is responsible for leading the Detroit Edison Company (DECo) technical and licensing effort to prepare the Fermi 3 Combined License Application. The Owners Engineer reports to the Director Nuclear Licensing for technical and COLA related activities.

Manager Nuclear Development Program Office is responsible for the design, implementation, and management of controls necessary to support the successful execution of the Nuclear Development Program. This position manages the project schedule, reports on program execution progress, manages issues, and assists with risk management facilitation.

Director Analysis & Commercial Agreements is responsible for leading the Detroit Edison Company's (DECo's) commercial and financial efforts to create an estimate range of the all-in cost to build an ESBWR on the Fermi site; and develop the financial (non-technical) feasibility study for the potential construction of Fermi 3.

Owner Engineer (OE) Project Manager shall be responsible for ensuring that the quality objectives of the project are met. The Project Manager shall ensure that the necessary procedures are prepared and implemented to control a project. The Project Manager shall also have the responsibility and authority for the activities identified in Subsection 6.3.1. The OE Project Manager shall report to the Director & Project Manager Nuclear Development.

OE Engineering Manager shall be responsible for and have the authority for ensuring that engineering activities are conducted in accordance with the applicable quality manual and implementing procedures. The OE Engineering Manager shall also be responsible for ensuring that engineering activities achieve the project criteria for constructability. The OE Engineering Manager shall report directly to the Project Manager.

Nuclear Development (ND) Quality Assurance Manager shall be responsible for verifying implementation of the applicable quality assurance program for the Nuclear Development Project, qualifying suppliers for nuclear safety-related procurements, maintaining an Approved Suppliers List (ASL), processing nonconforming items, and other responsibilities as identified in the Nuclear Development Project procedures.

The Nuclear QA Oversight Quality Assurance function reports administratively to the Director & Project Manager Nuclear Development. This ensures that the personnel performing QA oversight functions are not subject to line influence. This also ensures that quality assurance personnel are provided direct access to senior management that is independent of the line functions for reporting QA concerns.

Day to day work direction is provided from the Manager Nuclear Development Program Office.

OE Information Management System (IMS) Manager shall be responsible for the IMS utilized by the Nuclear Development Project. This assignment will function as the liaison with the corporate information technology (IT) department and vendors providing IT services to B&V. The OE Nuclear IMS Manager will report to the OE Project Manager.

OE Nuclear Administrative Assistants shall be responsible for receiving and transmitting project documents; identifying, indexing, and controlling documents to facilitate their filing and retrieval; routing documents to personnel for action and information; and ensuring electronic filing and storage of project quality records.

6.3 Project Organization

Personnel to staff the Nuclear Development Project includes DECo employees, personnel within B&V, and contract personnel utilized as necessary.

The Nuclear Development Project organization including the Owner's Engineering is defined in Figures 1.1-1 and 1.1-2 (B&V). The Nuclear Development Project organizational positions shall be identified in the Project Management Memorandum (Memorandum) in accordance with NP 5.1, Nuclear Procedure and Project Management Memorandum Preparation.

The organizational structure, functional responsibilities, levels of authority, and lines of communication for activities affecting quality shall be documented in the Memorandum and procedures implemented to address project-specific activities.

6.3.1 Nuclear Development Project Responsibilities and Authority

Director Nuclear Development Licensing shall coordinate nuclear development licensing activities with and report to the Director & Project Manager Nuclear Development. The Director Nuclear Development Licensing shall be assigned responsibility and authority for the following activities:

- Technical Direction and Oversight of COLA and vendor activities including activities performed by the Owners Engineer.
- The Detroit Edison Company's (DECo's) review and acceptance of the COLA vendor products
- Providing technical support for the financial team
- Coordination of the Detroit Edison Company (DECo) and Fermi COLA support activities
- Interface with NRC and Industry entities related to COLA development, technical, and licensing activities

Manager Nuclear Development Program Office shall coordinate program office activities with and report to the Director & Project Manager Nuclear Development. The Manager Nuclear Development Program Office shall be assigned responsibility and authority for the following activities:

- Quality Assurance
- Document Management
- Budgeting and Forecasting
- Spending Control
- Change Request Management
- Metrics and Reporting
- Project Scheduling

- Risk Management
- Meeting Facilitation
- Scope Management
- Contract Administration
- Invoice Processing
- Unbilled Liability
- Decision Making Process
- Issue Management
- Equipment and Facilities Management
- Continuous Improvement

Director Analysis & Commercial Agreements shall coordinate analysis and commercial agreements with and report to the Director & Project Manager Nuclear Development. The Director Analysis & Commercial Agreements shall be assigned responsibility and authority for the following activities:

Interacting with GEH and/or other vendors, if required, to obtain the appropriate information
Leading any commercial discussions, if necessary, with GEH and/or other vendors to obtain said information and/or support

Black & Veatch Project Director reports to the Director & Project Manager Nuclear Development. This position is responsible for Projects and Services for the B&V Nuclear Business Line.

