

UPDATED SAFETY EVALUATION REPORT

DAVIS-BESSE NUCLEAR POWER STATION, UNIT NO. 1

OPERATIONS PHASE QUALITY ASSURANCE PROGRAM

QUALITY ASSURANCE

GENERAL

The description of the quality assurance (QA) program for the operations phase of the Davis-Besse Nuclear Power Station, Unit No. 1 (Davis-Besse #1) is contained in Section 17.2 of the FSAR thru Revision 20. Our evaluation of this QA program is based on a detailed review of this information and discussions with representatives of Toledo Edison Company (TE) to assess if TE's QA program for the operations phase complies with the requirements of Appendix B to 10 CFR 50 and supplemental guidance contained in the NRC documents WASH 1284, "Guidance on Quality Assurance Requirements During the Operational Phase of Nuclear Power Plants"; WASH 1309, "Guidance on Quality Assurance Requirements During the Construction Phase of Nuclear Power Plants"; and WASH 1283, "Guidance on Quality Assurance Requirements During Design and Procurement Phase of Nuclear Power Plants - Revision 1."

ORGANIZATION

The organizational structure responsible for the operation of Davis-Besse #1 and for the establishment and execution of the operations phase QA program is shown in Figure 1. The relationships between those primarily responsible for QA and those responsible for the operation of the plant are identified in Figure 2.

The President of TE, who has the overall responsibility for the engineering, design, procurement, construction, operation, and quality assurance of Davis-Besse #1, has delegated the authority to establish and implement the QA program to the

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Vice President - Facilities Development. This authority includes the final review and approval of the QA program for the operational phase of Davis-Besse #1.

The Quality Assurance Manager (QAM, who reports to the Vice President - Facilities Development, has the responsibility for the development of the detailed implementing procedures (contained in the Nuclear QA Manual) for the nuclear QA program and for monitoring and auditing all onsite and offsite activities required by the program. The President of TE has delegated to the QAM the authority to identify quality problems; to initiate, recommend, or provide solutions; to verify implementation of solutions; and to stop unsatisfactory work or further processing of unsatisfactory material.

The Operations QA Engineer(s) and the Quality Control (QC) Engineer are located at the Davis-Besse site and report directly to the QAM. These engineers have been provided the authority to stop work or further processing of unsatisfactory material. The Operations QA Engineer(s) are responsible for assuring proper implementation and compliance with the provisions of the Nuclear QA Manual. The principal responsibilities of the Operations QA Engineer(s) include: preparation or review of operational QA procedures and changes thereto; preparation of audit and surveillance schedules, procedures and/or checklists; maintenance of the QA records; performance of audits and surveillance of individuals and groups performing nuclear safety-related activities affecting quality; and review and approval of procedures, procurement documents and other documents. The QC Engineer is responsible for: preparation and review of operational QC instructions and changes thereto; review of procedures that affect nuclear safety-related items and their operation to identify inspections, including witness and/or hold points; surveillance of contractors; and performance of inspections of station operation activities.

The Station Superintendent, who reports to the Vice President - Energy Supply, is primarily responsible for operating Davis-Besse #1 in compliance with the requirements of the Operating License and the Nuclear QA Manual. The Station Superintendent and the QAM communicate directly on matters that relate specifically to the QA program. If differences of opinion on QA are not resolved jointly between the Operations QA Engineer(s) and the Station Superintendent, they are referred to the QAM. Unresolved differences culminate at the Vice President - Facilities Development for resolution.

The Company Nuclear Review Board (CNRB) reports to the Vice President - Facilities Development and performs reviews of nuclear safety-related activities to assure compliance with the Nuclear QA Manual. The Vice President - Facilities Development may instruct the CNRB to review, monitor, advise, investigate, or seek resolution to any nuclear safety-related matter. The Station Review Board reports to the Station Superintendent and is responsible for reviews of procedures, data and deficiencies related to nuclear safety.

