Mr. C. Lance Terry -Group Vice President, Nuclear TU Electric Energy Plaza 1601 Bryan Street, 12th Floor Dallas, TX 75201-3411

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2 - AMENDMENT

NOS. 42 AND 28 TO FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89

(TAC NOS. M88948 AND M88949)

Dear Mr. Terry:

The Commission has issued the enclosed Amendment Nos. 42 and 28 to Facility Operating License Nos. NPF-87 and NPF-89 for the Comanche Peak Steam Electric Station, Units 1 and 2. The amendments consist of changes to the Technical Specifications (TSs) in response to your application dated February 14, 1994 (TXX-94045), as supplemented by letter dated May 23, 1995 (TXX 95147).

These amendments incorporate appropriate references to and provisions of the new 10 CFR Part 20 regulations. These changes revise a definition and aspects of radiological effluent TSs, clarify the administrative specification for reporting individual annual exposures greater than 100 mrem by work/job function, and revise the administrative specifications for providing alternative measures for control of access to high radiation areas and designating record retention for radioactive shipments.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly Federal Register notice.

Sincerely.

Original Signed By: Timothy J. Polich, Project Manager

Project Directorate IV-1

Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures:

1. Amendment No. 42 to NPF-87

2. Amendment No. 28 to NPF-89

Safety Evaluation

cc w/encls: See next page

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UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

August 11, 1995

Mr. C. Lance Terry Group Vice President, Nuclear TU Electric Energy Plaza 1601 Bryan Street, 12th Floor Dallas, TX 75201-3411

SUBJECT: COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2 - AMENDMENT

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These amendments incorporate appropriate references to and provisions of the new 10 CFR Part 20 regulations. These changes revise a definition and aspects of radiological effluent TSs, clarify the administrative specification for reporting individual annual exposures greater than 100 mrem by work/job function, and revise the administrative specifications for providing alternative measures for control of access to high radiation areas and designating record retention for radioactive shipments.

A copy of our related Safety Evaluation is enclosed. The Notice of Issuance will be included in the Commission's next biweekly <u>Federal Register</u> notice.

Sincerely,

Timothy J. Polich, Project Manager

Project Directorate IV-1

Nurty Polis

Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Docket Nos. 50-445 and 50-446

Enclosures: 1. Amendment No. 42 to NPF-87

2. Amendment No. 28 to NPF-89

3. Safety Evaluation

cc w/encls: See next page

Mr. C. Lance Terry TU Electric Company

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Regional Administrator, Region IV U.S. Nuclear Regulatory Commission 611 Ryan Plaza Drive, Suite 400 Arlington, TX 76011

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Honorable Dale McPherson County Judge P. O. Box 851 Glen Rose, TX 76043

Office of the Governor
ATTN: Susan Rieff, Director
Environmental Policy
P. O. Box 12428
Austin, TX 78711



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

TEXAS UTILITIES ELECTRIC COMPANY

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT 1

DOCKET NO. 50-445

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 42 License No. NPF-87

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Texas Utilities Electric Company (TU Electric, the licensee) dated February 14, 1994 (TXX-94045), as supplemented by letter dated May 23, 1995 (TXX 95147), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-87 is hereby amended to read as follows:

2. Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 42, and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. The license amendment is effective as of its date of issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Timothy J. Polich, Project Manager

Project Directorate IV-1

Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical

Specifications

Date of Issuance: August 11, 1995



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

TEXAS UTILITIES ELECTRIC COMPANY

COMANCHE PEAK STEAM ELECTRIC STATION, UNIT 2

DOCKET NO. 50-446

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 28 License No. NPF-89

- 1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Texas Utilities Electric Company (TU Electric, the licensee) dated February 14, 1994 (TXX-94045), as supplemented by letter dated May 23, 1995 (TXX 95147), complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations set forth in 10 CFR Chapter I;
 - B. The facility will operate in conformity with the application, as amended, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this license amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
- 2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment and Paragraph 2.C.(2) of Facility Operating License No. NPF-89 is hereby amended to read as follows:

(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A, as revised through Amendment No. 28, and the Environmental Protection Plan contained in Appendix B, are hereby incorporated into this license. TU Electric shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION

Timothy J. Polich, Project Manager

Project Directorate IV-1

Division of Reactor Projects III/IV Office of Nuclear Reactor Regulation

Attachment: Changes to the Technical

Specifications

Date of Issuance: August 11, 1995

ATTACHMENT TO LICENSE AMENDMENT NOS. 42 AND 28

FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89

DOCKET NOS. 50-445 AND 50-446

Replace the following pages of the Appendix A Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain marginal lines indicating the areas of change. The corresponding overleaf pages are also provided to maintain document completeness.

REMOVE	<u>INSERT</u>
xvi	xvi
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B 3/4 11-1	B 3/4 11-1
5-1	5-1
5–4	5-4
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DOSE EQUIVALENT 1-131

1.12 DOSE EQUIVALENT I-131 shall be that concentration of I-131 (microCurie/gram) which alone would produce the same thyroid dose as the quantity and isotopic mixture of I-131, I-132, I-133, I-134, and I-135 actually present. The thyroid dose conversion factors used for this calculation shall be those listed in Table III of TID-14844, "Calculation of Distance Factors for Power and Test Reactor Sites" or Table E-7 of NRC Regulatory Guide 1.109, Revision 1, October 1977.

E - AVERAGE DISINTEGRATION ENERGY

1.13 E shall be the average (weighted in proportion to the concentration of each radionuclide in the sample) of the sum of the average beta and gamma energies per disintegration (MeV/d) for the radionuclides with a halflife greater than ten (10) minutes in the sample.