OE Project Manager shall coordinate with and report to the Director Nuclear Development Licensing/Engineering. The OE Project Manager shall be assigned responsibility and authority for the following activities:

- Interfacing with the owner/client to ensure that contractual requirements are satisfied.
- Executing work activities and preparing and approving project level instructions, procedures, or guidelines to define and implement project activities.
- Implementing the quality program for project activities as defined in the Nuclear Procedures.
- Coordinating with B&V internal organization functional areas to staff an effective project organization.
- Indoctrinating and training project personnel in Nuclear Development Project and unique project-specific requirements.
- Establishing the project schedule and budget management.
- Coordinating with and providing direction to project management and staff to ensure that the work meets requirements and is completed in accordance with the project budget, schedule, and quality goals.
- Specifying the requirements and schedule for project status updates.
- Reviewing and approving project deliverables.
- Overseeing project records to ensure that an effective system for indexing, filing, transmitting, and storing is established.

OE Project Controls Manager shall coordinate project cost and schedules and report to the OE Project Manager. The OE Project Controls Manager shall be assigned responsibility and authority for the following activities:

- Coordinating and providing cost estimates and cash flow reports, including cost control summaries.
- Establishing and implementing engineering delivery schedules.

OE Engineering Manager shall coordinate with and report to the OE Project Manager. The OE Engineering Manager shall be assigned responsibility and authority for the following activities:

- Implementing engineering activities in accordance with the quality requirements.
- Preparing and issuing project level instructions, procedures, or guidelines that define and implement project engineering activities, as necessary.
- Establishing project engineering staffing requirements.
- Indoctrinating and training project engineering staff in design engineering-related activities.
- Implementing document control.
- Ensuring that design basis documents have been reviewed and approved, including applicable client reviews.
- Ensuring that engineering work meets B&V's standard requirements.
- Providing the OE Project Manager with project engineering updates.

OE Project Discipline Engineer shall report to the OE Engineering Manager and shall be assigned as the project discipline lead. The OE Project Discipline Engineer shall be responsible for the following activities:

- Communicating design engineering requirements to assigned engineering discipline personnel.
- Coordinating design discipline activities to meet the project delivery schedule.
- Ensuring that design activities are accomplished in accordance with the established quality requirements.
- Assigning due dates for supplier submittals, tracking submittal of deliverables, and expediting suppliers, as necessary.
- Reviewing and approving supplier-submitted technical documents.
- Interfacing with suppliers to resolve technical design questions.
- Providing indoctrination and training for discipline engineering activities.

ND Quality Assurance Manager shall be assigned by and report to the Director & Project Manager Nuclear Development. The ND Quality Assurance Manager shall be responsible for the following quality assurance activities:

- Evaluating through audit/surveillance of project activities, programs, processes, or documentation whether quality requirements have been effectively implemented.
- Providing the Director & Project Manager Nuclear Development with analyses of trends in nonconformances.
- Tracking completion of corrective actions against the quality program and meeting with responsible management to discuss status and progress.
- Controlling work, items, or documents that do not conform to specified requirements. Controls shall provide for identification, documentation, evaluation, segregation (as practical), disposition, and notification to affected organizations.
- Stopping work that jeopardizes the quality characteristics of products, programs, or activities or adversely affects the quality characteristics of subsequent work associated with programs or activities or could cause a deterioration of conditions adverse to quality.
- Coordinating project quality assurance interfaces with the owner/client.
- Reviewing project work for implementation of quality program requirements.
- Providing indoctrination and training for project personnel in quality assurance requirements.
- Evaluating suppliers' quality assurance programs for conformance with ND requirements.
- Reviewing and approving suppliers' quality assurance documents.
- Establishing source surveillance witness and hold points in the supplier's quality plan.

- Developing and maintaining a project summary level inspection and test plan.

Quality Assurance professionals shall have direct access to management where appropriate action can be effected. The ND Quality Assurance Manager shall report to the Director & Project Manager Nuclear Development so that the required authority and organizational freedom, including independence from cost and schedule considerations, are provided for verifying implementation of the quality assurance program.

Quality Assurance professionals shall have sufficient authority, access to work areas, and organizational freedom to accomplish the following:

- Identify quality problems.
- Initiate, recommend, and provide solutions to quality problems through procedurally designated channels.
- Verify implementation of solutions.
- Ensure that further processing, delivery, installation, or use is controlled until proper disposition of unsatisfactory conditions has occurred.