QA PROGRAM

The QA program for the operation of Davis-Besse #1 establishes the QA policies and procedures which are contained in the Nuclear QA Manual. The Nuclear QA Manual is the governing document which controls nuclear safety-related activities to comply with applicable requirements of Appendix B to 10 CFR 50. The QA program for the operations phase (testing, operation, maintenance, repair, refueling, and modification) of Davis-Besse #1 consist of three primary elements: administrative controls; quality verification; and review and audit.

The documented system of administrative controls for each nuclear safety-related activity is a series of procedures which are approved by the QAM. These procedures are set forth in the Nuclear QA Manual to assure compliance with the requirements of each of the 18 criteria in Appendix B. They encompass detailed controls for: translating codes, standards, regulatory requirements, technical specifications, engineering and process requirements into drawings, specifications, procedures, and instructions; developing, reviewing, and approving procurement documents, including changes; prescribing all nuclear safety-related activities by documented instructions, procedures, drawings or checklists; issuing and distributing approved documents; purchasing items and services; identifying materials, parts, and components; performing special processes; inspecting and/or testing material, equipment, processes or services; calibrating and maintaining measuring and test equipment; handling, storing and shipping of items; identifying the inspection, test and operating status of nuclear safety-related items (Q-list); identifying and dispositioning nonconforming items; correcting conditions adverse to quality; preparing and maintaining QA records; and auditing of activities which affect quality.

An indoctrination and training program is established to assure that persons involved in quality-related activities are knowledgeable in QA/QC requirements and implementing procedures and demonstrate a high level of competence and skill in the performance of their quality-related activities.

Quality is verified through surveillance, inspection, testing, checking and review of nuclear safety-related activities. The QA department reviews and approves the detailed procedures, and the QC staff provides independent inspection or surveillance of operations phase activities (e.g. procurement, modifications, and major maintenance on Q-listed items; fuel handling; and special tests).

The QA program requires that quality verification be performed by individuals who are not directly responsible for performing the nuclear safety-related activity. Inspections of nuclear safety-related activities during the operation of the Davis-Besse #1 are performed by both the station staff and the QA department. In addition to being independent from the individual or group performing the activity being inspected, inspection personnel do not report to the same immediate supervisor as those performing the work.

The CNRB is primarily responsible for the independent review of nuclear safety-related activities. This includes a review of the audit program at least annually to assure that audits are being accomplished in accordance with the QA program requirements. The Vice President - Facilities Development annually reviews the status and adequacy of the QA program and reports the results thru the Senior Vice President-Operations to the TE President.

The QAM is responsible for the content and control of the audit program. Audits are performed in accordance with predetermined written procedures and instructions which assure that checklists are used for each type of activity being audited. The audit function, which is conducted on a periodic basis by onsite and offsite QA personnel, includes an objective evaluation of QA practices, procedures and instructions; work areas, activities, processes, and items; the effectiveness of implementation of the QA program; and compliance with policy directives. The QA program requires both documentation of audit results and written review by management having responsibility in the area audited to determine and take corrective action needed, if any. Followup audits are performed to determine that nonconformances are effectively corrected and that the corrective action precludes repetitive occurrences.

