SAFETY EVALUATON REPORT

DAVIS-BESSEE NUCLEAR POWER STATION, UNIT NO. 1

OPERATIONAL PHASE QUALITY ASSURANCE PROGRAM

QUALITY ASSURANCE

GENERAL

The description of the Quality Assurance (QA) Program for the operational phase of the Davis-Besse Nuclear Power Station, Unit No. 1 (Davis-Besse #1) is contained in Section 17.2 of the FSAR (Amendment 24, Revision 10). 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 has the program and resources to comply with the requirements of Appendix B to 10 CFR 50 and supplemental guidance contained in the AEC 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 operational phase QA program is shown in Figure 1. The relationships between those primarily 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 responsibility to establish and implement the QA Program to the Vice President - Facilities Development. This responsibility includes the final review and approval of the QA program for the operational phase of Davis-Besse #1.

The Manager of QA, who reports to the Vice President - Facilities Development, has been delegated 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 Manager of QA 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 and the Quality Control (QC) Engineer, both of whom are located at the Davis-Besse site, report directly to the Manager of QA. Both engineers have been provided the authority to stop work or further processing of unsatisfactory material. The Operations QA Engineer and his staff are responsible for assuring proper implemention and compliance with the provisions of the Nuclear QA Manual. The principal functions of the Operations QA Engineer include: preparation

or review of operational QA procedures and changes thereto; preparation of audit schedules, procedures, and/or checklists; maintenance of the QA records; performance of audits and surveillance of individuals and groups performing activities affecting quality; and review and approval of drawings. The QC Engineer is responsible for: preparation and review of operational QA procedures and changes thereto; review of procedures that affect safety-related items and their operation to identify witness and/or hold points for independent inspections; and inspections (independent of those performed by the Inspection Engineer) of activities affecting quality.

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 Inspection Engineer reports to the Station Superintendent and has responsibility for inspection of station operation activities. The Station Superintendent and the Manager of QA communicate directly on matters that relate specifically to the QA program. If differences of opinion on QA are not resolved jointly between the QA Engineer and the Station Superintendent, they are referred to the Manager of QA. 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 quality 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 QA matter.

The qualifications, duties, responsibilities, and authority for the various individual positions performing QA functions have been found acceptable. Based on our evaluation of the TE organization and the duties and responsibilities assigned to persons performing QA functions, we conclude that the QA organization has sufficient authority, and independence from undue influences of cost and schedule, to effectively conduct the operational QA program for Davis-Besse #1. We find that the organization is acceptable and complies with the requirements of Appendix B to 10 CFR 50.

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 quality-affecting activities to comply with applicable requirements of Appendix B to 10 CFR 50.

The QA program for the operational phase (testing, operation, maintenance, repair, refueling, and modification) of Davis-Besse #1 consists of three primary elements: administrative controls; quality verification; and review and audit.

The documented system of administrative controls for each quality-affecting activity is a series of procedures which are approved by the Manager of QA. 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: station design changes and modifications; development, review, approval, distribution, and changes to procurement documents; prescribing all safety-related activities by documented instructions, procedures, drawings, and checklists; purchased material, equipment and services; identification of the inspection, test and operating status of safety related items (Q-list); special processes; inspection; testing; measuring and test equipment; handling, storage, and shipping; nonconforming items; corrective action; preparation and maintenance of QA records; and an audit system.

Quality is verified through surveillance, inspection, testing, checking, and audit of work activities. The QA department reviews and approves the detailed procedures and provides independent inspection or surveillance of operational phase activities (e.g. procurement, modifications, and major maintenance of 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 work activity. Inspections of safety-related activities during the operation of the Davis-Besse #1 are performed by both the Inspection Engineer 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.

QA indoctrination, qualification, and training is conducted by the Manager of QA to maintain a high level of personnel competence and skill in the performance of quality-related activities.