ENGINEERED SAFETY FEATURES RESPONSE TIME

1.14 The ENGINEERED SAFETY FEATURES (ESF) RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ESF Actuation Setpoint at the channel sensor until the ESF equipment is capable of performing its safety function (i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc.). Times shall include diesel generator starting and sequence loading delays where applicable.

FREQUENCY NOTATION

1.15 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.1.

IDENTIFIED LEAKAGE

1.16 IDENTIFIED LEAKAGE shall be:

- a. Leakage (except CONTROLLED LEAKAGE) into closed systems, such as pump seal or valve packing leaks that are captured and conducted to a sump or collecting tank, or
- b. Leakage into the containment atmosphere from sources that are both specifically located and known either not to interfere with the operation of Leakage Detection Systems or not to be PRESSURE BOUNDARY LEAKAGE, or
- C. Reactor Coolant System leakage through a steam generator to the Secondary Coolant System.

MASTER RELAY TEST

1.17 A MASTER RELAY TEST shall be the energization of each master relay and verification of OPERABILITY of each relay. The MASTER RELAY TEST shall include a continuity check of each associated slave relay.

MEMBER(S) OF THE PUBLIC

1.18 MEMBER(S) OF THE PUBLIC means an individual in a controlled or UNRESTRICTED AREA. However, an individual is not a member of the public during any period in which the individual receives an occupational dose.

OFFSITE DOSE CALCULATION MANUAL

1.19 The OFFSITE DOSE CALCULATION MANUAL (ODCM) shall contain the methodology and parameters used in the calculation of offsite doses resulting from radioactive gaseous and liquid effluents, in the calculation of gaseous and liquid effluent monitoring Alarm/Trip Setpoints, and in the conduct of the Environmental Radiological Monitoring Program. The ODCM shall also contain (1) the Radioactive Effluent Controls and Radiological Environmental Monitoring Programs required by Section 6.8.3 and (2) descriptions of the information that should be included in the Annual Radiological Environmental Operating and Annual Radioactive Effluent Release Reports required by Specifications 6.9.1.3 and 6.9.1.4.

OPERABLE - OPERABILITY

1.20 A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s), and when all necessary attendant instrumentation, controls, electrical power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s).

OPERATIONAL MODE - MODE

1.21 An OPERATIONAL MODE (i.e., MODE) shall correspond to any one inclusive combination of core reactivity condition, power level, and average reactor coolant temperature specified in Table 1.2.

PHYSICS TESTS

1.22 PHYSICS TESTS shall be those tests performed to measure the fundamental nuclear characteristics of the reactor core and related instrumentation:
(1) described in Chapter 14.0 of the FSAR, (2) authorized under the provisions of 10 CFR 50.59, or (3) otherwise approved by the Commission.

PRESSURE BOUNDARY LEAKAGE

1.23 PRESSURE BOUNDARY LEAKAGE shall be leakage (except steam generator tube leakage) through a nonisolable fault in a Reactor Coolant System component body, pipe wall, or vessel wall.

3/4.11 RADIOACTIVE EFFLUENTS

BASES

3/4.11.1 LIQUID EFFLUENTS

3/4.11.1 LIQUID HOLDUP TANKS

The tanks listed in this specification include all those unprotected outdoor tanks both permanent and temporary that are not surrounded by liners, dikes, or walls capable of holding the tank contents and that do not have tank overflows and surrounding area drains connected to the Liquid Radwaste Treatment System.

Restricting the quantity of radioactive material contained in the specified tanks provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting concentrations would be less than the values given in Appendix B, Table 2, Column 2, to 10 CFR 20.1001-20.2402, at the nearest potable water supply and the nearest surface water supply in an UNRESTRICTED AREA.

3/4.11.2 GASEOUS EFFLUENTS

3/4.11.2.1 EXPLOSIVE GAS MIXTURE

This specification is provided to ensure that the concentration of potentially explosive gas mixtures contained in the WASTE GAS HOLDUP SYSTEM is maintained below the flammability limits of hydrogen and oxygen. Automatic control features are included in the system to prevent the hydrogen and oxygen concentrations from reaching these flammability limits. These automatic control features include isolation of the source of hydrogen and/or oxygen. Maintaining the concentration of hydrogen and oxygen below their flammability limits provides assurance that the releases of radioactive materials will be controlled in conformance with the requirements of General Design Criterion 60 of 10 CFR Part 50 Appendix A.

3/4 11.2.2 GAS STORAGE TANKS

The tanks included in this specification are those tanks for which the quantity of radioactivity contained is not limited directly or indirectly by another Technical Specification. Restricting the quantity of radioactivity contained in each gas storage tank provides assurance that in the event of an uncontrolled release of the tank's contents, the resulting whole body exposure to a MEMBER OF THE PUBLIC at the nearest SITE BOUNDARY will not exceed 0.5 rem. This is consistent with Standard Review Plan 11.3, Branch Technical Position ETSB 11-5, "Postulated Radioactive Releases Due to a Waste Gas System Leak or Failure," in NUREG-0800, July 1981.

5.0 DESIGN FEATURES

5.1 SITE

EXCLUSION AREA

5.1.1 The Exclusion Area shall be as shown in Figure 5.1-1.

LOW POPULATION ZONE

5.1.2 The Low Population Zone shall be as shown in Figure 5.1-2.

MAP DEFINING UNRESTRICTED AREAS AND SITE BOUNDARY FOR RADIOACTIVE GASEOUS AND LIQUID EFFLUENTS

5.1.3 Information regarding radioactive gaseous and liquid effluents, which will allow identification of structures and release points as well as definition of UNRESTRICTED AREAS within the SITE BOUNDARY that are accessible to MEMBERS OF THE PUBLIC, shall be as shown in Figure 5.1-3.

