

## **Escalated Enforcement Cases from 10 CFR Part 50 Construction**

The violations listed below are Escalated Enforcement Actions (EA) related to Enforcement Policy Supplement II, Part 50 construction.

Washington Public Power Supply System, Richland, Washington  
(Columbia Power Station), EA 80-20, Supplement II  
Infraction with \$61,000 Civil Penalty was issued on June 17, 1980.

A QA program breakdown existed related to welding, weld repairs, ultrasonic testing, inspector qualification, and records on the sacrificial shield wall and pipe whip restraints.

Cincinnati Gas and Electric Company, Cincinnati, Ohio  
(Zimmer Nuclear Power Station), EAs 82-12, 82-129, and 83-66, Supplement II  
Severity Level II Violation with \$200,000 Civil Penalty was issued November 24, 1981.  
Stop Work Order was issued on November 12, 1982.  
Severity Level III Violation (No Civil Penalty) was issued on March 25, 1983.  
Severity Level III Violation (No Civil Penalty) was issued on August 29, 1983.

A QA program breakdown existed related to harassment of quality control (QC) inspectors, and unacceptable welding, material records, welding NDE, design control, corrective actions, and installation of cables and pipe hangers. March 1983 and August 1983 violations related to work prior to the November 1982 NRC Stop Work Order.

Pacific Gas and Electric Company, San Francisco, California  
(Diablo Canyon Nuclear Power Station), EA 82-13, Supplement II  
Severity Level III Violation (No Civil Penalty) was issued on February 11, 1982.

Senior licensee representatives made material false verbal statements regarding whether PG&E had received reports dealing with a seismic reverification program conducted by a contractor, which the NRC did not have. PG&E stated that no written reports existed. This was a false statement because at the time, at least two draft reports existed which had not been provided to the NRC.

Gulf State Utilities Company, Beaumont, Texas  
(River Bend Nuclear Station, Unit No. 1), EA 82-40, Supplement II  
Severity Level III Violation (No Civil Penalty) was issued on March 4, 1982.

Licensee failed to provide timely notification of construction deficiencies related to pipe whip restraint mounting brackets insufficient welds. (Inspections were performed to the wrong drawing.) The nonconformance report was initiated on January 5, 1982, but the 10 CFR 50.55(e) construction deficiency report (NRC-required within 24 hours) had not been submitted to the NRC as of January 29, 1982.

Illinois Power Company, Decatur, Illinois  
(Clinton Nuclear Station, Unit No. 1), EA 82-93, Supplement II  
Severity Level III Violation with \$90,000 Civil Penalty was issued on October 5, 1982

A QA program breakdown existed for electrical construction related to multiple instances of unacceptable design control, installation procedures, inspection, and corrective actions. Also, harassment and intimidation of QC inspectors existed. (NRC issued a CAL addressing the licensee's stop work order, and changes made to address the violations.)

Louisiana Power and Light, New Orleans, Louisiana  
(Waterford Steam Electric Station, Unit 3), EA 82-109, Supplement II  
Severity Level III Violation with \$20,000 Civil Penalty was issued on December 6, 1982.

Numerous deficiencies and discrepancies were found by the licensee's startup and QA organizations in both the as-built condition and supporting quality documentation of systems offered for startup testing by the prime contractor. Subsequent NRC inspection found four ECCS systems with unacceptable installation and as-built errors.

Commonwealth Edison Company, Chicago, Illinois  
(Braidwood Generating Station, Units 1 and 2) EA 82-136, Supplement II  
Severity Level III Violation with \$100,000 Civil Penalty was issued on February 2, 1983.

Inadequate corrective actions resulted to address licensee QA audit-identified unacceptable conditions related to installation of steam generators, reactor coolant pumps, safety injection pumps, and residual heat removal pumps without acceptable installation and inspection procedures, and material control. Also, the construction deficiency report was 2 years overdue.

Consumers Power Company, Jackson, Michigan  
(Midland Nuclear Plant, Units 1 and 2) EA 83-03, Supplement II  
Severity Level III Violation with \$120,000 Civil Penalty was issued on February 8, 1983.

A QA program breakdown existed during as-built inspections for the installation of electrical, mechanical and civil components in the diesel generator building. Also, QC supervisors had instructed QC inspectors to suspend inspections if excessive deficiencies were found during the performance of inspections.

Niagara Mohawk Power Corporation, Syracuse, New York  
(Nine Mile Point Nuclear Station, Unit 1) EA 83-16, Supplement II  
Severity Level III Violations with \$100,000 Civil Penalty was issued on April 26, 1983.

A principal contractor allowed trainees who were not fully certified to perform safety-related electrical inspections, and several inspection reports were signed by certified inspectors indicating they had performed an inspection, when in fact the inspection had been performed by a trainee.

Long Island Lighting Company, Wading River, New York  
(Shoreham Nuclear Power Station) EA 83-20, Supplement II  
Severity Level III Violation with \$40,000 Civil Penalty was issued on April 12, 1983.

Licensee approved preoperational test results for a diesel generator 2-hour test even though test results indicated that one kW load test acceptance criteria was not satisfied.