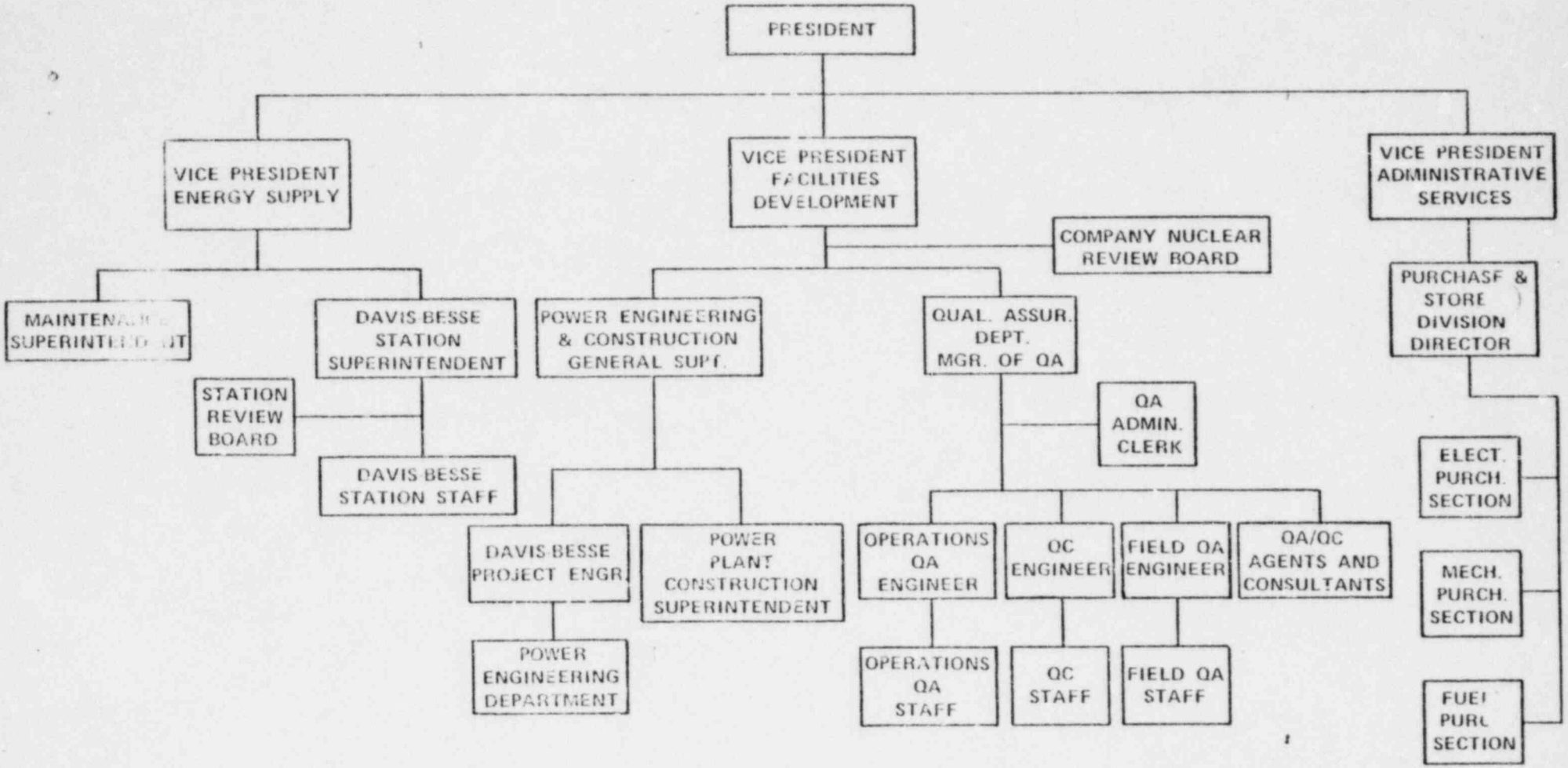
The CNRB is primarily responsible for independent review of activities related to QA. This includes a review of the audit program at least semiannually to assure that audits are being accomplished in accordance with the QA program requirements.

The Manager of QA is responsible for the content and control of the audit program. Audits are performed in accordance with predetermined written procedures which assure that checklists are used for each type of activity being audited. The audit activities, which are conducted on a periodic basis by onsite and offsite QA personnel, include 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 corrective action needed, if any. Audit reports are also sent to the Vice President - Facilities Development and the Station-Superintendent.