The definition of UNRESTRICTED AREA used in implementing these Technical Specifications has been expanded over that in 10 CFR 20.1003. The UNRESTRICTED AREA boundary may coincide with the Exclusion Area Boundary, as defined in 10 CFR 100.3(a), but the UNRESTRICTED AREA does not include areas over water bodies. The concept of UNRESTRICTED AREAS, established at or beyond the SITE BOUNDARY, is utilized in the Limiting Conditions for Operation to keep levels of radioactive materials in liquid and gaseous effluents as low as is reasonably achievable, pursuant to 10 CFR 50.36a.

5.2 CONTAINMENT

CONFIGURATION

- 5.2.1 The containment building is a steel-lined, reinforced concrete building of cylindrical shape, with a dome roof and having the following design features:
 - a. Nominal inside diameter = 135 feet.
 - b. Nominal inside height = 192.5 feet. (Dome = 67.5 feet; total = 260 feet)
 - c. Nominal thickness of concrete walls = 4.5 feet.
 - d. Nominal thickness of concrete roof = 2.5 feet.
 - e. Nominal thickness of base mat = 12.0 feet.
 - f. Nominal thickness of steel liner wall = 3/8 inch. (Dome = 1/2 inch, Base Mat = 1/4 inch), and
 - g. Net free volume = 2,985,000 cubic feet.

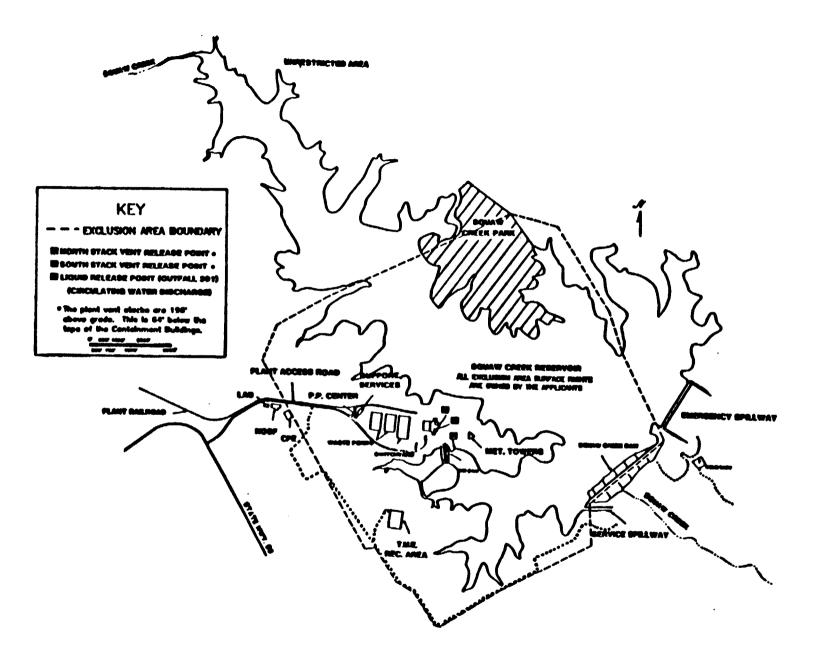


FIGURE 5.1-1
EXCLUSION AREA

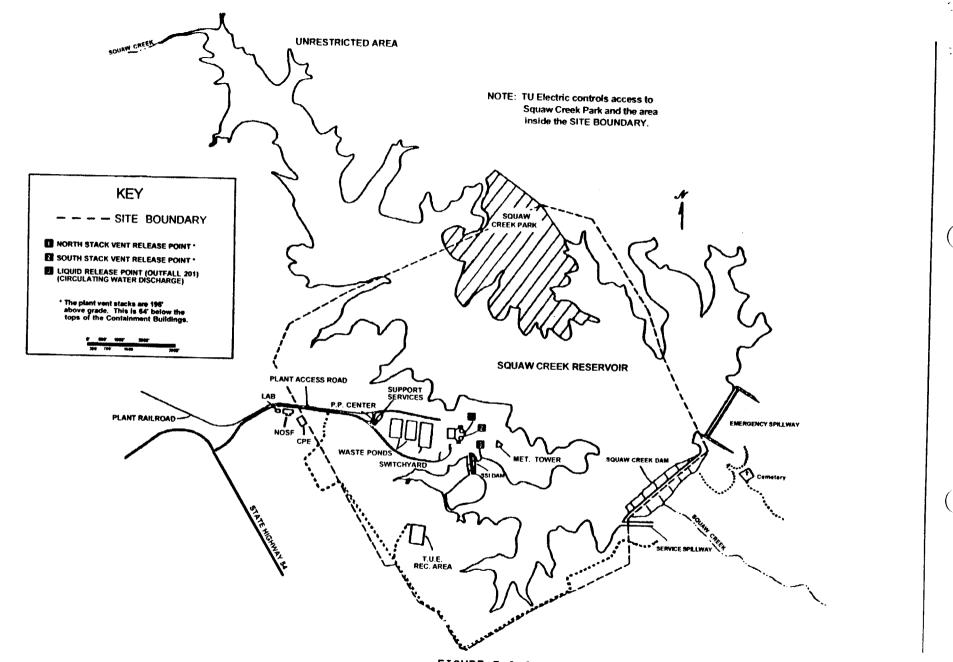
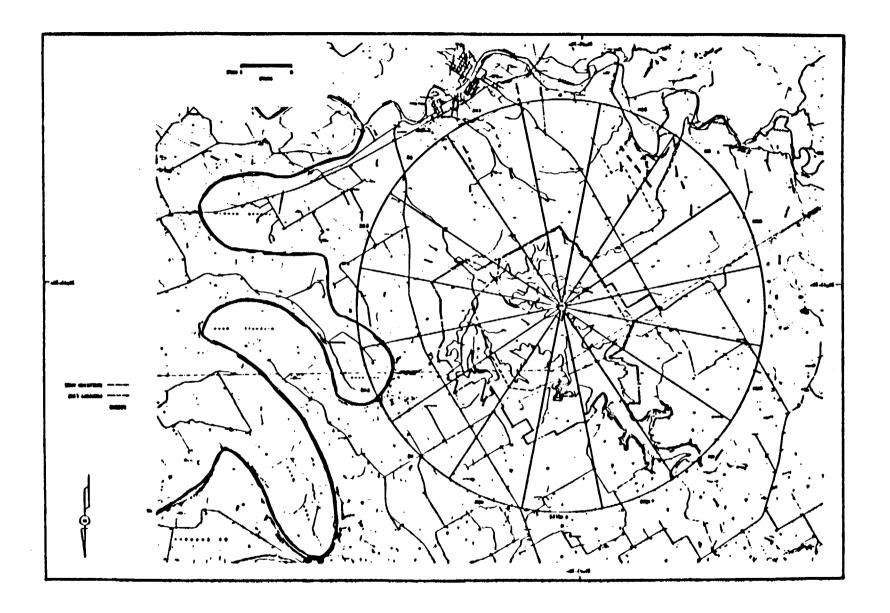