OE Project Engineering Staff are professionals assigned to support the project. Project Staff shall report to the OE Project Discipline Engineer or OE Engineering Manager, as applicable. Project Staff shall be assigned responsibility and authority for the following procurement or engineering activities, as applicable:

- Conducting work in accordance with the quality requirements.
- Completing assigned engineering work and/or activities to support project deliveries.
- Controlling partial quality records and providing completed quality records to the OE Project Support Assistant for electronic and hard copy capture.
- Including system design basis data in applicable engineering documents.
- Identifying training requirements and coordinating with management to accomplish training.

OE Project Support Assistant shall report to the OE Project Manager or others as required to support specific project activities. The OE Project Support Assistant shall be responsible for the following activities:

- Receiving and transmitting project documents.
- Identifying, indexing, and controlling documents to facilitate filing and retrieval of documents.
- Routing documents to personnel for action and information.
- Electronic and hard copy filing and storage of project quality records.

OE Project Field Manager shall report to the OE Project Manager. The OE Project Field Manager shall be assigned responsibility and authority for the following activities:

- Performing project field activities in accordance with the quality requirements.
- Developing and issuing supplemental project instructions for field activities.
- Verifying that current and approved documents are available and used in work activities.
- Implementing the field operations schedule.
- Conducting meetings to discuss the work schedule and resolve conflicts.
- Interfacing with the owner/client and subcontractors.
- Controlling procurement documents and activities to the extent of involvement in such activities.
- Implementing corrective actions in construction activities.

6.4 Multiple Organizations

Where more than one organization is involved in the execution of activities covered by this procedure, the responsibility and authority of each organization shall be clearly established and documented in project-specific procedures.

6.5 Interface Control

The external interfaces between organizations and the internal interfaces between organizational units, and changes thereto, shall be documented in project-specific procedures. Interface responsibilities shall also be defined and documented.

6.6 Delegation of Work

The individual(s) or organization(s) responsible for establishing and executing a quality assurance program may delegate any or all of the work to others, but shall retain responsibility for implementation.

7.0 Records

None.