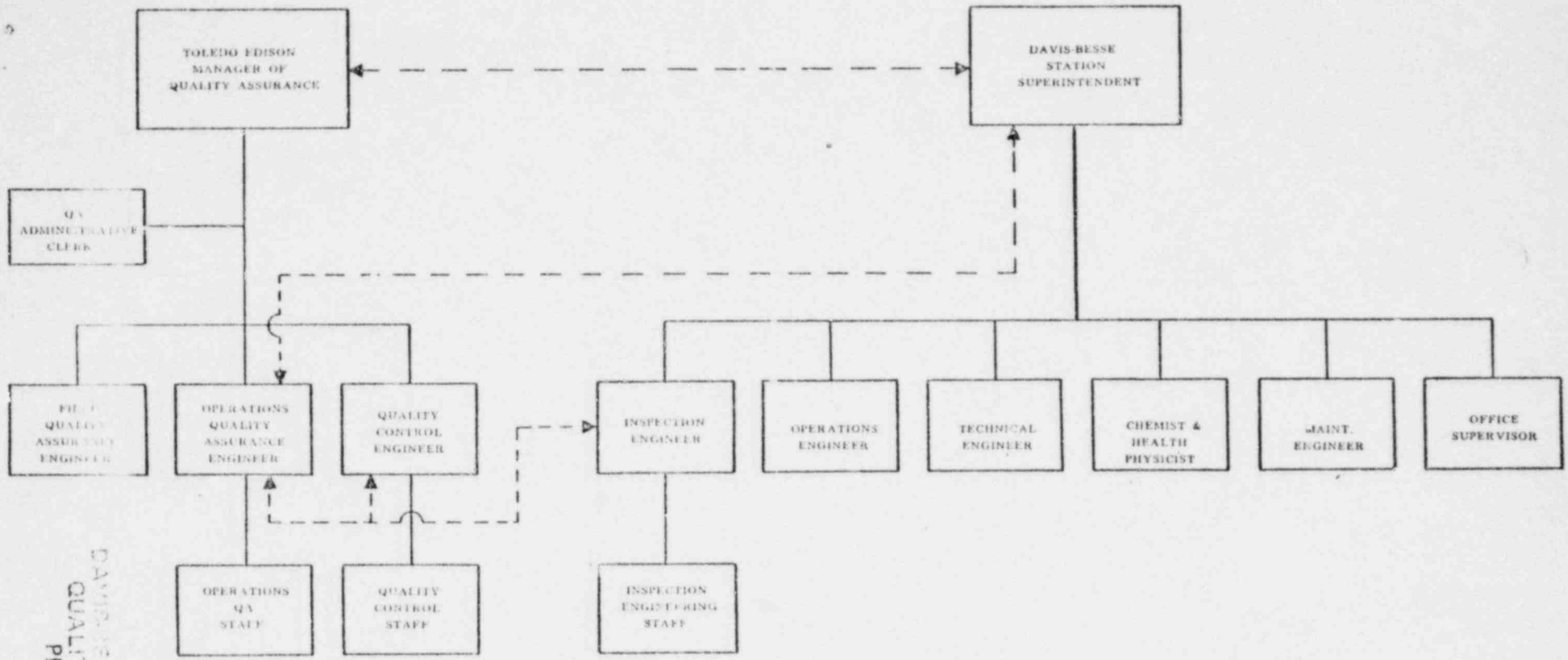
CONCLUSION

Based on a detailed review and evaluation of the QA Program for the operational phase of Davis-Besse #1, the staff has determined that TE's QA program, as described in Section 17.2 of the FSAR (Amendment 24, Revision 10) for Davis-Besse #1, provides a comprehensive system of

planned and systematic controls such that quality-related activities will be conducted in accordance with the requirements of Appendix B to 10 CFR 50. TE has also described an acceptable QA organization which has sufficient authority and independence to permit effective implementation of their QA program. We therefore conclude that the TE QA program is acceptable for the operational phase of Davis-Besse #1.



DAVIS-BESSE NUCLEAR POWER STATION
TOLEDO EDISON ORGANIZATION CHART
FIGURE 1



Administrative

QA/QC Coordination and Communication

DAVIS-BESSE NUCLEAR POWER STATION
QUALITY ASSURANCE INTERFACE
PRINCIPLE FLOW PATHS
FIGURE 2