STATE OF CALIFORNIA

JESSE M. UNRUH, Treasurer

CALIFORNIA POLLUTION
CONTROL FINANCING AUTHORITY

915 CAPITOL MALL ROOM 280
SACRAMENTO 95814
(916) 445-9597

November 17, 1983

Nuclear Regulatory Commission
1450 Maria Ln., Ste. 210
Walnut Creek, CA 94596
Attention: Licensing Branch

Dear Sirs: Re: San Diego Gas & Electric; Application #420

In accordance with recently passed regulations, the California Pollution Control Financing Authority, in its efforts to assist companies with their pollution control problems, are now required to obtain certifications from various pollution control agencies throughout the State.

The certificate itself is quite simple, as outlined in Section 44533(b) of the State's Health and Safety Code: "No project relating to the improvement of air or water quality or solid waste control shall be eligible for financing under this division unless, prior to the issuance of bonds or notes, a local, regional, State, or federal environmental authority exercising jurisdiction over the project certifies that the project, as designed, will further compliance with federal, State, or local pollution control standards and requirements."

In the spirit of the law, I am forwarding to you, for your review, a copy of an application for financing from:

San Diego Gas & Electric
101 Ash Street
San Diego, CA 92101

The California Pollution Control Financing Authority took an "official action" regarding this project at its meeting on November 16, 1983. In accordance with the State Health and Safety Code, we ask you to review the description of the proposed project for eligibility. Please advise us following your review whether you can certify that there is reasonable assurance that the project, as designed, will further compliance with federal, State, or local pollution control standards and requirements. Following your review, we would appreciate an oral or written response with a preliminary indication as to whether this project would qualify.

Please be assured that you may hold reservation for further review prior to issuing a final certification and an adoption by us of a Final Resolution for issuing bonds. I call your attention to Section 44533(c) of the Health and Safety Code in that regard: "No certification issued pursuant to subdivision (b) shall be admissible in evidence, constitute an admission, or bind any certifying authority in any proceeding in which the compliance of a participating party's facilities with any applicable pollution control, land use, zoning, or other similar law is an issue, or in any application or proceeding for a permit to locate or construct facilities."

*Proposed project located near San Clemente, CA.

C-1

If the Authority adopts a Final Resolution, we will make further written request that you take whatever steps are necessary to provide a final certificate for this project.

Should you have any questions, please contact me at 915 Capitol Mall, Sacramento, California 95814, Telephone (916) 323-9864.

Sincerely,

DOUGLAS E. CHANDLER
Executive Secretary

CERTIFICATE PURSUANT TO
HEALTH & SAFETY CODE SECTION 44533 (b)

CALIFORNIA POLLUTION CONTROL
FINANCING AUTHORITY
915 Capitol Mall, Room 110
Sacramento, California 95814

RE: CPCFA Application For Financing No.
Applicant:

Upon review of the hazardous/liquid waste control project described in the subject application (the "Project"), it is hereby certified on behalf of the below stated agency as follows:

1. We exercise jurisdiction over the Project.

2. The Project, as designed, will further compliance with federal, state or local pollution control standards or requirements.

3. The Project, as designed, is in furtherance of the purpose of abating or controlling hazardous or liquid waste pollutants or contaminants.

I certify that I am an authorized officer of the below stated agency.

Signature _____

Type Name _____

Title _____

Agency _____

Address _____

_____

Date _____

Southern California Edison Company

P. O. BOX 800

2244 WALNUT GROVE AVENUE

ROSEMEAD, CALIFORNIA 91770

SCE

MICHAEL L. NOEL

VICE PRESIDENT AND TREASURER

TELEPHONE

213-572-1088

October 27, 1983

California Pollution Control Financing Authority
915 Capitol Mall, Room 280
Sacramento, CA 95814
Attention: Mr. Douglas E. Chandler
Executive Secretary

Gentlemen:

Southern California Edison Company, a California corporation ("the Company") hereby applies to the California Pollution Control Financing Authority for financing in an amount not to exceed $225,000,000 for the construction of pollution control facilities at the San Onofre Nuclear Generating Station, located near San Clemente, California. Information concerning the Company, the pollution control facilities and the requested financing is attached hereto and incorporated by this reference. Also enclosed is our check in the amount of $5,000.00 representing payment of the application fee.

The undersigned certifies that, to the best of his knowledge or belief, this application contains no false or incorrect information or data, and the application, including exhibits and attachments is truly descriptive of the project. The Company is familiar with the California Pollution Control Financing Authority Act and its regulations, as amended.

Very truly yours,

Michael L. Noel

APPLICATION FOR FINANCING OF POLLUTION CONTROL PROJECT

PART 1. GENERAL AND BUSINESS INFORMATION

1.1 Legal name of the applicant.

SOUTHERN CALIFORNIA EDISON COMPANY (the "Company")

1.2 Line of business.

The Company is engaged in the generation, transmission, and distribution of electric energy for sale.

(Standard Industrial Code No. 4911)

1.3 Mailing address for purposes of application liaison, and address of headquarters.

Southern California Edison Company
P. O. Box 800
2244 Walnut Grove Avenue
Rosemead, California 91770

1.4 Employer I.D. No.

a) IRS Number 95-1240335

b) Return filed Fresno, California

1.5 and 1.6 Name, title and telephone numbers of principal contacts.

Mr. T. R. McDaniel, Assistant Treasurer
(213) 572-2939
(213) 572-1083

Mr. K. S. Stewart, Attorney
(213) 572-1482

1.7 Type of business organization.

Corporation

1.7.1 Place of organization.

California

1.7.2 Date of organization.

July 6, 1909

1.7.3 The nature of legal affliation or relationship with other entities.

The Company is a publicly-held corporation with a number of wholly-owned subsidiaries. None of these subsidiaries is involved in the construction of the pollution control facilities at the San Onofre Nuclear Generating Station. The Company owns a 75.05% undivided interest in San Onofre Unit 3. The remainder of the Unit is owned by San Diego Gas & Electric Company (20%) and the cities of Anaheim (1.5%) and Riverside (3.45%).

1.8 Constitution of ownership of the company, including percentage of holdings by general public.

100% Investor-Owned. The Company's Common Stock is traded on the New York, Pacific and London Stock Exchanges. At August 5, 1983, there were 99,216,145

shares of Common Stock outstanding. The Company's Annual Report to Shareholders for 1982 (attached as Apendix 2.1) contains on the inside back cover information about the distribution of record shareholders as of December 31, 1982.

1.9 Names and locations of key officials, including:

1.9.1 Principal officers

(All of the following officers have their offices at the general headquarters of Southern California Edison Company in Rosemead, California.)

William R. Gould, Chairman of the Board and Chief Executive Officer

Howard P. Allen, President

H. Fred Christie, Executive Vice President and Chief Financial Officer

David J. Pogarty, Executive Vice President

P. L. Martin, Senior Vice President

L. T. Papay, Senior Vice President

A. Arenal, Vice President (Engineering and Construction)

K. P. Baskin, Vice President (Nuclear Engineering)

G. J. Bjorklund, Vice President (System Development)

R. H. Bridenbecker, Vice President (Fuel Supply)

John R. Bury, Vice President and General Counsel

Robert Dietch, Vice President
(Customer Service and Conservation)

C. E. Hathaway, Vice President
(Human Resources)

Joe T. Head, Jr., Vice President
(Power Supply)

A. L. Maxwell, Vice President and Comptroller

Charles B. McCarthy, Vice President
(Advanced Engineering)

Edward A. Myers, Jr., Vice President
(Communications and Revenue Services)

Michael L. Noel, Vice President and Treasurer

Honor Muller, Secretary

1.9.2 Directors

William R. Gould, Chairman of the Board

Howard P. Allen, President

Roy A. Anderson, Chairman of the Board
Lockheed Corporation, Burbank

Norman Barker, Jr., Chairman of the Board
United California Bank, Los Angeles

Edward W. Carter, Chairman of the Board
Carter Hawley Hale Stores, Inc., Los Angeles

Warren Christopher, Senior Partner of the
law firm of O'Melveny & Myers, Los Angeles

Walter B. Gerken, Chairman of the Board
Pacific Mutual Life Insurance Company,
Newport Beach

Joan C. Hanley, General Partner and Manager
of Miramonte Vineyards, Rancho California

Jack K. Horton, Corporate Director and
Consultant (Retired Chairman of the Board
of Southern California Edison Company),
Rosemead

Carl P. Huntsinger, President and Chief
Executive, Blue Goose Growers, Inc., Ojai

Frederick G. Larkin, Jr., Chairman of the
Executive Committee, Security Pacific
National Bank, Los Angeles

T. M. McDaniel, Jr., Corporate Director and Consultant (Retired President, Southern California Edison Company), San Marino

Gerald H. Phipps, President,. Gerald H. Phipps, Inc., General Contractors, (Building Construction), Denver

Henry T. Segerstrom, Managing General Partner, C. J. Segerstrom & Sons (Real Estate Development), Costa Mesa

E. L. Shannon, Jr., President, Santa Fe International Corporation (Oil Service Petroleum Exploration and Production), Alhambra

H. Russell Smith, Chairman of the Board, Avery International (Manufacturers of Self-Adhesive Products), Pasadena

1.9.3 Principal Stockholders (over 10% ownership)
Cede & Company (Depository) 30.6% of total shares outstanding of all classes of stock at 2/1/83.

1.10 Description of other business affiliations of principal officers, directors, and principal stockholders.

HOWARD P. ALLEN - DIRECTOR AND OFFICER

California Council for Environmental & Economic Balance
California Federal Savings & Loan
California State University and College Chancellor's Association
California State University & College Foundation
Computer Sciences Company
ICN Pharmaceuticals
Los Angeles Civic Light Opera Association
Los Angeles County Fair Association
Los Angeles County Museum of Art
Los Angeles Olympic Organizing Committee
MCA, Inc.
National Confernce of Christians and Jews
Pacific Coast Electrical Association
Pacific Southwest Airlines
Pomona College
PSA, Inc.
Republic Corporation
Stanford Law School Board of Visitors

ROY A. ANDERSON - DIRECTOR

Airarms Incorporated
Avantek, Inc.
First Interstate Bancorp
First Interstate Bank of California
Granite Rock Company
Lockheed Air Terminal, Inc.
Lockheed Corporation
Lockheed Finance Corporation
Lockheed Missiles & Space Company, Inc.
Lockheed Properties, Inc.
Lockheed Shipbuilding and Construction Company
Occidental College
SRI International
Vega Aircraft Company

A. ARENAL - OFFICER

APCD Building Corporation
Don Bosco Technical Institute

NORMAN BARKER, JR. - DIRECTOR

Automobile Club of Southern California
Carnation Company
Carter Hawley Hale Stores, Inc.
First Interstate Bancorp
First Interstate Bank of California
First Interstate Investment Services, Inc.
Lear Siegler, Inc.
Los Angeles Country Club
Occidental College
Pacific American Income Shares, Inc.
Pacific Telephone and Telegraph Company
Santa Anita Foundation
Sixth and Spring Corporation
United California Bank Realty Corporation
University of Chicago

JOHN R. BURY - OFFICER

Visiting Nurses Association of the East San Gabriel Valley
Western Water Education Foundation

EDWARD W. CARTER - DIRECTOR

Brookings Institution
Carter Hawley Hale Stores, Inc.
Committee for Economic Development
First Interstate Bancorp

EDWARD W. CARTER (continued)

First Interstate Bank of California
James Irvine Foundation
Lockheed Corporation
Los Angeles County Museum of Art
National Humanities Center
Novacor Medical Corporation
Occidental College
Pacific Mutual Life Insurance Company
San Francisco Opera Association
Santa Anita Foundation
SRI International
University of California

H. FRED CHRISTIE - OFFICER

Adams Street Associates
American Mutual Fund, Inc.
Associated Electric & Gas Insurance Services, Inc. (AEGIS)
The Bond Fund of America, Inc.
Cash Management Trust of America
Industrial Drive Associates
Multiple Sclerosis Society, Southern California Chapter
Nuclear Electric Insurance Limited
Nuclear Mutual Limited
Occidental College
The Tax - Exempt Bond Fund of America, Inc.
Varco International, Inc.