FIGURE 5.1-3
UNRESTRICTED AREA AND SITE BOUNDARY FOR RADIOACTIVE GASEOUS
AND LIQUID EFFLUENTS



PROCEDURES AND PROGRAMS (Continued)

b. <u>In-Plant Radiation Monitoring (Continued)</u>

- 2) Procedures for monitoring, and
- 3) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation and low pressure turbine disc stress corrosion cracking. This program shall include:

- 1) Identification of a sampling schedule for the critical variables and control points for these variables,
- 2) Identification of the procedures used to measure the values of the critical variables,
- 3) Identification of process sampling points, which shall include monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,
- 4) Procedures for the recording and management of data,
- 5) Procedures defining corrective actions for all off-control point chemistry conditions, and
- 6) A procedure identifying: (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

d. Post-Accident Sampling

A program which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program shall include the following:

- 1) Training of personnel,
- 2) Procedures for sampling and analysis, and
- 3) Provisions for maintenance of sampling and analysis equipment.

e. Radioactive Effluent Controls Program

A program shall be provided conforming with 10 CFR 50.36a for the control of radioactive effluents and for maintaining the doses to MEMBERS OF THE PUBLIC from radioactive effluents as low as reasonably achievable. The program (1) shall be contained in the ODCM, (2) shall

PROCEDURES AND PROGRAMS (Continued)

e. Radioactive Effluent Controls Program (Continued)

be implemented by operating procedures, and (3) shall include remedial actions to be taken whenever the program limits are exceeded. The program shall include the following elements:

- Limitations on the operability of radioactive liquid and gaseous monitoring instrumentation including surveillance tests and setpoint determination in accordance with the methodology in the ODCM.
- 2) Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 times the concentration values in Appendix B, Table 2, Column 2, to 10 CFR 20.1001-20.2402,
- 3) Monitoring, sampling, and analysis of radioactive liquid and gaseous effluents in accordance with 10 CFR 20.1302 and with the methodology and parameters in the ODCM,
- 4) Limitations on the annual and quarterly doses or dose commitment to a MEMBER OF THE PUBLIC from radioactive materials in liquid effluents released from each unit to UNRESTRICTED AREAS conforming to Appendix I to 10 CFR 50,
- 5) Determination of cumulative and projected dose contributions from radioactive effluents for the current calendar quarter and current calendar year in accordance with the methodology and parameters in the ODCM at least every 31 days,
- 6) Limitations on the operability and use of the liquid and gaseous effluent treatment systems to ensure that the appropriate portions of these systems are used to reduce releases of radioactivity when the projected doses in a 31-day period would exceed 2 percent of the guidelines for the annual dose or dose commitment conforming to Appendix I to 10 CFR 50,
- 7) Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY conforming to the following:
 - a. For noble gases: Less than or equal to a dose rate of 500 mrem/yr to the total body and less than or equal to a dose rate of 3000 mrem/yr to the skin, and
 - b. For Iodine-131, for Iodine-133, for tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to a dose rate of 1500 mrem/yr to any organ,

PROCEDURES AND PROGRAMS (Continued)

- 8) Limitations on the annual and quarterly air doses resulting from noble gases released in gaseous effluents from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR 50,
- 9) Limitations on the annual and quarterly doses to a MEMBER OF THE PUBLIC from Iodine-131, Iodine-133, tritium, and all radio-nuclides in particulate form with half-lives greater than 8 days in gaseous effluents released from each unit to areas beyond the SITE BOUNDARY conforming to Appendix I to 10 CFR 50, and
- 10) Limitations on the annual dose or dose commitment to any MEMBER OF THE PUBLIC due to releases of radioactivity and to radiation from uranium fuel cycle sources conforming to 40 CFR 190.