Arizona Public Service Company, Phoenix, Arizona  
(Palo Verde Nuclear Power Station) EA 83-30 and EA 83-130, Supplement II  
Severity Level III Violation with \$80,000 Civil Penalty was issued on December 12, 1983.

A QA program breakdown existed as demonstrated by incorrect or unacceptable conditions of turned-over systems. Also, QC inspections were performed by persons other than documented with incorrectly documented tools.

Kansas Gas and Electric Company, Wichita, Kansas  
(Wolf Creek Generating Station) EA 83-32, Supplement II  
Severity Level III Violation with \$40,000 Civil Penalty was issued on March 23, 1983.

Inadequate control of turned-over systems existed as demonstrated by numerous unacceptable conditions identified by licensee QA personnel in the borated refueling water storage system and auxiliary feedwater systems.

Texas Utilities Generating Company, Dallas, Texas  
(Comanche Peak Steam Electric Station) Supplements II, EA 83-64  
Severity Level III Violation with \$40,000 Civil Penalty was issued on August 29, 1983.

The Department of Labor determined that a QC inspector was transferred and fired for engaging in protected activities (writing nonconformance reports).

Texas Utilities Generating Company, Dallas, Texas  
(Comanche Peak Steam Electric Station) Supplements II, EA 83-132  
Severity Level III Violation with \$40,000 Civil Penalty was issued on December 22, 1983.

A quality control supervisor intimidated QC personnel working for him inspecting paint coatings. The QC supervisor threatened the QC personnel with withdrawal of QC certifications if they continued to write "nitpicking" nonconformance reports.

Kansas Gas and Electric Company, Wichita, Kansas  
(Wolf Creek Generating Station) EA 84-107, Supplement II  
Severity Level III Violation with \$75,000 Civil Penalty was issued on November 21, 1984.

A contractor review had found over 60% of 241 safety-related structural steel welds to be nonconforming. Licensee inspectors found substantial, similar nonconformances 18 months later, demonstrating QA program breakdowns related to inspection, corrective actions, and records.

Louisiana Power and Light Company  
(Waterford 3 Steam Electric Station) EA 85-10, Supplement II  
Severity Level III Violation with \$130,000 Civil Penalty was issued on May 24, 1985.

Multiple minor weaknesses existed in the QA program based on 20,000 hours of NRC inspection. On multiple occasions, the licensee did not take adequate corrective action, ensure qualifications of QA personnel and welder certifications, adequately disposition conditions adverse to quality, establish QA programs for application of nuclear protective coatings, adequately review QA records, maintain design control, and adequately perform document and design control reviews.

Kansas Gas and Electric Company, Wichita, Kansas  
(Wolf Creek Generating Station) EA 85-27, Supplement II  
Severity Level III Violation with \$25,000 Civil Penalty was issued on May 8, 1985.

Weaknesses were identified in the execution of the preoperational test program. These weaknesses involved (1) three examples of not verifying design safety features, (2) two examples of not demonstrating component performance under the proper limiting accident condition, (3) three examples of not using proper testing methods and equipment, and (4) one example of not verifying a design document commitment.

Georgia Power Company, Atlanta, Georgia  
(Vogtle Electric Generating Plant) EA 85-117, Supplement II  
Severity Level III Violation (No Civil Penalty) was issued on November 15, 1985.

A contractor manager had intimidated QC personnel who reported to him administratively.

Texas Utilities Generating Company, Dallas, Texas  
(Comanche Peak Steam Electric Station Unit 1) Supplements II, EA 86-09  
Severity Level III Violations with \$200,000 Civil Penalty was issued May 2, 1986.

Significant weaknesses in QA program implementation based on QC inspectors and coatings supervisors not properly qualified and certified, design requirements not properly translated into instructions and drawing, inappropriate design criteria, improper seismic analysis, inadequate reinspection and as-built documentation of electrical cable trays, inadequate procurement and installation of electrical penetration assemblies, and ineffective corrective actions.

Houston Lighting and Power Company, Houston, Texas  
(South Texas Project, Units 1 and 2) EA 86-10, Supplement II  
Severity Level III Violation (No Civil Penalty) was issued August 20, 1986.

Significant breakdown in the QA program based on deficiencies in the contractor's inspection program, inadequate implementation of design reviews and design changes, and unacceptable equipment within the procurement program, all of which had not been identified by the licensee QA program.

Texas Utilities Generating Company, Dallas, Texas  
(Comanche Peak Steam Electric Station Unit 1) Supplements II, EA 86-63  
Severity Level III Violation with \$40,000 Civil Penalty was issued May 2, 1986.

Department of Labor determined that discrimination for raising safety concerns by QC inspectors existed. For example, a QC inspector was instructed by his supervisor to sign off a number of inadequately documented items, personnel actions were taken against electrical QC inspectors who wore T-shirts with job-related messages, and a confrontation occurred between a QA auditor and the site QC supervisor.

Carolina Power and Light Company, Raleigh, North Carolina  
(Shearon Harris, Unit 1) EA 86-171, Supplement II  
Severity Level III Violation (No Civil Penalty) was issued November 21, 1986.