WARREN CHRISTOPHER - DIRECTOR

Council of Foreign Relations
First Interstate Bancorp
First Interstate Bank of California
O'Melveny & Myers
Stanford University

DAVID J. FOGARTY - OFFICER

American Nuclear Energy Council
Atomic Industrial Forum, Inc.
Los Angeles Area Chamber of Commerce
Petrolane Incorporated
Varco International Inc.
West Associates

WALTER B. GERKEN - DIRECTOR

American Council of Life Insurance
California Round Table
Carter Hawley Hale Stores, Inc.
Irvine Foundation
W. M. Keck Foundation
1984 Los Angeles Olympics Committee
Occidental College
Pacific Mutual Life Insurance Company
The Times Mirror Company
Times Mirror Cable Television
United Way of Los Angeles
Wesleyan University
Whittaker Corporation

WILLIAM R. GOULD - DIRECTOR AND OFFICER

Aerospace Corporation
Atomic Industrial Forum
Beckman Instruments, Inc.
California Institute of Technology
Edison Electric Institute
Electric Power Research Institute
Eyring Research Institute
Huntington Library
Kaiser Steel Corporation
Los Angeles Philharmonic Association
Los Angeles World Affairs Council
National Energy Foundation
Union Bank

JOAN C. HANLEY - DIRECTOR

Kellogg Foundation
Miramonte Vineyards
Peninsula Chapter of National Charity League, Inc.
Peninsula Committee of Childrens' Hospital
Pomona College
Rancho California/Temecula Winegrowers Association
United Way
United Way Regional Training Center

C. E. HATHAWAY - OFFICER

Merchants and Manufacturers Association

JACK K. HORTON - DIRECTOR

Business Council
California Museum Foundation
First Interstate Bancorp
First Interstate Bank of California
Hoover Institution on War, Revolution and Peace
John Randolph Haynes and Dora Haynes Foundation
Lockheed Corporation
Pacific Mutual Life Insurance Company
Pepperdine University
Tax Foundation
University of Southern California

FREDERICK G. LARKIN, JR. - DIRECTOR

Automobile Club of Southern California
The Bank of Canton, Limited (Hong Kong)
California Institute of Technology
Carnation Company
Executive Service Corps of Southern California
Getty Oil Company
The John Randolph Haynes and Dora Haynes Foundation
Hospital of the Good Samaritan Medical Center
Los Angeles Philharmonic Association
Los Angeles World Affairs Council
National Safety Council, Greater Los Angeles Chapter
Occidental College
Pacific Stock Exchange
Rockwell International Corporation
Security Pacific Corporation
Security Pacific International Bank
Security Pacific National Bank
Security Pacific Overseas Corporation
Security Pacific Overseas Investment Corporation
Southern California Building Funds

T. M. MC DANIEL, JR. - DIRECTOR

Bank of America N.T. & S.A.
BankAmerica Corporation
Dillingham Corporation
Northrop Corporation
Pacific Indemnity Company
Santa Anita Foundation

MICHAEL L. NOEL - OFFICER

Current Income Shares, Inc.

L. T. PAPAY - OFFICER

Arcadia High School Boosters Club
Arcadia Tournament of Roses Association
Renewable Energy Institute

GERALD H. PHIPPS - DIRECTOR

C-P Company
The Colorado College
Colorado Safety Association
Denver & Rio Grande Western Railroad Company
Denver Bears, Ltd., a Partnership
Denver Chamber of Commerce
F G & P, Ltd.
Gerald H. Phipps, Inc.
IntraWest Bank of Denver
IntraWest Financial Corp.
Rio Grande Industries
The First Edition, Ltd., a Partnership

HENRY T. SEGERSTROM - DIRECTOR

The California Roundtable
Nordso
Orange County Energy Conservation Association
Orange County Music Center
Orange County Water District
Petrolane Incorporated
Secon Properties
C. J. Segerstrom & Sons
C. J. Segerstrom Associates
Segerstrom Center
South Coast Plaza Associates
Union Bank
World Affairs Council

E. L. SHANNON, JR. - DIRECTOR

C. F. Braun
Consolidated Freightways, Inc.
Hyster Company
Santa Fe International Corporation
Trust Company of the West

H. RUSSELL SMITH - DIRECTOR

Avery International
Beckman Instruments, Inc.
Childrens Hospital of Los Angeles
Los Angeles Philharmonic Association
Pomona College
Security Pacific Corporation
Security Pacific National Bank

ROBERT E. UMBAUGH - OFFICER

1015 North Lake Ltd.
GTN Building Associates Ltd.
Hotel Films I Ltd.
SNG Building Associates Ltd.
Virtual Investors Ltd.

1.11 Employees.

The Company is engaged in the generation and transmission of electricity in the states of Arizona, Nevada, and New Mexico, but does not distribute electricity for consumption in any state other than California. The substantial majority of the Company's facilities and employees are located in California.

1.11.1 Number of employees in California.

As of 9/30/83 = 16,197

1.11.2 Locations in California.

The Company provides electric service in a 50,000 square mile area of central and southern California, excluding the City of Los Angeles and certain other cities. The Company owns and operates 13 oil- and gas-fueled electric generating plants, one diesel-fueled generating

plant, two cogeneration plants and 36 hydroelectric plants, located in central and southern California. The Company also owns undivided interests in three units at the San Onofre Nuclear Generating Station near San Clemente, California.

1.12 Principal bank of account, and name of bank officer holding account.

Bank of America N.T. & S.A.

Account #10825-00001

North America Division

555 S. Flower Street
Los Angeles, CA 90017
Mr. Michael J. Nester, Executive Account Manager and Group Vice President
(213) 228-3526

PART 2. FINANCIAL INFORMATION

2.1 Financial statements from three most recent fiscal years. Attached are the following:

(See Appendix 2.1)

2.1.1 Balance Sheet(s).

Quarterly Report on Form 10-Q for the Quarter Ended June 30, 1983, at pages 4-5.

(12 Months Ended June 30, 1983)

Annual Reports to Shareholders for 1982 (pages 20-21) and 1981 (pages 18-19).

(Years Ended December 31, 1982, 1981 and 1980)

2.1.2 Income Statement(s).

Quarterly Report on Form 10-Q for the Quarter Ended June 30, 1983, at page 3.

(12 Months Ended June 30, 1983)

Annual Report to Shareholders for 1982, at page 19.

(Years Ended December 31, 1982, 1981 and 1980)

2.1.3 Analysis of Sources and Application of Funds.

Quarterly Report on Form 10-Q for the Quarter Ended June 30, 1983 at page 6.

(12 Months Ended June 30, 1983)

Annual Report to Shareholders for 1982, at page 22.

(Years Ended December 31, 1982, 1981 and 1980)

2.2 Description of the applicant's ranking and relative size in its industry.

Relative Size of the Company - Large

2.2.1	Revenues (6/30/83)	$4,211,961,000
2.2.2	Assets (6/30/83)	9,331,404,000
2.2.3	Tangible Net Worth (6/30/83)	3,583,013,000

Also attached hereto is a copy of the Company's Annual Report on Form 10-K for the Year Ended December 31, 1982.

PART 3. PROJECT INFORMATION

3.1 Description of Plant and Pollution Control Facilities

A. General Description of the Station

San Onofre Nuclear Generating Station includes, in addition to the older Unit 1, two new 1,100 MWE pressurized water nuclear generating units. Construction of both units began prior to September 1972. Unit 2 is now in full operation. Unit 3 is not fully operational but is expected to reach full commercial operation in late 1983 or early 1984.

The reactor coolant system for Unit 3 circulates water in a closed cycle, removing heat from the reactor and transferring it to the main steam system in the steam generators. The main steam system in turn is used to drive the generator which produces electricity. The main steam system is also a closed cycle. A third system, the circulating water system, provides ocean water for open cycle cooling of the main condensers.

In a pressurized water reactor, the steam generators provide the interface between the reactor coolant system and the main steam system. Reactor coolant is prevented from mixing with the secondary main steam system by the steam generator, making the reactor coolant system a closed loop. This forms a barrier to the release of radioactive materials from the reactor coolant system.

The following is a description of the major structures and systems which comprise the station.

Reactor building

The reactor building, also known as the "containment structure," is a steel-lined, cylindrical, domed concrete structure with an inside height of 170 feet and an inside diameter of 150 feet. Major equipment housed in the reactor building includes the reactor vessel and its control equipment, the steam generators, the reactor coolant pumps, the pressurizer and associated piping. These items comprise the entire primary loop and its interface with the secondary loop in the steam generators. A portion of the secondary loop, including the steam generators and associated piping, equipment used to control the rate of reaction, equipment to remove and replace reactor fuel and equipment to perform maintenance on the reactor, steam generators and other heavy equipment also are located in the containment structure.

Air inside the reactor building can be recirculated through filters during normal operation. In a separate step, it is purged under strictly controlled conditions prior to opening the building when personnel enter for refueling or maintenance. Liquid spills and leaks are collected in sumps near the bottom of the building and routed to the Liquid Radwaste Systems for processing.

Finally, a portion of the equipment used to cool or bring the reactor under control in the event of an emergency also is contained inside the reactor building. The design of the building itself is directed mainly to radiation shielding, protection of the critical equipment from internally or externally generated missiles, and to containment of pressure and radwaste that would result from an uncorrected LOCA (loss of coolant accident).

Auxiliary building

The auxiliary building contains the balance of the reactor support equipment which is not housed in the reactor building itself. The group of structures collectively known as the auxiliary building are made of reinforced concrete and are specially designed to shield workers and sensitive equipmment from radiation, to protect critical equipment, and to prevent uncontrolled release of radiation to the environment.

The Auxiliary building contains a multitude of equipment used to support the operating reactor and equipment. Most of the balance of the auxiliary building houses equipment to collect and treat contaminated liquids, gases, and solid wastes.

Control Room

Situated within the Auxiliary building is the control room which houses the controls, monitors, and support equipment to control the entire generating complex.

Fuel Handling Building

The fuel-handling building houses equipment to offload and store incoming fuel, handle irradiated spent fuel removed from the reactor, store spent fuel prior to shipment to a reprocessing plant, and load spent fuel into casks for shipment. The spent fuel pool is designed to keep the fuel submerged and to circulate and clean cooling water to remove heat and radioactive material in the continuing process of radioisotope decay. Since some radioactivity may be transferred to the air in this process, the spent fuel building has equipment to collect and treat contaminated air prior to its release or recirculation.

Radwaste Building

The radwaste building houses the majority of the radioactive waste management systems which are designed to collect, process, monitor, and recycle or dispose of radioactive liquid, gaseous, or solid wastes. The building is constructed of reinforced concrete and located adjacent to the auxiliary building. Most of the radiological pollution abatement equipment is located therein.