f. Radiological Environmental Monitoring Program

A program shall be provided to monitor the radiation and radionuclides in the environs of the plant. The program shall provide (1) representative measurements of radioactivity in the highest potential exposure pathways, and (2) verification of the accuracy of the effluent monitoring program and modeling of environmental exposure pathways. The program shall (1) be contained in the ODCM, (2) conform to the guidance of Appendix I to 10 CFR 50, and (3) include the following:

- 1) Monitoring sampling, analysis, and reporting of radiation and radionuclides in the environment in accordance with the methodology and parameters in the ODCM.
- 2) A Land Use Census to ensure that changes in the use of areas at and beyond the SITE BOUNDARY are identified and that modifications to the monitoring program are made if required by the results of this census. and
- 3) Participation in a Interlaboratory Comparison Program to ensure that independent checks on the precision and accuracy of the measurements of radioactive materials in environmental sample matrices are performed as part of the quality assurance program for environmental monitoring.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS

6.9.1 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, the following reports shall be submitted to the Regional Administrator of the Regional Office of the NRC unless otherwise noted.

STARTUP REPORT

6.9.1.1 A summary report of unit startup and power escalation testing shall be submitted following: (1) receipt of an Operating License, (2) amendment to the license involving a planned increase in power level, (3) installation of fuel that has a different design or has been manufactured by a different fuel supplier, and (4) modifications that may have significantly altered the nuclear, thermal, or hydraulic performance of the unit.

The initial Startup Report shall address each of the startup tests identified in Chapter 14 of the Final Safety Analysis Report and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report. Subsequent Startup Reports shall address startup tests that are necessary to demonstrate the acceptability of changes and/or modifications.

Startup Reports shall be submitted within: (1) 90 days following completion of the Startup Test Program, (2) 90 days following resumption or commencement of commercial power operation, or (3) 9 months following initial criticality, whichever is earliest. If the Startup Report does not cover all three events (i.e., initial criticality, completion of Startup Test Program, and resumption or commencement of commercial operation), supplementary reports shall be submitted at least every 3 months until all three events have been completed.

ANNUAL REPORTS*

6.9.1.2 Annual Reports covering the activities of the unit as described below for the previous calendar year shall be submitted prior to March 1 of each year. The initial report shall be submitted prior to March 1 of the year following initial criticality.

Reports required on an annual basis shall include:

a. A tabulation on an annual basis of the number of station, utility, and other individuals (including contractors), for whom monitoring was performed, receiving an annual deep dose equivalent greater than 100 mrem and the associated collective deep dose equivalent (reported in person-rem) according to work and job functions** e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignments to various duty functions may be estimated based on pocket dosimeter, thermoluminescent dosimeter (TLD), or film badge measurements. Small exposures totalling less than 20% of the individual total dose need not be accounted for. In the aggregate, at least 80% of the total deep dose equivalent received from external sources should be assigned to specific major work functions;

^{*}A single submittal may be made for a multiple unit station. The submittal should combine those sections that are common to all units at the station.

^{**}This tabulation supplements the requirements of 10 CFR 20.2206.

SPECIAL REPORTS

6.9.2 In addition to the applicable reporting requirements of Title 10, Code of Federal Regulations, special reports shall be submitted to the Regional Administrator of the Regional Office of the NRC within the time period specified for each report.

6.10 RECORD RETENTION

- 6.10.1 In addition to the applicable record retention requirements of Title 10, Code of Federal Regulations, the following records shall be retained for at least the minimum period indicated.
- 6.10.2 The following records shall be retained for at least 5 years:
 - a. Records and logs of unit operation covering time interval at each power level;
 - b. Records and logs of principal maintenance activities, inspections, repair, and replacement of principal items of equipment related to nuclear safety;
 - All REPORTABLE EVENTS;
 - d. Records of surveillance activities, inspections, and calibrations required by the Technical Specifications, Technical Requirements Manual, and Fire Protection Report, except as explicitly covered in Specification 6.10.3:
 - e. Records of changes made to the procedures required by Specification 6.8.1;
 - f. Deleted;
 - g. Records of sealed source and fission detector leak tests and results; and
 - h. Records of annual physical inventory of all sealed source material of record.
- 6.10.3 The following records shall be retained for the duration of the unit Operating License:
 - Records and drawing changes reflecting unit design modifications made to systems and equipment described in the Final Safety Analysis Report;
 - b. Records of new and irradiated fuel inventory, fuel transfers, and assembly burnup histories;
 - c. Records of doses received by all individuals for whom monitoring was required by 10 CFR Part 20;
 - d. Records of gaseous and liquid radioactive material released to the environs;

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RECORD RETENTION (Continued)

- e. Records of transient or operational cycles for those unit components identified in Table 5.7-1;
- f. Records of reactor tests and experiments;
- g. Records of training and qualification for current members of the unit staff:
- h. Records of inservice inspections performed pursuant to these Technical Specifications;
- i. Records of quality assurance activities required by the Quality Assurance Manual;
- j. Records of reviews performed for changes made to procedures or equipment or reviews of tests and experiments pursuant to 10 CFR 50.59;
- k. Records of meetings of the SORC and the ORC;
- Records of the service lives of all hydraulic and mechanical snubbers required by the Technical Requirements Manual including the date at which the service life commences and associated installation and maintenance records;
- m. Records of secondary water sampling and water quality;
- n. Records of analyses required by the Radiological Environmental Monitoring Program that would permit evaluation of the accuracy of the analysis at a later date. This should include procedures effective at specified times and QA records showing that these procedures were followed; and
- o. Records of reviews performed for changes made to the OFFSITE DOSE CALCULATION MANUAL and the PROCESS CONTROL PROGRAM.
- p. Records of radioactive shipments.

