# Operation Technology, Inc.

# Quality Assurance Manual

## Revision 21

**April 13, 2022**

Operation Technology, Inc.
ETAP QA Controlled Document

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# OTI QA Manual

# Revision 21, April 13, 2022

Operation Technology, Inc., implements this QA Manual for the purpose of establishing and documenting the software quality assurance program for OTI's Electrical Engineering software package - ETAP (ELECTRICAL TRANSIENT ANALYZER PROGRAM). This ETAP-PS Software Quality Assurance Plan in conjunction with ETAP Operations Quality Assurance Plan (ETAP OQAP) and ETAP Quality Assurance Plan (ETAP QAP) is specifically dedicated to meeting the requirements of the following standards:

- ✓ **United States Code (U.S.C.) Title 10 CFR 50, Appendix B** – QUALITY ASSURANCE CRITERIA FOR NUCLEAR POWER PLANTS AND FUEL REPROCESSING PLANTS
- ✓ **United States Code (U.S.C.) Title 10 CFR Part 21** – REPORTING OF DEFECTS AND NONCOMPLIANCE
- ✓ **United States Code (U.S.C.) Title 10 CFR Part 50.55** – CONDITION OF CONSTRUCTION PERMITS, EARLY SITE PERMITS, COMBINED LICENSES, AND MANUFACTURING LICENSES
- ✓ **ASME-ANSI N45.2-1977 – QUALITY ASSURANCE PROGRAM REQUIREMENTS FOR NUCLEAR FACILITIES**
- ✓ **ASME NQA-1 (INCLUDES SUBPART 2.7)** – QUALITY ASSURANCE REQUIREMENTS FOR NUCLEAR FACILITY APPLICATIONS
- ✓ **ISO 9001:2015 Standards** – QUALITY MANAGEMENT SYSTEMS - REQUIREMENTS
- ✓ **IEEE Std 730.1-1995** – IEEE GUIDE FOR SOFTWARE QUALITY ASSURANCE PLANNING
- ✓ **CAN/CSA-Q396.1.2-89–** QUALITY ASSURANCE PROGRAM FOR PREVIOUSLY DEVELOPED SOFTWARE USED IN CRITICAL APPLICATIONS
- ✓ **ASME-ANSI N45.2.2-1972** – PACKAGING, SHIPPING, RECEIVING, STORAGE AND HANDLING OF ITEMS FOR NUCLEAR POWER PLANTS

Quality assurance comprises all those planned and systematic actions necessary to provide adequate confidence that ETAP shall perform satisfactorily when in used in activities directly associated with Nuclear Power Plants. It is vital for the success of the ETAP-PS SQAP program that all personnel involved with the design and development of ETAP fully integrate all facets of the approved program into their daily operations and methodologies.

**Part 1: ETAP-PS SQAP**
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**Part 2: ETAP OQAP**
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**Part 3: ETAP QAP**
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