Pumphouse Structure

The pumphouse structure contains the main circulating water pumps, service water pumps and support equipment. In the onshore intake, circulating ocean water is drawn from the offshore intake pipe and pumped to the main condensers. Traveling screens and bar racks located in the onshore intake remove debris from the cooling water flow for offsite disposal.

B. General Pollution Control Design Features

The original design and planned modification of the Station include facilities to abate or control the discharge of radioactive and nonradioactive air and water pollutants and contaminants and heat. The original design also included solid waste disposal facilities.

The radioactive waste processing facilities were originally designed to collect, process, monitor, sample, and recycle or dispose of wastes based on the origin of the waste in the plant and the expected levels of radioactivity from normal operation (including heat-up, shutdown, refueling, and other expected transitions). Prior to being released, samples are analyzed to determine the types and amounts of radioactivity present. Based on the results of those analyses, water is retained for further processing or released under controlled conditions to the environment.

Nonradioactive oily wastes are treated by collection and removal from waste water. Oily wastes removed by this process are shipped offsite to an approved disposal facility.

Non-radioactive liquid wastes are neutralized by pH adjustment to within allowable limits. Neutralized liquids are subsequently piped to the circulating water system for discharge offshore.

Waste heat is disposed of by the circulating water system. The pollution control function of this system is to treat thermal pollution by transporting heated cooling water to an acceptable disposal site and discharging it in an approved manner.

3.2 The Pollution Control Facilities: Functional and Engineering Description

(See also Appendix 3.2 attached hereto.)

A. Radiological Pollution Control Facilities (3.2.1 - 3.2.4)

The radiological pollution control facilities will have the main functions of (1) limiting exposure to radioactive materials in unrestricted areas to levels well within 10CFR50, Appendix I, and 10CFR20 guidelines (2) preventing on an ALARA (as low as reasonably achievable) basis the release of radioactive waste to unrestricted areas, and (3) disposing of radioactive waste. An "unrestricted area," is any area outside of the Station not controlled by Southern California Edison Co. for purposes of protecting individuals from exposure to radioactive materials. The ALARA concept for control of radioactive pollutants is applied under provisions of 10CFR20.1(c) and 10CFR50.34(a) and 50.36(a).

Facilities that are designed to control releases of radioactive waste materials to the environment ("radwaste facilities") are required by Criterion 60, Appendix A, 10CFR50, to function "during normal reactor operation, including anticipated operational occurrences." "Anticipated operational occurrences" are defined in Appendix A as those conditions of normal operation that are expected to occur one or more times during the life of a nuclear power unit. Radwaste facilities are not designed to prevent the release of pollutants in a major accident.

The basic radiological pollution control systems include the Liquid Radwaste Systems, Coolant Radwaste System, Gaseous Radwaste System, Coolant and Boric Acid Recycle System, Solid Radwaste Handling System, and portions of the Chemical and Volume Control, Effluent and Radiation Monitoring, Steam Generator Blowdown Processing, and Nuclear Plant Sampling Systems. The liquid, gaseous, and solid radwaste systems are shared between San Onofre Units 2 and 3.

Liquid Radwaste Systems

The liquid radwaste system at Unit 3 is designed to collect and treat non-reactor grade water for reuse within the plant or for discharge and consists of two subsystems: a miscellaneous liquid radwaste subsystem for the processing of low conductivity wastes, and a chemical waste subsystem for the processing of high conductivity wastes.

The miscellaneous liquid radwaste subsystem collects low conductivity non-reactor grade water from auxiliary building sumps, containment sumps, and other sources in a 6,000 gallon waste holdup tank and processes those wastes through as many as four in-series demineralizers and associated filters. The processed wastes are pumped to one of two 25,000 gallon monitor tanks for batch sampling and analysis, prior to reprocessing or discharge. The monitor tanks are shared with the chemical waste system. If needed, the waste stream can also be diverted to the liquid radwaste system evaporator for treatment.

The chemical radwaste subsystem collects high conductivity wastes from laboratory drains, decontamination area drains, and demineralizer regenerant solutions in a 25,000 gallon chemical waste tank and processes those wastes through two demineralizers, associated filters, and/or a waste evaporator. Those wastes are also pumped to the shared monitor tanks for batch sampling and analysis prior to being reprocessed or discharged.

In both subsystems, certain of the listed components can be bypassed depending on the nature of the wastes to be processed. However, in any case the monitor tanks are used for waste holdup to allow batch sampling and analysis. The contents of these tanks are normally recycled for further treatment or discharged if within the ALARA and 10CFR20 guidelines.

Coolant Radwaste System

Miscellaneous liquids from the reactor coolant system (RCS) are collected in the RCS drain tank from where they are processed through the primary ion exchangers, associated filters, and the gas strippers, and then pumped to one of the four 60,000 gallon radwaste primary holdup tanks. The wastes in the four radwaste primary holdup tanks can then be processed through the coolant radwaste system. The remainder of the coolant radwaste system (downstream of the primary tanks), consists of two demineralizers in series, two 120,000 gallon radwaste secondary holdup tanks, and ancilliary filters and pumps. From the radwaste secondary holdup tanks, the processed liquid can be routed to the reactor coolant makeup tank, can be discharged to the circulating water outfall (if radioactivity concentrations are within established limits), or can be further processed through the coolant and boric acid recycle system.

Coolant and Boric Acid Recycle System

The coolant and boric acid recycle system can be used in series with the coolant radwaste system to enable reclaimed water and boric acid to be reused in the reactor coolant system. The coolant and boric acid recycle system consists of a boric acid evaporator, two deborating and polishing demineralizers in series, and two 300,000 gallon primary plant makeup tanks. The boric acid recovered in the evaporater bottoms can be recycled. If the radioactivity is below a predetermined value, the treated stream may be discharged following appropriate sampling and analysis.

Chemical and Volume Control System

A letdown stream of approximately 40 gallons per minute of primary coolant is removed from the primary reactor coolant system for processing through the chemical and volume control system (CVCS). The letdown stream is cooled through the letdown heat exchangers, reduced in pressure, filtered and processed through one of two demineralizers. The processed letdown stream is collected in the volume control tank and reused in the primary coolant system. The chemical and volume control system is used to control the primary coolant boron concentration by diverting a portion of the treated letdown stream to the coolant radwaste system as shim bleed. The coolant radwaste system receives input from the chemical and volume control system letdown stream to be processed accordingly. Primary coolant-grade water from equipment drains, equipment leakage, and from relief valves inside containment is collected in the reactor drain tank and equipment drain tank.

Gaseous Radwaste Systems

The gaseous radwaste systems consist of the gaseous radioactive waste system, the vent gas collection system, and the plant ventilation system. These systems are designed to collect, store, process, monitor, and/or discharge potentially radioactive gaseous wastes which are generated during normal operation of the plant. The systems consist of equipment and instrumentation necessary to reduce releases of radioactive gases and particulates to the environment. The principal sources of gaseous waste are the effluents from the gaseous waste system, condenser vacuum pumps, and ventilation exhausts from the auxiliary building, reactor containment, and turbine area.

The gaseous radioactive waste system is designed to collect and process gases stripped from the primary coolant and from the hydrogenated gases vented from the volume control tanks and the reactor drain tanks. The gases are compressed into pressurized storage tanks to allow radioactive decay. Redundant compressors are provided for this purpose. There are six storage tanks included in the gaseous radioactive waste system with a design pressure of 350 pounds per square inch, gauge and a 500 cubic foot volume in each. Releases from the gas decay tanks are mixed with plant ventilation air prior to release to the environment after a specified decay period and appropriate sampling to ensure compliance with ALARA and 10CFR20 guidelines.

Solid Radwaste Handling System

The solid waste handling system is designed to process two general types of solid wastes: "wet" solid wastes which require solidification or dewatering prior to shipment, and "dry" solid wastes which require packaging and, in some cases, compaction prior to shipment to a licensed burial facility. "Wet" solid wastes consist mainly of spent filter cartridges, demineralizer resins, and evaporator bottoms which contain radioactive materials removed from liquid streams during processing. "Wet" solid wastes are normally combined with a concrete solidification agent in containers to form a solid matrix. The containers are subsequently sealed and placed in a shield, as required, for offsite shipment and burial.

The principal sources of spent resins are ten 50 cubic foot liquid radwaste system demineralizers, two 50 cubic foot deborating demineralizers, six 36 cubic foot purification and deborating demineralizers, four steam generator blowdown purification demineralizers, and two spent fuel pool purification demineralizers. Spent resins from the demineralizers are collected in one of two spent resin storage tanks. When the resin is to be packaged, it is sluiced tc a disposable liner, is sampled and analyzed, and dewatered or solidified.

"Dry" solid wastes consist mainly of ventilation air filtering medium (charcoal), contaminated clothing, paper, plastics, rags, laboratory glassware, and tools, and are packaged in 55-gallon drums or wooden crates for offsite shipment and burial.

Compressible dry solid wastes such as clothing, paper, plastics, and rags are compressed prior to packaging. During the compressing operation, the air flow in the vicinity of the baler is exhausted by a fan through a high efficiency particulate air filter to the auxiliary area exhaust system to reduce the potential for airborne radioactive dusts.

Nuclear Plant Sampling System

The nuclear plant sampling system provides a means for sampling and/or verifying the proper operation and/or discharge limits of the following systems:

- o Reactor Coolant System
- o Chemical and Volume Control System
- o Boric Acid Makeup System
- o Coolant Radwaste System
- o Coolant and Boric Acid Recycle System
- o Liquid Radwaste System
- o Gaseous Radwaste System
- o Safety Injection System
- o Containment Area Sumps
- o Containment Environment

Portions of the sampling system are utilized to determine the required amount of processing and to ensure discharges comply with ALARA and 10CFR20 guidelines.

Radwaste Building

The radwaste building is common for both Units 2 and 3. The building houses and provides shielding for the major components of the following systems:

- o Liquid Radwaste System
- o Coolant Radwaste System
- o Coolant and Boric Acid Recycle System

- o Chemical and Volume Control System
- o Gaseous Radwaste System
- o Nuclear Plant Sampling System
- o Solid Waste Handling System

Ancillary equipment servicing these systems, such as ventilation, fire protection, service water, instrument air, and inert gas systems are also housed in the radwaste building.

Steam Generator Blowdown Processing System

The steam generator blowdown processing system functions to demineralize the steam generator blowdown and provide high quality condensate back to the main condenser. The blowdown processing system continuously processes steam generator blowdown at an average flow rate of 60 gallons per minute (design flow rate is 300 gallons per minute). The blowdown from the two steam generators for Unit 3 is directed to a common flash tank. The liquid is cooled, filtered, and treated through two demineralizers connected in series before being returned to the main condenser. The flashed steam is condensed in the main condenser hot well. The blowdown demineralizer can be regenerated. The regenerative waste water is then neutralized prior to discharge.

Effluent and Radiation Monitoring System

The process and effluent radiological monitoring system monitors and furnishes information to operators concerning radioactivity levels in selected process systems and plant effluents. The overall system is designed to assist the operator in evaluating and controlling the radiological consequences of normal plant operation and anticipated operational occurrences such that resultant radiation exposures and releases to unrestricted areas are maintained at ALARA levels (as low as reasonably achievable).