6.11 RADIATION PROTECTION PROGRAM

6.11.1 Procedures for personnel radiation protection shall be prepared consistent with the requirements of 10 CFR 20 and shall be approved, maintained, and adhered to for all operations involving personnel radiation exposure.

6.12 HIGH RADIATION AREA

6.12.1 Pursuant to paragraph 10 CFR 20.1601(c), in lieu of the "control device" or "alarm signal" required by paragraph 10 CFR 20.1601(a), each high radiation area, as defined in 10 CFR 20, in which the intensity of radiation is equal to or less than 1000 mrem/h at 30 cm (12 in.) from the radiation source or from any surface which the radiation penetrates shall be barricaded and conspicuously posted as a high radiation area and entrance thereto shall be

6.12 HIGH RADIATION AREA (Continued)

controlled by requiring issuance of a Radiation Work Permit (RWP). Individuals qualified in radiation protection procedures (e.g., Radiation Protection Technician) or personnel continuously escorted by such individuals may be exempt from the RWP issuance requirement during the performance of their assigned duties in high radiation areas with dose rates equal to or less than 1000 mrem/h, provided they are otherwise following plant radiation protection procedures for entry into such high radiation areas. Any individual or group of individuals permitted to enter such areas shall be provided with or accompanied by one or more of the following:

- a. A radiation monitoring device which continuously indicates the radiation dose rate in the area; or
- b. A radiation monitoring device which continuously integrates the radiation dose rate in the area and alarms when a preset integrated dose is received. Entry into such areas with this monitoring device may be made after the dose rate levels in the area have been established and individuals have been made knowledgeable of them; or
- c. An individual qualified in radiation protection procedures with a radiation dose rate monitoring device, who is responsible for providing positive control over the activities within the area and shall perform periodic radiation surveillance at the frequency specified by the RWP.

6.12.2 In addition to the requirements of Specification 6.12.1, areas accessible to individuals with radiation levels greater than 1000 mrem/h at 30 cm (12 in.) but less than 500 rads in one hour at one meter from the radiation source or from any surface which the radiation penetrates shall be provided with locked doors to prevent unauthorized entry, and the keys shall be maintained under the administrative control of the Shift Supervisor on duty and/or radiation protection supervision. Doors shall remain locked except during periods of access by individuals under an approved RWP which shall specify the dose rate levels in the immediate work areas and the maximum allowable stay time for individuals in that area. In lieu of the stay time specification of the RWP, direct or remote (such as closed circuit TV cameras) continuous surveillance may be made by individuals qualified in radiation protection procedures to provide positive exposure control over the activities being performed within the area.

For isolated high radiation areas accessible to individuals with radiation levels of greater than 1000 mrem/h at 30 cm but less than 500 rads in one hour at one meter that are located within large areas, such as PWR containment, where no enclosure exists for purposes of locking, and where no enclosure can be reasonably constructed around the isolated area, that isolated area shall be barricaded, conspicuously posted, and a flashing light shall be activated as a warning device.

6.13 PROCESS CONTROL PROGRAM (PCP)

Changes to the PCP:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.30. This documentation shall contain:
 - 1) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - 2) A determination that the change will maintain the overall conformance of the solidified waste product to existing requirements of Federal, State, or other applicable regulations.
- b. Shall become effective after review and acceptance by the SORC and the approval of the Vice President, Nuclear Operations.

6.14 OFFSITE DOSE CALCULATION MANUAL (ODCM)

Changes to the ODCM:

- a. Shall be documented and records of reviews performed shall be retained as required by Specification 6.10.30. This documentation shall contain:
 - 1) Sufficient information to support the change together with the appropriate analyses or evaluations justifying the change(s) and
 - 2) A determination that the change will maintain the level of radioactive effluent control required by 10 CFR 20.1302, 40 CFR 190, 10 CFR 50.36a, and Appendix I to 10 CFR 50 and not adversely impact the accuracy or reliability of effluent, dose, or setpoint calculations.
- b. Shall become effective after review and acceptance by the SORC and the approval of the Vice President, Nuclear Operations.
- c. Shall be submitted to the Commission in the form of a complete, legible copy of the entire ODCM as a part of or concurrent with the Annual Radioactive Effluent Release Report for the period of the report in which any change to the ODCM was made. Each change shall be identified by markings in the margin of the affected pages, clearly indicating the area of the page that was changed, and shall indicate the date (e.g., month/year) the change was implemented.



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

RELATED TO AMENDMENT NOS. 42 AND 28 TO

FACILITY OPERATING LICENSE NOS. NPF-87 AND NPF-89

TEXAS UTILITIES ELECTRIC COMPANY

COMANCHE PEAK STEAM ELECTRIC STATION, UNITS 1 AND 2

DOCKET NOS. 50-445 AND 50-446

1.0 INTRODUCTION

By application dated February 14, 1994 (TXX-94045), as supplemented by letter dated May 23, 1995 (TXX 95147), Texas Utilities Electric Company (TU Electric/the licensee) requested changes to the Technical Specifications (TSs) (Appendix A to Facility Operating License Nos. NPF-87 and NPF-89) for the Comanche Peak Steam Electric Station (CPSES), Units 1 and 2. These proposed changes incorporate appropriate references to and provisions of the new 10 CFR Part 20 regulations. These changes revise a definition and aspects of radiological effluent TSs, clarify the administrative specification for reporting individual annual exposures greater than 100 mrem by work/job function, and revise the administrative specifications for providing alternative measures for control of access to high radiation areas and designating record retention for radioactive shipments. The May 23, 1995, letter provided clarifying information (Attachment 2) and additional editorial changes (Attachment 3). The licensee subsequently requested that Attachment 3 not be included in the supplement, and it was withdrawn. The supplemental information was for clarification only and did not change the proposed no significant hazards consideration determination.