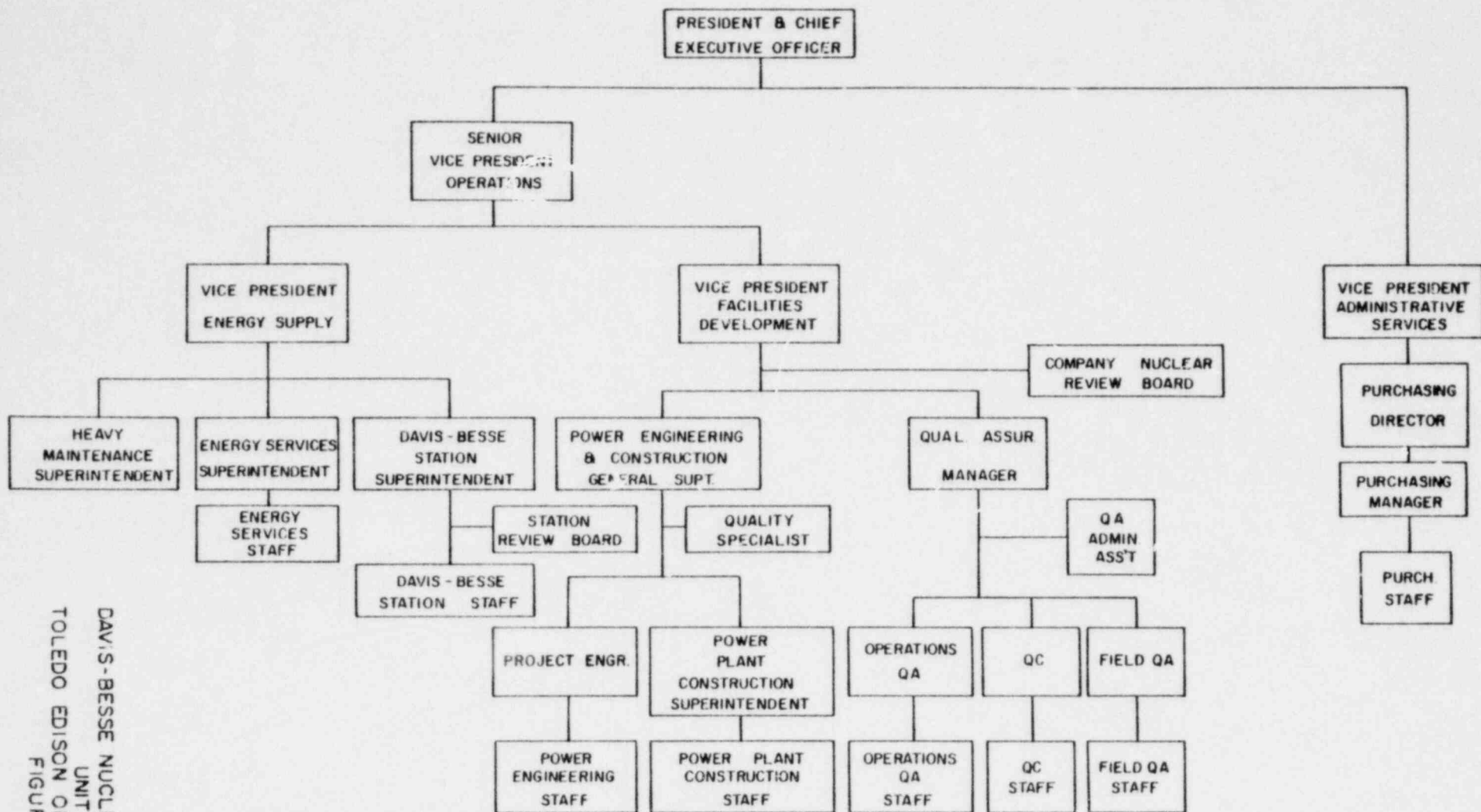
Audit reports, which indicate quality trends and the effectiveness of the QA program, are also sent to the Vice President-Facilities Development, the Station Superintendent and the General Superintendent - Power Engineering and Construction.