B. Non-Radiological Pollution Control Facilities (3.2.1 - 3.2.4)

Cooling Water System

The cooling water system provides plant waste heat disposal by means of a once-through cooling system. Water is withdrawn from the ocean utilizing an offshore intake structure specifically designed to reduce the amount of fish entrained in the system. The onshore portion of the cooling water system (onshore intake structure) contains a fish handling system providing for automatic removal of fish that have entered the system. Fish are returned alive to the ocean via a separate fish outfall.

The cooling water flows through a screening/trash removal system prior to reaching the main circulating water pumps and the steam condenser. The main steam condenser is designed to meet the State thermal discharge limitations. The warmed water is returned to the ocean via an offshore conduit and discharged from a submerged multiport diffuser to meet State thermal discharge limitations. Trash and debris removed by the screening system is transported offsite at an approved disposal site.

Oil and Waste Chemical Treatment

All drains and sumps associated with the nonradioactive portion of the plant flow by gravity to the oily waste treatment system. Any oil in the effluent is removed by an oily waste floatation separator prior to discharge to the ocean to comply with discharge requirements.

Chemical waste water generated by regeneration of the Makeup Demineralizer System, the Blowdown Processing System and the Full Flow Condensate Polishing Demineralizers System (to be installed in the future) are separately processed prior to disposal. The pH of the waste water is adjusted to acceptable limits, sampled and analyzed, and then piped to the circulating water system for subsequent discharge via the outfall, if analysis results so allow.

Sanitary Waste Treatment System

The Sanitary Waste System provides treatment of sanitary waste from Units 1, 2 & 3 and the Administration/Warehouse Building. The treated effluent is discharged to the ocean via the Unit 1 cooling water outfall.

C. Engineering Certification (3.2.5)

An Engineering Certification based on an independent review by a qualified engineer is attached as Appendix 3.2.5.

3.3 Construction Period

3.3.1 Starting Date

San Onofre Nuclear Generating Station began construction in 1970. Pollution control equipment of the type described herein was included in the original plant design and installed in the construction of Unit 3 and common facilities.

In addition, future improvements are planned for the radwaste systems. Procurement and construction of these improvements will commence in late 1983.

3.3.2 Completion Date

Construction of the originally planned pollution control systems is complete and the unit is now in start-up testing. Full commercial operation is expected in late 1983 or early 1984.

Construction of the improvements to the radwaste system will be completed by 1987.

3.4 The applicant's architect and engineering firm, Bechtel Power Corporation, was responsible for the design and construction of the on-shore portion of the plant. Southern California Edison Co., was responsible for the design and construction of the offshore portion of the plant.

Bechtel Power Corporation
12400 East Imperial Highway
Norwalk, California 90650

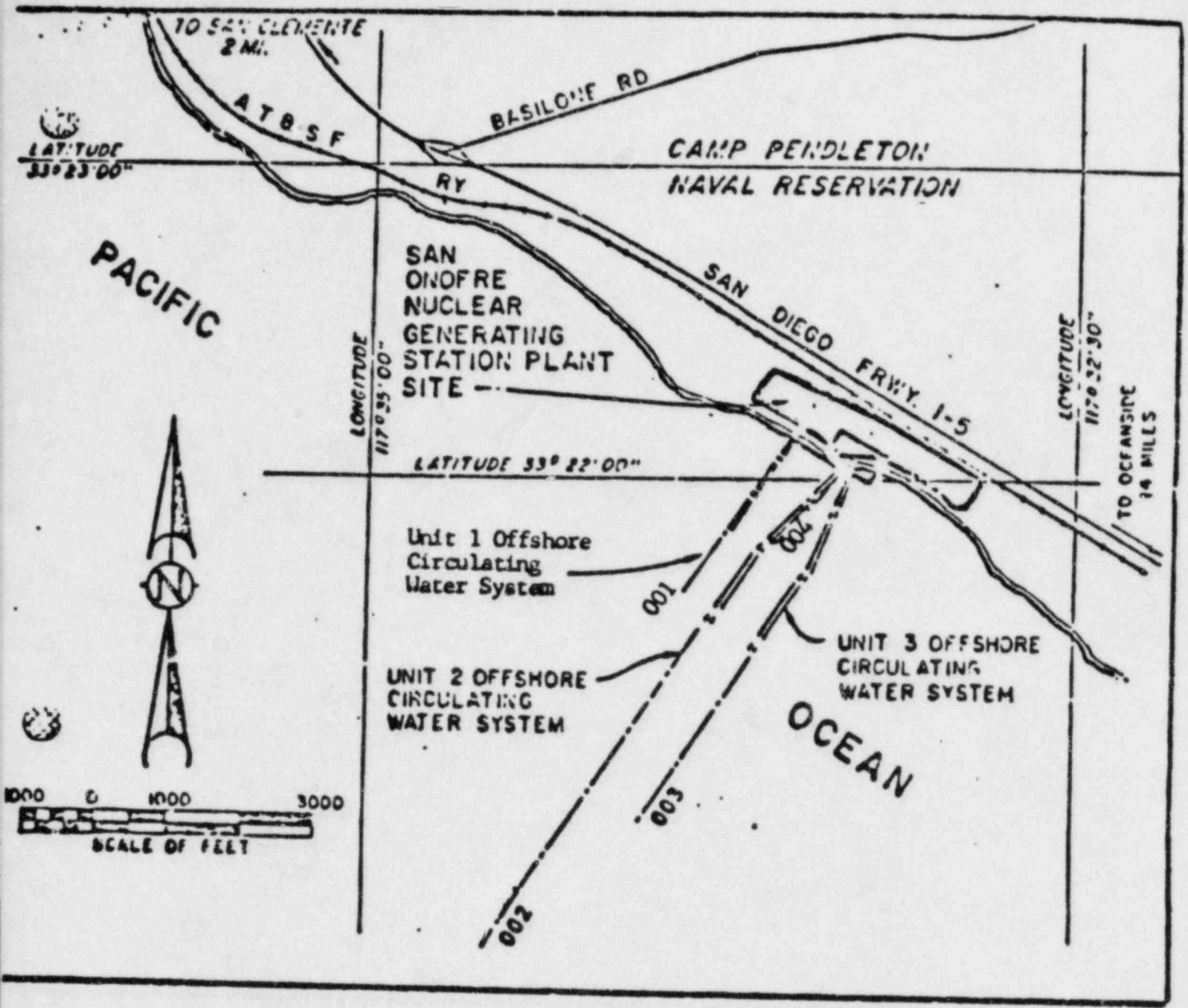
Southern California Edison Company
P.O. Box 800
Rosemead, California 91770

3.5 San Onofre Nuclear Generating Station Units 2 and 3 are located on the Pacific Coast approximately 2 miles south of the City of San Clemente, California

3.6 The project is a new location.

3.7 The San Onofre Nuclear Generating Station is located on lands owned by the United States of America. The Company has entered into long-term easements, licenses and leases with the Department of the Navy pertaining to the parcels occupied by the plant.

3.8 See pages 25 thru 29.

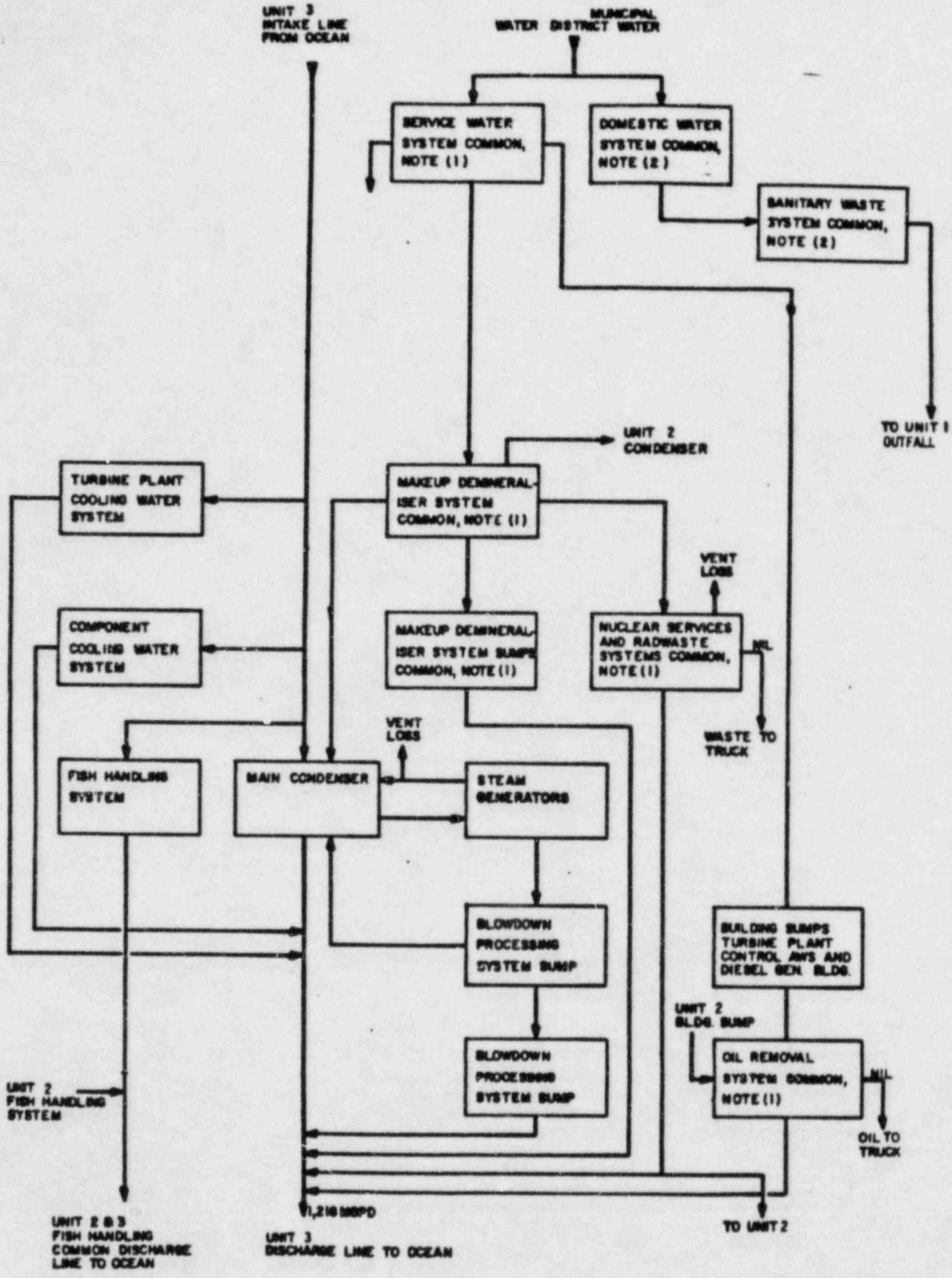


"LOCATION MAP"
Based on U.S.G.S. Quad Map San Onofre Bluff, Calif.
San Diego County, California