2.0 BACKGROUND

On May 21, 1991, the Nuclear Regulatory Commission (NRC) issued a revision to its standards for protection against ionizing radiation, 10 CFR Part 20, Standards for Protection Against Radiation. The purpose of the revision was to modify the Radiation Protection Standards to reflect developments in the principles and scientific knowledge underlying radiation protection. In addition, the revision addresses International Radiation Protection Standards in order to attain more consistency with the requirements of other nations. The new 10 CFR Part 20 became effective on June 20, 1991, and required implementation on or before January 1, 1994.

The licensee programmatically implemented the new 10 CFR Part 20 regulations at CPSES effective January 1, 1993. Implementation was achieved by incorporating requirements of the new 10 CFR Part 20 directly into appropriate procedures of the CPSES Radiation Protection Program and the Offsite Dose Calculation Manual (ODCM). This implementation is consistent with requirements of 10 CFR 20.1008, and has provided compliance that is equivalent or conservative in comparison to that required by the current TSs and the new 10 CFR Part 20. The licensee seeks to revise the CPSES TSs in order to reflect the new regulations.

3.0 EVALUATION

The licensee has proposed to revise the CPSES TSs to include wording that is consistent with the revised 10 CFR Part 20, and will retain the same overall level of effluent control required to meet the design objectives of Appendix I to 10 CFR Part 50.

The proposed TS changes and evaluations follow:

1. TS 1.18 Definitions

The licensee proposed to change the definition of "MEMBER(S) OF THE PUBLIC." to reflect the 10 CFR 20.1003 definition.

The change is consistent with the revised 10 CFR Part 20 definition and is acceptable.

2. BASES 3/4.11.1 Liquid Holdup Tanks

The licensee proposed to revise the Bases to replace the reference to "10 CFR 20, Appendix B, Table II, Column 2" with "Appendix B, Table 2, Column 2, to 10 CFR 20.1001-20.2402."

The change is administrative in nature to incorporate the corresponding revised 10 CFR Part 20 section number and table number and is acceptable.

3. TS 5.1.3 Map Defining Unrestricted Areas and Site Boundary for Radioactive Gaseous and Liquid Effluents

The licensee proposed to change the reference from "10 CFR 20.3(a)(17)" to "10 CFR 20.1003" and update the map (Figure 5.1-3) to add a clarifying note with respect to areas for which TU Electric controls access.

The change is administrative in nature to incorporate the corresponding revised 10 CFR Part 20 section number and is acceptable.

4. TS 6.8.3e Radioactive Effluent Controls Program

The licensee proposed to revise Item 2 of this TS to change the liquid effluents release concentrations values to:

"Limitations on the concentrations of radioactive material released in liquid effluents to UNRESTRICTED AREAS conforming to 10 times the concentration values in Appendix B, Table 2, Column 2, to 10 CFR 20.1001-20.2402."

The licensee proposed this change in order to retain operational flexibility consistent with Appendix I to 10 CFR Part 50, concurrent with the implementation of the revised 10 CFR Part 20.

The current requirements concerning radioactive effluents are contained in 10 CFR 50.36a. Title 10 of the Code of Federal Regulations, Section 50.36a requires licensees to maintain control over radioactive material in gaseous and liquid effluents to unrestricted areas, produced during normal reactor operations, to levels that are as low as reasonably achievable (ALARA). For power reactors, Appendix I to 10 CFR Part 50 contains the numerical guidance to meet the ALARA requirement. The dose values specified in Appendix I of 10 CFR Part 50 are small percentages of the implicit limits in the old 10 CFR 20.106 and the explicit limits in 10 CFR 20.1301. As secondary controls, the instantaneous dose rates required were chosen by the staff to help maintain annual average releases of radioactive material in gaseous and liquid effluents to within the dose values specified in Appendix I of 10 CFR Part 50. For the purposes of this TS, 10 CFR Part 20 is used as a source of reference values only. These TS requirements allow operational flexibility, compatible with considerations of health and safety, which may temporarily result in release rates which, if continued for the calendar quarter, would result in radiation doses higher than specified in Appendix I of 10 CFR Part 50. However, these releases are within the implicit limits in the old 10 CFR 20.106 and the explicit limits in 10 CFR 20.1302 which references Appendix B, Table II concentrations. These referenced concentrations in the old 10 CFR Part 20 are specific values which relate to an annual dose of 500 mrem. The liquid effluent radioactive effluent concentration limits given in Appendix B, Table 2, Column 2 to 10 CFR 20.1001-20.2402 are based on an annual dose of 50 mrem total effective dose equivalent. An instantaneous release concentration corresponding to a dose rate of 500 mrem/year has been acceptable as a TS limit for liquid effluents, which applies at all times to assure that the values in Appendix I of 10 CFR Part 50 are not likely to be exceeded. Therefore, the use of effluent concentration values that are ten times those listed in Appendix B, Table 2, Column 2 to 10 CFR 20.1001-20.2402 will not have a negative impact on the ability to continue to operate within the design objectives in Appendix I to 10 CFR Part 50 and 40 CFR Part 190.