Inadequate inspections had been performed for physical separation of electrical cables for safety-related circuits and corrective actions had been inadequate.

Texas Utilities Electric Company, Dallas, Texas  
(Comanche Peak Steam Electric Station Unit 1) Supplements II, EA 88-278  
Severity Level III Violation (No Civil Penalty) was issued on February 28, 1989.

Licensee did not submit a timely application for extension of the construction permit.

Texas Utilities Electric Company, Dallas, Texas  
(Comanche Peak Steam Electric Station) Supplements II and VII, EA 90-020  
Severity Level III Violation with \$25,000 Civil Penalty was issued on May 17, 1990.

Intimidation of QC inspectors existed, in that QC receipt inspectors perceived that their supervision would no longer allow them to issue non-conformance reports.

Public Service Company of New Hampshire  
Seabrook, New Hampshire (Seabrook Station) Supplement II, EA 91-144  
Severity Level III Violation with \$100,000 Civil Penalty was issued on November 25, 1991.

ASME Code non-destructive examination (NDE) requirements had not been met to fully demonstrate the quality of welds and provide an acceptable record of weld quality.

## **Other EAs considered for Escalated Enforcement**

Niagara Mohawk Power Corporation, Syracuse, New York  
(Nine Mile Point Nuclear Station, Unit 2) EA 83-106, Supplement II  
Severity Level IV Violation (No Civil Penalty) was issued on October 13, 1983.

Intimidating statements were made by a contractor QC manager. The QC person was instructed by their QA director not to discuss problems with the licensee or the NRC without first discussing the problem with their supervisor, and that disciplinary action could be taken if those instructions were ignored.

Commonwealth Edison Company, Chicago, Illinois  
(Braidwood Station) Supplements II, EA 84-35  
Severity Level IV Violation (No Civil Penalty) was issued on May 7, 1984.

Deficiencies in the QA program existed concerning the verification of correct material for ASME piping components, control of HVAC welding activities, and design control of field run small bore piping and associated hanger installation activities.

Detroit Edison Company, Newport, Michigan  
(Fermi Nuclear Power Station) Supplements II, EA 84-53  
Severity Level IV Violation (No Civil Penalty) was issued on September 21, 1984.

Inadequate records related to the qualification of personnel existed, and the licensee did not audit a contractor's implementing procedures. The effectiveness of corrective actions was not adequately assessed, in that a hardware assessment was not reviewed by the licensee and no objective evidence existed to substantiate that the training specified in the corrective action had been conducted. A pipe bending and inspection program was not established.

Commonwealth Edison Company, Chicago, Illinois  
(Braidwood Generating Station, Units 1 and 2) EA 86-14, Supplement II  
Severity Level IV Violation (No Civil Penalty) was issued on February 3, 1986.

The licensee had identified that material traceability for small and large bore piping was inadequate for approximately 5% of the material. Follow-up evaluations determined that the material was as specified and would have performed its functions.

Public Service Electric and Gas Company, Wilmington, Delaware  
(Salem Units 1 and 2) Supplements II, EA 86-162  
Letter was issued November 5, 1986.

A licensee investigation identified cheating on the General Employee Training and Radiation Protection Training examinations

Texas Utilities Electric Company, Dallas, Texas  
(Comanche Peak Steam Electric Station) Supplements II, EA 87-122  
Severity Level IV Violation (No Civil Penalty) was issued on August 4, 1987.

Although a vendor notified the licensee on September 5, 1986, that switchgear could malfunction during a seismic event, the NRC was not notified with a construction deficiency report until February 13, 1987.

Texas Utilities Electric Company, Dallas, Texas  
(Comanche Peak Steam Electric Station Unit 1) Supplements II, EA 88-310  
Severity Level IV Violation (No Civil Penalty) was issued on January 9, 1989.

Inadequate management controls existed over painting activities, in that the purchase order did not define the quality requirements, did not address wall thinning, and did not reference the applicable ASME classification.

Tennessee Valley Authority, Chattanooga, Tennessee  
Watts Bar, Tennessee Supplement II, EA 91-19  
Letter was issued on August 26, 1991.

NRC addressed the conditions under which a TVA-issued stop work order would be lifted. The stop work order was placed due to work control problems and inadequate field installation activities.

Tennessee Valley Authority, Chattanooga, Tennessee  
Watts Bar, Tennessee Supplement II, EA 92-047  
Severity Level IV Violation (No Civil Penalty) was issued on July 2, 1992.

Material of unknown quality was installed in the plant without an engineering review and re-inspection to verify acceptability. There were also concerns that the program controls for the material receipt inspection area were reduced after construction restart without notification of the NRC, contrary to one of the conditions which were agreed to prior to construction restart.

Tennessee Valley Authority, Chattanooga, Tennessee  
Watts Bar, Tennessee Supplement II, 92-218  
Severity Level IV Violation (No Civil Penalty) was issued on February 4, 1993.

Inadequate corrective actions existed, based on incorrect or missing nonconformances which occurred during transfer between QA information systems.