Southern California Edison Company

SDG&E SAN DIEGO GAS & ELECTRIC COMPANY

December 1, 1980 Sheet 1 of 1

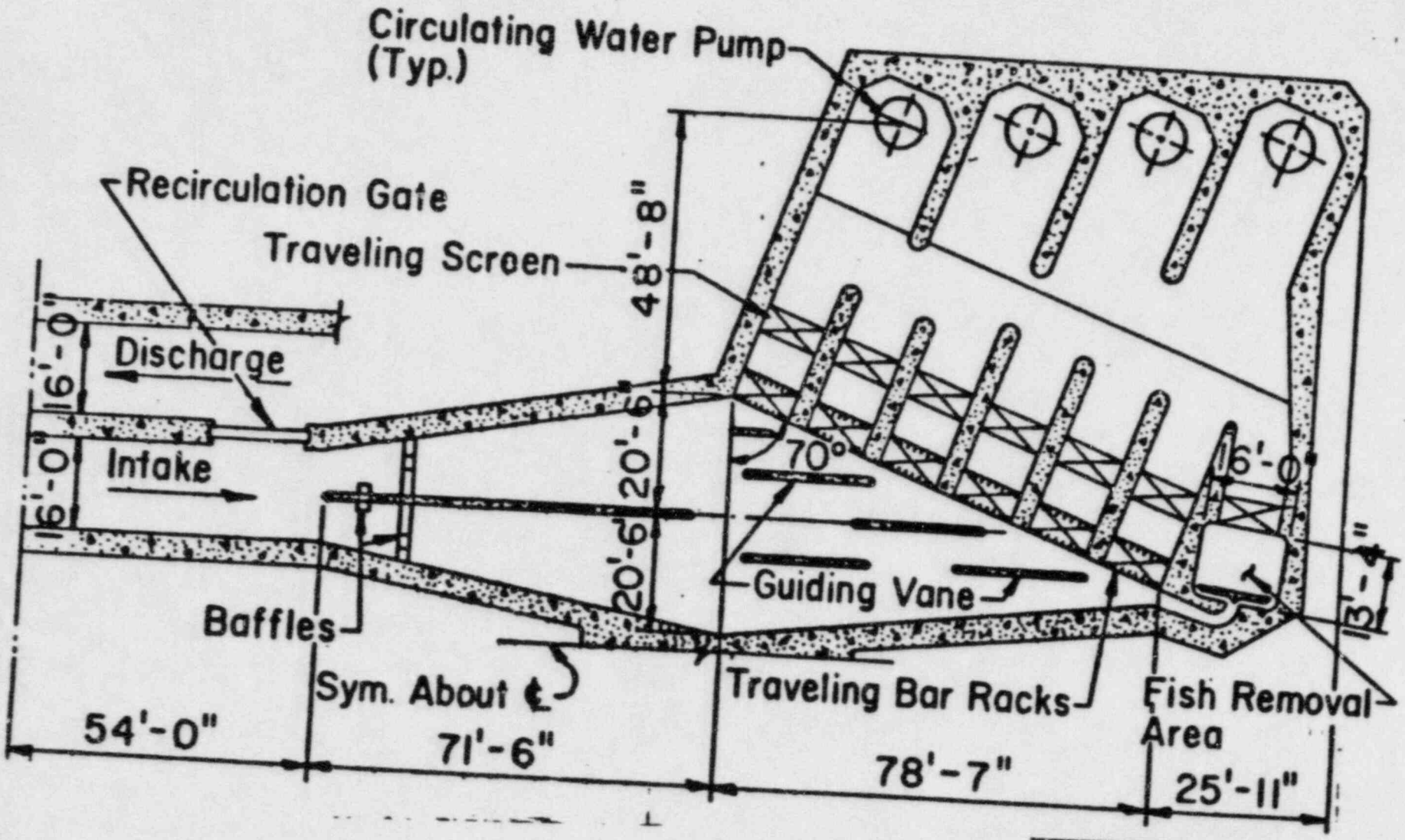


NOTES:

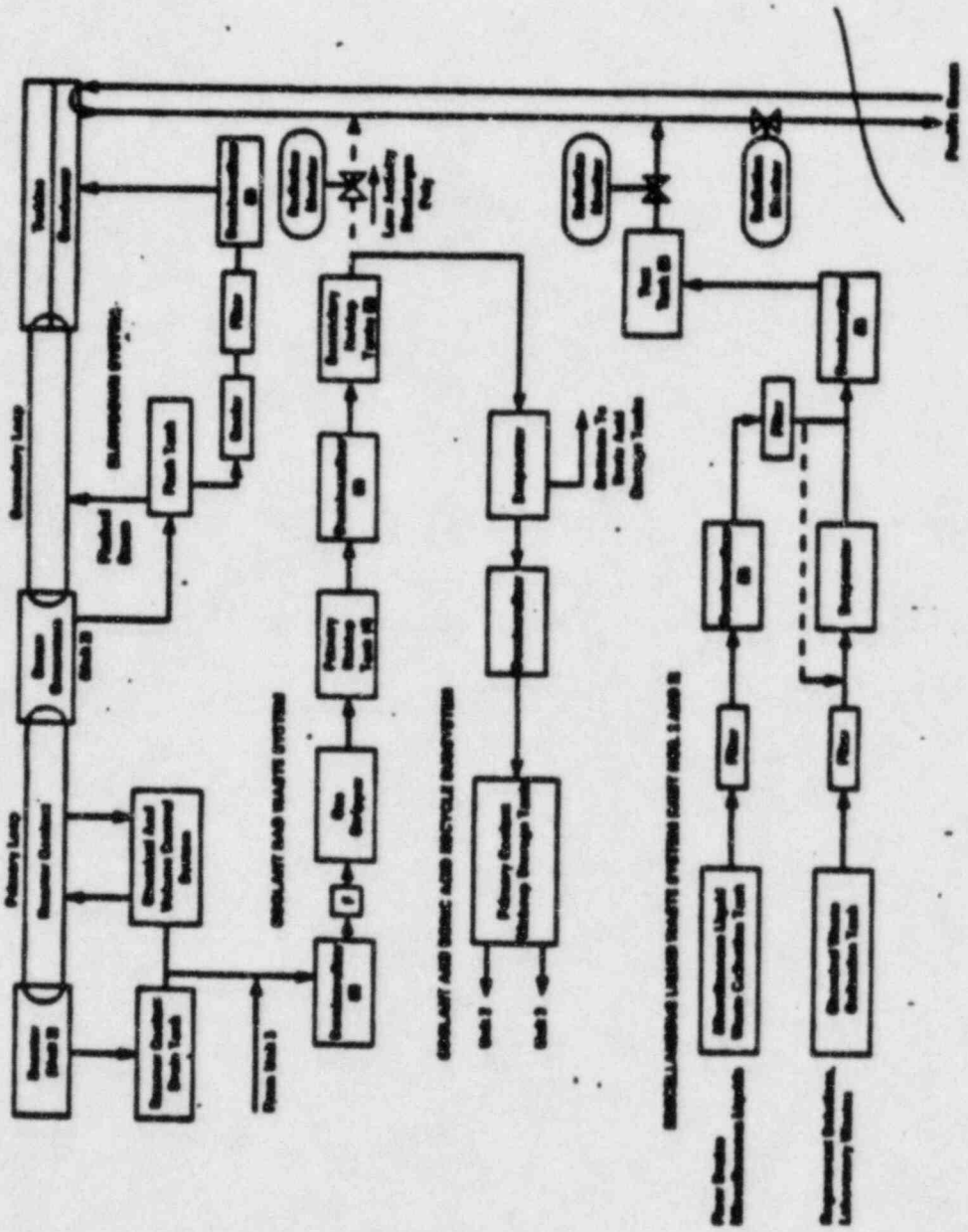
(1) COMMON SYSTEM, SERVES UNITS 2 & 3

(2) COMMON SYSTEM, SERVES UNITS 2 & 3 AND AWS BLDG.

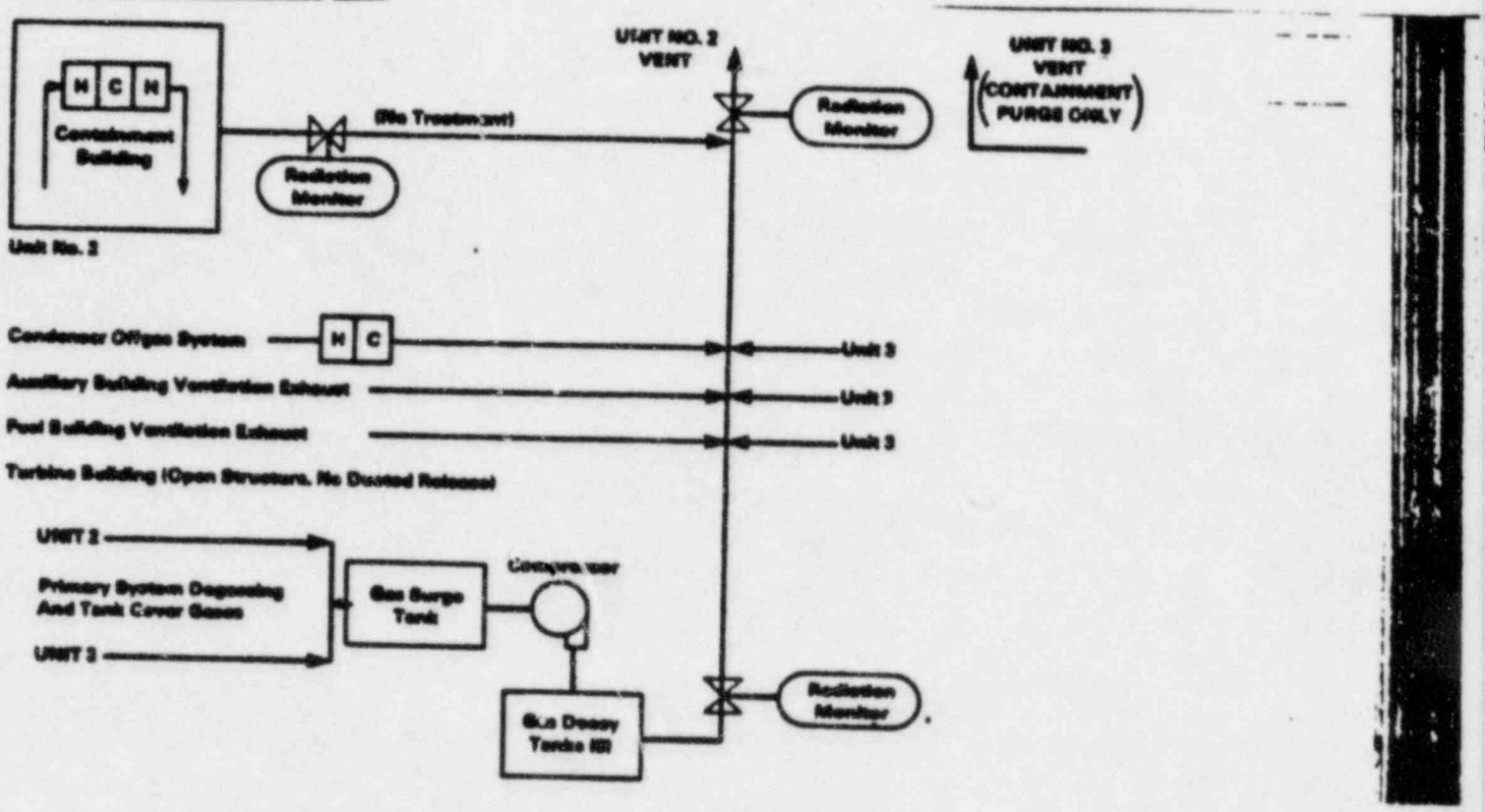
SAN ONOFRE NUCLEAR GENERATING STATION Units 2 & 3
GENERAL WATER SCHEMATIC



INTAKE STRUCTURE
SAN ONOFRE UNITS 2 & 3



LIQUID RADWASTE SYSTEM
SIMPLIFIED BLOCK DIAGRAM



GASEOUS RADWASTE &
CONTAINMENT PURGE SYSTEMS
SIMPLIFIED BLOCK DIAGRAM

3.9 Environmental Quality Regulations, Standards and Requirements

Regulation	System
1) Nuclear Regulatory Commission Regulations (ALARA requirements)	
o 10 CFR 20 o 10 CFR 50	o All Radiological Systems (See Section 3.2.A)
2) Federal Water Pollution Control Act as amended by the Clean Water Act of 1977	
o 316(a) o 316(b)	o Cooling Water System o Fish return system
o NPDES, BAT Regs.	o Oil and waste chemical treatment o Cooling water system o Compliance monitoring
3) Porter Cologne Water Quality Control Act (Waste Discharge Requirements)	o Receiving Water Monitoring Program o Annual monitoring o Cooling water system o Oil and waste chemical treatment
4) Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California	o Cooling Water System o Condenser design to meet $20^{o} \Delta T$
5) Water Quality Control Plan for Ocean Waters of California	o Circulating Water System o Oil and waste chemical treatment o Steam Generator Blowdown Processing o Sanitary Waste Treatment
6) Resource Conservation and Recovery Act	o Oil and waste chemical treatment
7) California Administrative Code - Title 22	o Oil and waste chemical treatment
8) California Administrative Code - Title 23	o Sanitary waste treatment

3.10 NPDES Permits

NPDES No. CA 0003395, Waste Discharge Requirements (Appendix 3.10).