Based on the above, it is acceptable for the liquid release rate TSs, as applied on an instantaneous basis, be based on ten times the effluent concentration values given in Appendix B, Table 2, Column 2 to 10 CFR 20.1001-20.2402.

5. TS 6.8.3e Radioactive Effluent Controls Program

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The licensee proposed to revise Item 3 of this TS to replace the reference "10 CFR 20.106" with "10 CFR 20.1302".

The change is administrative in nature to incorporate the corresponding revised 10 CFR Part 20 section number and is acceptable.

6. TS 6.8.3e Radioactive Effluent Controls Program

The licensee proposed to revise Item 7 of this TS which specifies the limitations on the concentrations of radioactive material released in gaseous effluents. The licensee proposed that the TS be revised to read as follows:

"Limitations on the dose rate resulting from radioactive material released in gaseous effluents from the site to areas at or beyond the SITE BOUNDARY conforming to the following:

- a. For noble gases: Less than or equal to a dose rate of 500 mrem/yr to the total body and less than or equal to a dose rate of 3000 mrem/yr to the skin, and
- b. For Iodine-131, for Iodine-133, for tritium, and for all radionuclides in particulate form with half-lives greater than 8 days: Less than or equal to a dose rate of 1500 mrem/yr to any organ."

The licensee has proposed this change in order to retain operational flexibility consistent with 10 CFR Part 50, Appendix I, concurrent with the implementation of the revised 10 CFR Part 20.

The current requirements for the content of the licensee's TSs concerning radioactive effluents are contained in 10 CFR 50.36a. Title 10 of the Code of Federal Regulations 50.36a requires licensees to maintain control over radioactive material in gaseous and liquid effluents to unrestricted areas, produced during normal reactor operations, to levels that are ALARA. For power reactors, Appendix I to 10 CFR Part 50 contains the numerical guidance to meet the ALARA requirement. The dose values specified in Appendix I of 10 CFR Part 50 are small percentages of the implicit limits in the old 10 CFR 20.106 and the explicit limits in 10 CFR 20.1301. As secondary controls, the instantaneous dose rates required by this regulation were chosen by the staff to help maintain annual average releases of radioactive material in gaseous and liquid effluents to within the dose values specified in

Appendix I of 10 CFR Part 50. For purpose of the bases of this TS, 10 CFR Part 20 is used as a source of reference values only. These TS requirements allow operational flexibility, compatible with considerations of health and safety, which may temporarily result in release rates which, if continued for the calendar quarter, would result in radiation doses higher than specified in Appendix I of 10 CFR Part 50. However, these releases are within the limits specified in the old 10 CFR 20.106 and the current 10 CFR 20.1302.

This specification, which is based on guidance contained in NUREG-0133, is acceptable as a TS limit for gaseous effluents, which applies at all times as an assurance that the values in Appendix I of 10 CFR Part 50 are not likely to be exceeded. The proposed TS change will not have a negative impact on the ability to continue to operate within the design objectives in Appendix I of 10 CFR Part 50 and 40 CFR Part 190.

Based on the above, it is acceptable that the gaseous release rate TSs for radioactive material be based on the stated dose rates.

7. TS 6.9.1.2 Annual Reports

The licensee proposed to revise this TS which defines annual reports for tabulation of personnel, by work group, receiving exposures greater than 100 mrem/yr. The footnote referencing 10 CFR 20.407 is being changed to reference 10 CFR 20.2206. The wording of TS 6.9.1.2a. is clarified to be consistent with the requirements of 10 CFR 20.2206, to change "personnel" to "individuals", "exposures" and "whole body dose" to "deep dose equivalent", "man-rem exposure" to "collective deep dose equivalent (reported in person-rem)", and to correct the units (mrem/yr is a dose rate while cumulative mrem in one year was intended).

These changes are administrative in nature to be consistent with the revised 10 CFR Part 20 and are acceptable.

8. TS 6.10 Record Retention

The licensee proposed to revise this TS to change the retention period for records of disposal of licensed material changed from 5 years to the duration of the operating license as required by 10 CFR 20.2108 (Item 2f was moved to 3p) and Item 3c is edited to be consistent with the record keeping requirements of 10 CFR 20.2106.

These changes are consistent with the revised 10 CFR Part 20 and are acceptable.

9. TS 6.12 High Radiation Area

The licensee proposed to change the measurement distance, 10 CFR Part 20 references, add an upper bound to high radiation area and make selected wording changes for consistency.

The changes are consistent with the revised 10 CFR Part 20 and are acceptable.

10. TS 6.14 Offsite Dose Calculation Manual

The licensee proposed to change the reference "10 CFR 20.106" to "10 CFR 20.1302".

The change is administrative in nature to incorporate the corresponding revised 10 CFR Part 20 section number and is acceptable.

4.0 STATE CONSULTATION

In accordance with the Commission's regulations, the Texas State official was notified of the proposed issuance of the amendments. The State official had no comments.

5.0 ENVIRONMENTAL CONSIDERATION

Pursuant to 10 CFR 51.21, 51.32, and 51.35, an environmental assessment and finding of no significant impact was published in the <u>Federal Register</u> on August 4, 1995 (60 FR 39973). Accordingly, based upon the environmental assessment, the Commission has determined that issuance of this amendment will not have a significant effect on the quality of the human environment.

6.0 CONCLUSION

The Commission has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, (2) such activities will be conducted in compliance with the Commission's regulations, and (3) the issuance of the amendments will not be inimical to the common defense and security or to the health and safety of the public.

Principal Contributor: Steve Klementowicz

Date: August 11, 1995