Figure 1.1-1

Nuclear Development Organization

January, 2008

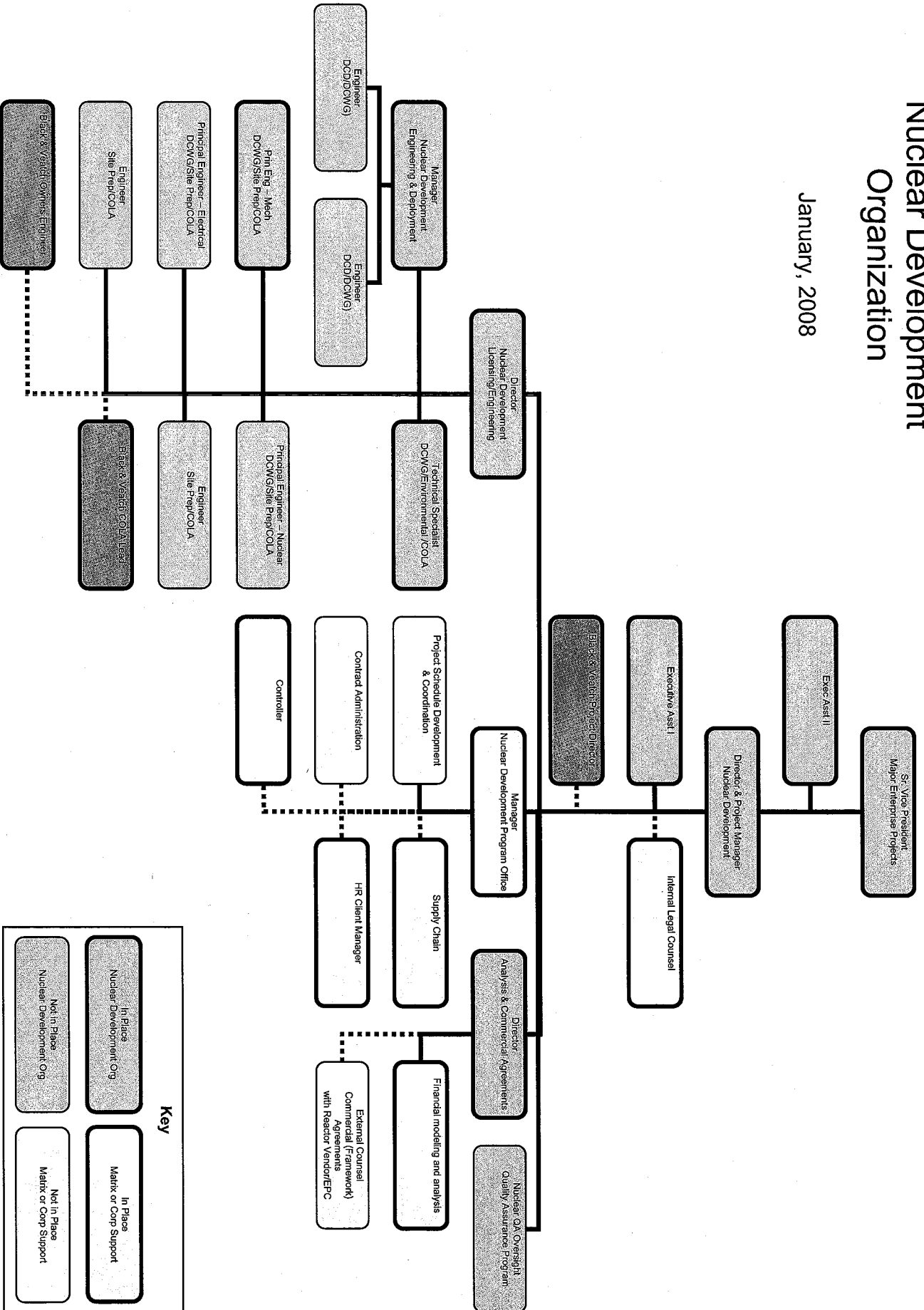
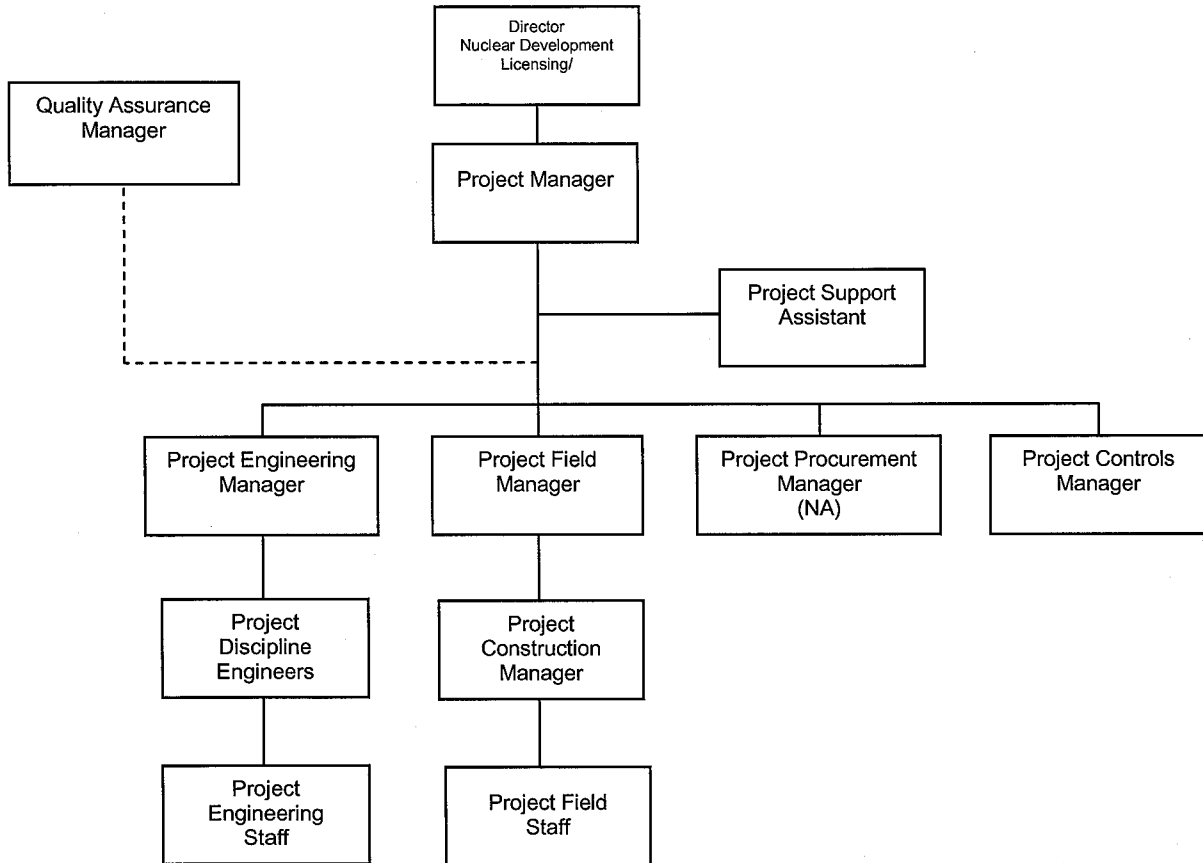


Figure 1.1-2

**Owner Engineer
Nuclear Development
Project Organization**



----- Denotes coordination