3.11 List of Pollution Control Agencies

Ladin Delaney, San Diego Region
California Regional Water Quality Control Board
6154 Mission Gorge Road, Suite 205
San Diego, CA 92120

John Wise, Region 9
Environmental Protection Agency
215 Fremont Street
San Francisco, CA 94105

Harry Rood, Licensing Branch 3
Nuclear Regulatory Commission
7920 Norfolk Avenue
Bethesda, Maryland 20014

3.12 Description of Basin Plan

Comprehensive Water Quality Control
Plan Report, San Diego Region (9) (Basin Plan)

- o incorporates ocean plan and Thermal plan requirements as specified in NPDES Permit and Waste Discharge Requirements

3.13 Description of Compliance with Standards and Regulations

1) CWA 316a - Thermal discharge of $20^{\circ}\ \Delta T$

2) NPDES pH requirements - waste water neutralization

3) NPDES Oil and Grease Requirements - Oil & Water Separator

4) CWA
NPDES/Porter Cologne - Waste Discharge Requirements,
   - o Receiving Water Monitoring
   - o Effluent Monitoring

5) ALARA requirements - See Section 3.2.A

3.14 Description of By-Products and Residues

Disposal of wastes not permitted under authority of the above are disposed of as required at off-site disposal facilities.

Appendix 3.2

SAN ONOFRE NUCLEAR GENERATING STATION #3

ESTIMATED POLLUTION CONTROL EQUIPMENT COSTS

	SYSTEM	COST ($000)
1.	Radiological Pollution Control Equipment	
	a. Liquid Radwaste and Coolant Radwaste Systems.....	$21,900
	b. Coolant and Boric Acid Recycle.....	2,600
	c. Chemical & Volume Control.....	1,100
	d. Gaseous Radwaste.....	2,300
	e. Solid Radwaste Handling.....	800
	f. Nuclear Plant Sampling.....	1,100
	g. Radwaste Building.....	59,300
	h. Steam Generator Blowdown Processing.....	1,900
	i. Effluent and Radiation Monitoring.....	400
	SUB TOTAL	$91,400
2.	Non-Radiological Pollution Control Equipment	
	a. Cooling Water	54,000
	b. Oil and Waste Chemical Treatment	2,600
	c. Sanitary Waste Treatment	2,000
	SUB TOTAL	$58,600

Appendix 3.2

SAN ONOFRE NUCLEAR GENERATING STATION #3
ESTIMATED POLLUTION CONTROL EQUIPMENT COSTS

	SYSTEM	COST ($000)
3.	**Planned Radwaste System Improvements**	
a.	Solidified Resin Handling	$ 800
b.	Interim Waste Storage Facilities	13,600
c.	Solidification Process Sampling	100
d.	High Density Compaction	400
e.	Incineration (Volume Reduction)	6,400
f.	Resin Backwash Processing (FFCPD)	4,500
g.	Liquid Radwaste Holdup Capacity Augmentation	2,600
h.	Filter Handling	200
i.	DAW Handling...Dry Active Waste	800
j.	Containment Purge Radiation Monitoring	800
	SUBTOTAL	$ 30,200
4.	**Future Non-Radwaste System Improvements**	
a.	Oily Waste.....separate oil and water from discharge to not pollute ocean	800
	SUBTOTAL	800
	TOTAL	$181,000

Appendix 3.2.5

ENGINEERING CERTIFICATION

by

RUSSELL B. MACPHERSON, P. E.

Data contained in this report has been prepared and furnished to me by Southern California Edison Company. Based on my independent review of this information, I conclude that:

- The project, as designed, is in furtherance of the purpose of abating air and water pollution, and disposing of solid and liquid wastes.

- The project has no significant purpose other than pollution control and solid and liquid waste disposal (except as disclosed in this application).

- The project will further compliance with applicable Federal, State or local pollution control standards and requirements.

- The project components described in the application are all necessary for the proper installation and operation of the project as a pollution control and solid and liquid waste disposal system, and the cost estimates provided are reasonable as of the time they were made.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. 76 - 21

NPDES NO. CA0003395

WASTE DISCHARGE REQUIREMENTS
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
AND SAN DIEGO GAS AND ELECTRIC COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3
SAN DIEGO COUNTY

THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION (HEREAFTER BOARD), FINDS THAT:

1. ON DECEMBER 9, 1974, THIS REGIONAL BOARD ADOPTED ORDER NO. 74-92 (NPDES PERMIT NO. CA0003395), WASTE DISCHARGE REQUIREMENTS FOR SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3, SAN DIEGO COUNTY (HEREAFTER DISCHARGER).

2. THE SAN ONOFRE NUCLEAR GENERATING STATION UNITS 2 AND 3, ARE PRESENTLY UNDER CONSTRUCTION AT A SITE LOCATED ON THE U.S. MARINE CORPS BASE, CAMP PENDLETON, SAN DIEGO COUNTY. UNITS 2 AND 3 ARE BEING CONSTRUCTED ADJACENT TO UNIT 1. ORDER NO. 74-92, AN INTERIM NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT, PROVIDED REQUIREMENTS FOR THE DISCHARGES TO THE COASTAL WATERS OF THE PACIFIC OCEAN, A NAVIGABLE WATER OF THE UNITED STATES, OF ELEVATED TEMPERATURE WASTES FROM THE PRODUCTION OF ELECTRICITY IN STEAM ELECTRIC GENERATING PLANTS WITH ONCE-THROUGH SALT WATER COOLING SYSTEMS. ORDER NO. 74-92 EXPIRES JUNE 8, 1976.

3. ON DECEMBER 8, 1975, THE DISCHARGER SUBMITTED A REPORT OF WASTE DISCHARGE IN APPLICATION FOR RENEWAL OF THE EXISTING NPDES PERMIT FOR THE DISCHARGES TO THE PACIFIC OCEAN.

4. THE REPORT OF WASTE DISCHARGE DESCRIBES THE PROPOSED DISCHARGES AS FOLLOWS:

DISCHARGE 001 (FISH HANDLING SYSTEM FOR UNITS 2 AND 3)

POINT OF DISCHARGE: LATITUDE 33°21'50.13" NORTH
LONGITUDE 117°33'30.67" WEST

AVERAGE FLOW RATE: (TO BE ADJUSTED TO MEET OPERATING REQUIREMENTS.)

AVERAGE TEMPERATURE: 57.0°F (13.9°C) WINTER
69.3°F (20.7°C) SUMMER

pH: MINIMUM 7.5; MAXIMUM 8.4

DISCHARGE 002 (COMBINATION OF DISCHARGES FROM UNIT 2 CONSISTING OF 002A, COOLING WATER DERIVED FROM THE PACIFIC OCEAN; 002B, LOW VOLUME WASTES; AND 002C, STORM DRAIN FROM YARD.)

POINT OF DISCHARGE: LATITUDE 33°20'55.84" NORTH
LONGITUDE 117°34'13.5" WEST

AVERAGE FLOW RATES:

002 UNIT 2 COMBINED DISCHARGE - 1,218.6 MILLION GALLONS PER OPERATING DAY (53.4 m^3/SEC)

002A UNIT 2 COOLING WATER - 1,172 MILLION GALLONS PER OPERATING DAY (51.3 m^3/SEC)

002B UNIT 2 LOW VOLUME WASTES - 46.6 MILLION GALLONS PER OPERATING DAY (2.04 m^3/SEC)

002C STORM DRAINS FROM UNIT 2 YARD - 74,000 GALLONS DAILY AVERAGE (0.0032 m^3/SEC)

AVERAGE TEMPERATURE: 77.0°F (25.0°C) WINTER
89.3°F (31.8°C) SUMMER

pH: MINIMUM 7.5; MAXIMUM 8.5

DISCHARGE 003 (COMBINATION OF DISCHARGES FROM UNIT 3 CONSISTING OF 003A, COOLING WATER DERIVED FROM THE PACIFIC OCEAN; 003B, LOW VOLUME WASTES; AND 003C, STORM DRAIN FROM YARD).

POINT OF DISCHARGE: LATITUDE 33°21'11.74" NORTH
LONGITUDE 117°33'51.61" WEST

NOTE: m^3/SEC = CUBIC METERS PER SECOND
°F (°C) = DEGREES FAHRENHEIT (DEGREES CENTIGRADE)

AVERAGE FLOW RATE:

003 UNIT 3 COMBINED DISCHARGE - 1,218.6 MILLION GALLONS PER OPERATING DAY (53.4 M^3/SEC)

003A UNIT 3 COOLING WATER - 1,172 MILLION GALLONS PER OPERATING DAY (51.3 M^3/SEC)

003B UNIT 3 LOW VOLUME WASTES - 46.6 MILLION GALLONS PER OPERATING DAY (2.04 M^3/SEC)

003C STORM DRAINS FROM UNIT 3 YARD - 168,000 GALLONS DAILY AVERAGE (0.0074 M^3/SEC)

AVERAGE TEMPERATURE: 77.0°F (25.0°C) WINTER
89.3°F (31.8°C) SUMMER

5. THE DISCHARGER REPORTED THAT THE FISH HANDLING SYSTEM WILL BE USED TO RETURN THE FISH ENTRAINED IN THE SEA WATER INTAKE CONDUITS TO THE PACIFIC OCEAN. ONE COMMON FISH HANDLING SYSTEM OUTFALL WILL BE USED FOR THE SEA WATER INTAKE CONDUITS FOR BOTH UNIT 2 AND UNIT 3.

6. THE DISCHARGER REPORTED THAT PLANT OPERATIONS WILL RESULT IN ADDITION TO THE DISCHARGES OF SODIUM HYPOCHLORITE, SULFURIC ACID, SODIUM HYDROXIDE, BORIC ACID AND NALCO 39, AN ANTICORROSIVE AGENT CONTAINING SODIUM, BORON, NITRATE AND NITRITE. THE ONLY REPORTED CHEMICAL ADDITION TO DISCHARGES 002A AND 003A (COOLING WATERS) WILL BE SODIUM HYPOCHLORITE, USED AS AN ALGICIDE.