CONCLUSION

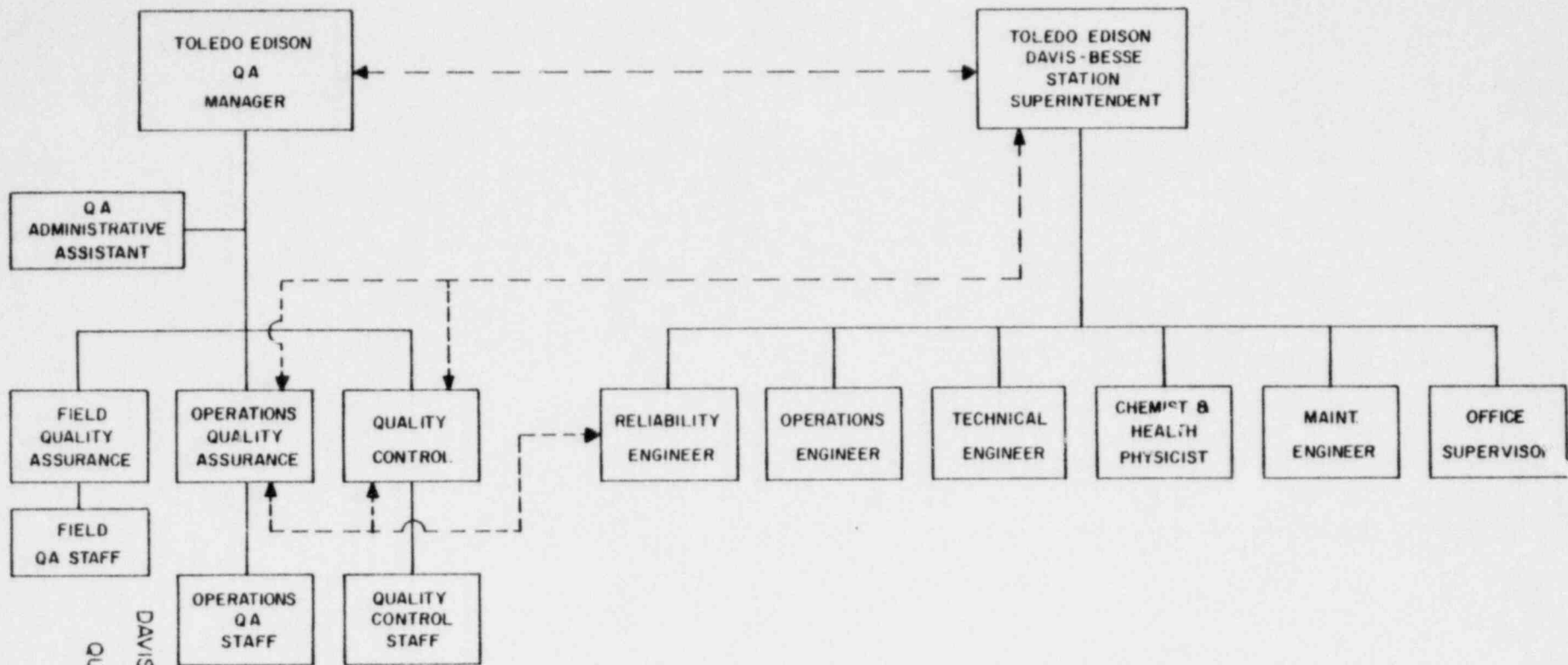
Our review of the Davis-Besse #1 QA program description for the operations phase has verified that all applicable requirements of Appendix B to 10 CFR Part 50 are included in the QA program requirements. Further, this review has determined that the QA organizations are structured such that they can effectively carry out their responsibilities related to quality without undue influence from other groups.

Based on our detailed review and evaluation of the QA program description contained in Section 17.2 of the FSAR thru Revision 20 for the Davis-Besse Nuclear Power Station, Unit No. 1, we conclude that:

1. The QA organization of TE is provided sufficient independence from cost and schedule (when opposed to safety considerations), authority to effectively carry out the operations QA program, and sufficient access to management at a level necessary to perform their QA functions.
2. The QA program description contains adequate QA requirements and a comprehensive system of planned and systematic controls which address each of the criterion of Appendix B to 10 CFR Part 50 in an acceptable manner.



DAVIS-BESSE NUCLEAR POWER STATION
 UNIT NO. 1
 TOLEDO EDISON ORGANIZATION CHART
 FIGURE 1



DAVIS-BESSE NUCLEAR POWER STATION
 UNIT NO. 1
 QUALITY ASSURANCE INTERFACE
 PRINCIPLE FLOW PATHS
 FIGURE 2

————— Administrative
 - - - - - QA/QC Coordination and Communication