7. THE COMPREHENSIVE WATER QUALITY CONTROL PLAN REPORT SAN DIEGO BASIN (9), ADOPTED BY THIS REGIONAL BOARD ON MARCH 17, 1975 AND APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD ON MARCH 20, 1975, ESTABLISHED WATER QUALITY OBJECTIVES FOR THE COASTAL WATERS OF THE PACIFIC OCEAN.

8. THE COMPREHENSIVE WATER QUALITY CONTROL PLAN REPORT ALSO CONTAINS THE FOLLOWING PROHIBITIONS FOR WATERS SUBJECT TO TIDAL ACTION:

> "THE DUMPING OR DEPOSITION FROM SHORE OR FROM VESSELS OF OIL, GARBAGE, TRASH OR OTHER SOLID MUNICIPAL OR AGRICULTURAL WASTES DIRECTLY INTO WATERS SUBJECT TO TIDAL ACTION OR ADJACENT TO WATERS SUBJECT TO TIDAL ACTION IN ANY MANNER WHICH MAY PERMIT IT TO BE WASHED INTO THE WATERS SUBJECT TO TIDAL ACTION IS PROHIBITED."

• • • • •

"DISCHARGE OF INDUSTRIAL WASTEWATERS EXCLUSIVE OF COOLING WATER, CLEAR BRINE OR OTHER WATERS WHICH ARE ESSENTIALLY CHEMICALLY UNCHANGED, INTO WATERS SUBJECT TO TIDAL ACTION IS PROHIBITED."

* * * * *

"THE DUMPING OR DEPOSITION OF CHEMICAL WASTES, CHEMICAL AGENTS OR EXPLOSIVES INTO WATERS SUBJECT TO TIDAL ACTION IS PROHIBITED."

9. THE COMPREHENSIVE WATER QUALITY CONTROL PLAN REPORT SAN DIEGO BASIN (9), ESTABLISHED THE FOLLOWING BENEFICIAL USES FOR THE COASTAL WATERS OF THE PACIFIC OCEAN:

(A) INDUSTRIAL SERVICE SUPPLY
(B) NAVIGATION
(C) WATER CONTACT RECREATION
(D) NON-WATER CONTACT RECREATION
(E) OCEAN COMMERCIAL AND SPORTFISHING
(F) PRESERVATION OF AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE
(G) PRESERVATION OF RARE AND ENDANGERED SPECIES
(H) MARINE HABITAT
(I) FISH MIGRATION
(J) SHELLFISH HARVESTING

10. THE WATER QUALITY CONTROL PLAN, OCEAN WATERS OF CALIFORNIA, ADOPTED BY THE STATE WATER RESOURCES CONTROL BOARD ON JULY 6, 1972, ESTABLISHED WATER QUALITY OBJECTIVES AND EFFLUENT LIMITATIONS FOR THE DISPOSAL OF WASTES INTO THE COASTAL WATERS OF THE PACIFIC OCEAN.

11. ON FEBRUARY 25, 1975, THE STATE WATER RESOURCES CONTROL BOARD ADOPTED A REVISED VERSION OF THE WATER QUALITY CONTROL PLAN FOR CONTROL OF TEMPERATURE IN THE COASTAL AND INTERSTATE WATERS AND ENCLOSED BAYS AND ESTUARIES OF CALIFORNIA (THERMAL PLAN). THIS PLAN CONTAINED OBJECTIVES FOR DISCHARGES OF ELEVATED TEMPERATURE WASTES (EXISTING AND NEW DISCHARGES) TO COASTAL WATERS.

12. ON OCTOBER 8, 1974, THE ENVIRONMENTAL PROTECTION AGENCY PROMULGATED EFFLUENT GUIDELINES AND STANDARDS FOR DISCHARGES FROM STEAM ELECTRIC POWER GENERATING PLANTS. THE GUIDELINES ESTABLISHED EFFLUENT LIMITATIONS FOR EXISTING SOURCES AND STANDARDS OF PERFORMANCE AND PRETREATMENT STANDARDS FOR NEW SOURCES.

13. UNDER THE ENVIRONMENTAL PROTECTION AGENCY'S EFFLUENT GUIDELINES AND STANDARDS, THE SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3 POWER PLANTS, ARE CLASSIFIED AS GENERATING UNITS AND ARE SUBJECT TO A "NO DISCHARGE OF HEAT" LIMITATION.

14. THE ENVIRONMENTAL PROTECTION AGENCY HAS APPROVED A WAIVER OF THE "NO DISCHARGE OF HEAT" LIMITATION FOR UNITS 2 AND 3 PURSUANT TO SECTION 423.13(L)4 OF THE ENVIRONMENTAL PROTECTION AGENCY'S EFFLUENT GUIDELINES AND STANDARDS WHICH PROVIDES FOR SUCH A WAIVER WHEN INSUFFICIENT LAND IS AVAILABLE TO CONSTRUCT A RECIRCULATING COOLING SYSTEM. BECAUSE OF THE WAIVER OF THE "NO DISCHARGE OF HEAT" LIMITATION, THE THERMAL COMPONENTS OF THE DISCHARGES FROM UNITS 2 AND 3 ARE SUBJECT ONLY TO REGULATION BY THE THERMAL PLAN.

15. PRIOR TO THE REVISION OF THE THERMAL PLAN, ON JULY 31, 1972 THE DISCHARGER REQUESTED AND THE REGIONAL BOARD GRANTED AN EXCEPTION TO THE SPECIFIC WATER QUALITY OBJECTIVES OF THE THERMAL PLAN FOR THE PURPOSE OF HEAT TREATMENT TO CONTROL MARINE ORGANISMS IN THE COOLING WATER SYSTEM AND FISH HANDLING SYSTEM CONDUIT. THE STATE WATER RESOURCES CONTROL BOARD CONDITIONALLY APPROVED THE EXCEPTION TO THE THERMAL PLAN CONTINGENT UPON THE DISCHARGER COMPLETING STUDIES WHICH WOULD PERMIT THE REGIONAL BOARD TO SET PRECISE LIMITS ON THE FREQUENCY, DEGREE AND DURATION OF HEAT TREATMENT.

16. THE REVISED VERSION OF THE THERMAL PLAN REQUIRES THAT EXCEPTIONS BE GRANTED ONLY IN ACCORDANCE WITH SECTION 316(A) OF THE FEDERAL WATER POLLUTION CONTROL ACT OF 1972 AND SUBSEQUENT FEDERAL REGULATIONS. THEREFORE, FINAL RESOLUTION OF THE EXCEPTION REQUEST FOR UNITS 2 AND 3 MUST BE MADE PURSUANT TO SECTION 316(A), WHICH REQUIRES THE DISCHARGER TO DEMONSTRATE THAT THE PROPOSAL WOULD ASSURE THE PROTECTION OF THE AQUATIC COMMUNITIES OF THE RECEIVING WATERS.

17. ON NOVEMBER 28, 1975, THE DISCHARGER FORMALLY REQUESTED TO UTILIZE THE STUDIES, IDENTIFIED IN FINDING NO. 15 ABOVE, WHICH ARE BEING CONDUCTED IN ACCORDANCE WITH THE STATE WATER RESOURCES CONTROL BOARD ORDER NO. 75-5, AS A BASIS FOR A 316(A) DEMONSTRATION. THE DISCHARGER PROPOSED TO SUBMIT THE FINAL REPORT ON THE 316(A) STUDY ON DECEMBER 29, 1978, AT LEAST ONE YEAR PRIOR TO THE ANTICIPATED COMMERCIAL OPERATION OF UNITS 2 AND 3. ON JULY 28, 1975, REPRESENTATIVES OF THE ENVIRONMENTAL PROTECTION AGENCY INFORMED THE STATE WATER RESOURCES CONTROL BOARD THAT THE SCOPE OF THE STUDIES WAS CONSISTENT WITH THE REQUIREMENTS OF SECTION 316(A). ON DECEMBER 22, 1975 STAFF OF THE REGIONAL BOARD INFORMED THE DISCHARGER THAT THE STUDIES WERE ACCEPTABLE AS A 316(A) DEMONSTRATION.

18. EFFLUENT LIMITATIONS, NATIONAL STANDARDS OF PERFORMANCE, AND TOXIC AND PRETREATMENT EFFLUENT STANDARDS ESTABLISHED PURSUANT TO SECTIONS 301, 302, 303(D), 304, 307, 316(B) AND 403 OF THE FEDERAL WATER POLLUTION CONTROL ACT AND AMENDMENTS THERETO ARE APPLICABLE TO THE DISCHARGE.

19. THE BOARD, IN ESTABLISHING THE REQUIREMENTS CONTAINED HEREIN, CONSIDERED FACTORS INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

    (A) PAST, PRESENT, AND PROBABLE FUTURE BENEFICIAL USES OF WATER.

    (B) ENVIRONMENTAL CHARACTERISTICS OF THE HYDROGRAPHIC UNIT UNDER CONSIDERATION, INCLUDING THE QUALITY OF WATER AVAILABLE THERETO.

    (C) WATER QUALITY CONDITIONS THAT COULD REASONABLY BE ACHIEVED THROUGH THE COORDINATED CONTROL OF ALL FACTORS WHICH AFFECT WATER QUALITY IN THE AREA.

    (D) ECONOMIC CONSIDERATION.

20. THE BOARD HAS CONSIDERED ALL ENVIRONMENTAL FACTORS ASSOCIATED WITH THE DISCHARGE OF WASTE.

21. THE BOARD HAS NOTIFIED THE DISCHARGER AND ALL KNOWN INTERESTED PARTIES OF ITS INTENT TO PRESCRIBE WASTE DISCHARGE REQUIREMENTS FOR THE DISCHARGE.

22. THE BOARD IN A PUBLIC MEETING HEARD AND CONSIDERED ALL COMMENTS PERTAINING TO THE DISCHARGE.

23. THIS ORDER SHALL SERVE AS A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT PURSUANT TO SECTION 402 OF THE FEDERAL WATER POLLUTION CONTROL ACT, OR AMENDMENTS HERETO.

IT IS HEREBY ORDERED, THE SOUTHERN CALIFORNIA EDISON COMPANY AND THE SAN DIEGO GAS AND ELECTRIC COMPANY, IN ORDER TO MEET THE PROVISIONS CONTAINED IN DIVISION 7 OF THE CALIFORNIA WATER CODE AND REGULATIONS ADOPTED THEREUNDER AND THE PROVISIONS OF THE FEDERAL WATER POLLUTION CONTROL ACT, AND REGULATIONS AND GUIDELINES ADOPTED THEREUNDER, SHALL COMPLY WITH THE FOLLOWING:

A. EFFLUENT LIMITATIONS

1. DISCHARGE 001 (FISH HANDLING SYSTEM)

    (A) THE FISH HANDLING SYSTEM SHALL BE USED ONLY FOR THE PURPOSE OF RETURNING ENTRAINED FISH AND INTAKE SEA WATER. DISCHARGE OF ANY CHEMICALS OR POLLUTANTS IS PROHIBITED.

    (B) IF WARRANTED BY THE RESULTS OF THE DISCHARGER'S STUDY IN ACCORDANCE WITH SECTION 316(A) OF THE FEDERAL WATER POLLUTION CONTROL ACT OF 1972, THE REGIONAL BOARD MAY GRANT AN EXCEPTION TO THE SPECIFIC WATER QUALITY OBJECTIVES OF THE THERMAL PLAN FOR THE PURPOSE OF HEAT TREATMENT OF THE FISH HANDLING SYSTEM. IF THE REGIONAL BOARD GRANTS SUCH AN EXCEPTION, PRECISE LIMITS ON THE FREQUENCY, DEGREE AND DURATION OF HEAT TREATMENT WILL BE ESTABLISHED. PRIOR TO BECOMING EFFECTIVE, THE EXCEPTION AND ALTERNATIVE LESS STRINGENT REQUIREMENTS MUST RECEIVE THE CONCURRENCE OF THE STATE WATER RESOURCES CONTROL BOARD.

2. DISCHARGES 002 AND 003 (COMBINED DISCHARGES)

(A) THE TEMPERATURE OF THE DISCHARGE SHALL NOT AVERAGE MORE THAN 20°F (11.1°C) ABOVE THAT OF INCOMING OCEAN WATERS.

(B) IF WARRANTED BY THE RESULTS OF THE DISCHARGER'S STUDY IN ACCORDANCE WITH SECTION 316(A) OF THE FEDERAL WATER POLLUTION CONTROL ACT OF 1972, THE REGIONAL BOARD MAY GRANT AN EXCEPTION TO THE SPECIFIC WATER QUALITY OBJECTIVES OF THE THERMAL PLAN FOR THE PURPOSE OF HEAT TREATMENT OF THE INTAKE AND DISCHARGE CONDUITS AND RELATED ONSHORE STRUCTURES. IF THE REGIONAL BOARD GRANTS SUCH AN EXCEPTION, PRECISE LIMITS ON THE FREQUENCY, DEGREE AND DURATION OF HEAT TREATMENT WILL BE ESTABLISHED. PRIOR TO BECOMING EFFECTIVE, THE EXCEPTION AND ALTERNATIVE LESS STRINGENT REQUIREMENTS MUST RECEIVE THE CONCURRENCE OF THE STATE WATER RESOURCES CONTROL BOARD.

(C) THE MONTHLY AVERAGE[1] FREE AVAILABLE CHLORINE DISCHARGED SHALL NOT EXCEED 0.2 MG/L (922 KG/DAY, 2033 LBS/DAY[4]) AND THE DAILY MAXIMUM[2] FREE AVAILABLE CHLORINE DISCHARGED SHALL NOT EXCEED 0.5 MG/L (2306 KG/DAY, 5082 LBS/DAY).

(D) DISCHARGE OF FREE AVAILABLE CHLORINE OR TOTAL RESIDUAL CHLORINE FROM ANY PLANT UNIT FOR MORE THAN TWO HOURS IN ANY ONE DAY OR FROM MORE THAN ONE UNIT IN THE PLANT AT ANY ONE TIME IS PROHIBITED.

(E) THE DISCHARGE OF RADIOACTIVITY SHALL NOT EXCEED THE LIMITS SPECIFIED IN TITLE 17, CHAPTER 5, SUBCHAPTER 4, GROUP 3, ARTICLE 5, SECTIONS 30285 AND 30287 OF THE CALIFORNIA ADMINISTRATIVE CODE.

(F) THE DISCHARGE OF POLYCHLORINATED BIPHENYLS IS PROHIBITED.

(G) THE PH OF THE EFFLUENT DISCHARGED SHALL BE WITHIN THE RANGE OF 6.0 TO 9.0.

NOTE: MG/L = MILLIGRAMS PER LITER
KG/DAY = KILOGRAMS PER DAY
LBS/DAY = POUNDS PER DAY

A LIST OF ALL FOOTNOTES REFERENCED WILL BE FOUND FOLLOWING THE LAST PAGE OF THE WASTE DISCHARGE REQUIREMENTS SECTION.

(H) AFTER JULY 1, 1978, THE DISCHARGE SHALL NOT EXCEED THE FOLLOWING LIMITS:

CONSTITUENTS	UNIT OF MEASUREMENT	CONCENTRATION NOT TO BE EXCEEDED MORE THAN 50% OF TIME	CONCENTRATION NOT TO BE EXCEEDED MORE THAN 10% OF TIME
ARSENIC	MG/L	0.01	0.02
CADMIUM	"	0.02	0.03
TOTAL CHROMIUM	"	0.005	0.01
COPPER	"	0.2	0.3
LEAD	"	0.1	0.2
MERCURY	"	0.001	0.002
NICKEL	"	0.1	0.2
SILVER	"	0.02	0.04
ZINC	"	0.3	0.5
CYANIDE	"	0.1	0.2
PHENOLIC COMPOUNDS	"	0.5	1.0
TOTAL CHLORINE RESIDUAL	"	1.0	2.0
AMMONIA (EXPRESSED AS NITROGEN)	"	40.	60.
TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS*	"	0.002	0.004
TOXICITY CONCENTRATION	TU	1.5	2.0
RADIOACTIVITY		NOT TO EXCEED THE LIMITS SPECIFIED IN TITLE 17, CHAPTER 5, SUBCHAPTER 4, GROUP 3, ARTICLE 5, SECTION 30285 AND 30287 OF THE CALIFORNIA ADMINISTRATIVE CODE.	

* TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS SHALL BE MEASURED BY SUMMING THE INDIVIDUAL CONCENTRATIONS OF DDT, DDD, DDE, ALDRIN, BHC, CHLORDANE, ENDRIN, HEPTACHLOR, LINDANE, DIELDRIN, POLYCHLORINATED BIPHENYLS, AND OTHER IDENTIFICABLE CHLORINATED HYDROCARBONS.

NOTE: TU = TOXICITY UNITS

3. DISCHARGES 002B AND 003B (LOW VOLUME WASTE)

THE DISCHARGE OF AN EFFLUENT IN EXCESS OF THE FOLLOWING LIMITS IS PROHIBITED

CONSTITUENTS	UNITS	MONTHLY[1] AVERAGE	DAILY[2] MAXIMUM
TOTAL SUSPENDED SOLIDS	MG/L	30	100
	KG/DAY[4]	5291	17638
	LBS/DAY[4]	11662	38874
OIL AND GREASE	MG/L	15	20
	KG/DAY	2345	3527
	LBS/DAY	5831	7774

4. DISCHARGES 002C AND 003C (STORM DRAINS FROM YARD)

THE MONTHLY AVERAGE[1] OF OIL AND GREASE DISCHARGED SHALL NOT EXCEED 10 MG/L AND THE DAILY MAXIMUM OIL AND GREASE DISCHARGED SHALL NOT EXCEED 15 MG/L.

B. RECEIVING WATER LIMITATIONS

1. THE DISCHARGE OF ELEVATED TEMPERATURE WASTES SHALL NOT RESULT IN INCREASES IN THE NATURAL WATER TEMPERATURE EXCEEDING 4°F (2.2°C) AT (A) THE SHORELINE, (B) THE SURFACE OF ANY OCEAN SUBSTRATE, OR (C) THE OCEAN SURFACE BEYOND 1,000 FEET FROM THE DISCHARGE SYSTEM. THE SURFACE TEMPERATURE LIMITATION SHALL BE MAINTAINED AT LEAST 50 PERCENT OF THE DURATION OF ANY COMPLETE TIDAL CYCLE.

2. THE DISCHARGE SHALL NOT CAUSE THE FOLLOWING LIMITS TO BE EXCEEDED OUTSIDE OF THE INITIAL DILUTION ZONE[5]:

CONSTITUENTS	UNITS	CONCENTRATION NOT TO BE EXCEEDED MORE THAN 50% OF TIME	10% OF TIME	MAXIMUM
GREASE AND OIL	MG/M^2	10.0	20.0	—
FLOATING PARTICULATES	MG/DRY WT/M^2	1.0	1.5	—
TOXICITY	TU	—	—	0.05
RADIOACTIVITY		NOT TO EXCEED THE LIMITS SPECIFIED IN TITLE 17, CHAPTER 5, SUBCHAPTER 4, GROUP 3, ARTICLE 5, SECTION 30260 OF THE CALIFORNIA ADMINISTRATIVE CODE.		

NOTE: MG/M^2 = MILLIGRAMS PER SQUARE METER
MG DRY WT/M^2 = MILLIGRAMS DRY WEIGHT PER SQUARE METER

3. THE DISCHARGE SHALL NOT CAUSE:

(A) FLOATING PARTICULATES OR GREASE AND OIL TO BE VISIBLE AT ANY LOCATION;

(B) AESTHETICALLY UNDESIRABLE DISCOLORATION ON THE OCEAN SURFACE AT ANY LOCATION;

(C) THE MEAN OF THE TRANSMITTANCE OF NATURAL LIGHT OUTSIDE OF THE INITIAL DILUTION ZONE[5] TO BE REDUCED BY MORE THAN ONE STANDARD DEVIATION FROM THE MEAN DETERMINED FOR UNAFFECTED WATERS DURING THE SAME PERIOD;

(D) THE DISSOLVED OXYGEN CONCENTRATIONS OF WATERS OUTSIDE OF THE INITIAL DILUTION ZONE[5] TO BE DEPRESSED MORE THAN 10 PERCENT FROM CONCENTRATIONS WHICH OCCUR NATURALLY;

(E) THE pH OUTSIDE OF THE INITIAL DILUTION ZONE[5] TO BE CHANGED MORE THAN 0.2 UNITS FROM THE pH WHICH OCCURS NATURALLY;

(F) THE RATE OF DEPOSITION OF INERT SOLIDS AND THE CHARACTERISTICS OF INERT SOLIDS IN OCEAN SEDIMENTS TO BE CHANGED SUCH THAT BENTHIC COMMUNITES ARE DEGRADED[6];

(G) THE DISSOLVED SULFIDE CONCENTRATION OF WATERS IN AND NEAR SEDIMENTS TO BE INCREASED BY MORE THAN ONE STANDARD DEVIATION FROM THE MEAN DETERMINED UNDER NATURAL CONDITIONS;

(H) THE CONCENTRATIONS OF HEAVY METALS, CYANIDE, PHENOLIC COMPOUNDS, TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS AND RADIOACTIVITY IN SEDIMENTS TO BE INCREASED BY MORE THAN ONE STANDARD DEVIATION FROM THE MEAN DETERMINED UNDER NATURAL CONDITIONS;

(I) THE CONCENTRATIONS OF ORGANIC MATERIALS IN MARINE SEDIMENTS TO BE INCREASED ABOVE THOSE WHICH COULD DEGRADE[6] MARINE LIFE;

(J) NUTRIENT MATERIALS IN CONCENTRATIONS THAT WOULD CAUSE OBJECTIONABLE AQUATIC GROWTHS OR DEGRADE[6] INDIGENOUS BIOTA;

(K) MARINE COMMUNITIES INCLUDING VERTEBRATE, INVERTEBRATE, AND PLANT SPECIES TO BE DEGRADED[6]; OR

(L) ALTERNATION OF NATURAL TASTE, ODOR, AND COLOR OF FISH, SHELLFISH OR OTHER MARINE RESOURCES USED FOR HUMAN CONSUMPTION.

4. THE DISCHARGE SHALL NOT CAUSE CLEARLY VISIBLE DISCOLORATION IN THE RECEIVING WATERS RESULTING FROM PARTICULATE ENTRAINMENT.

C. PROVISIONS

1. THIS ORDER BECOMES EFFECTIVE ON JUNE 8, 1976.

2. THIS ORDER EXPIRES ON JUNE 8, 1981, AND SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY MUST FILE A REPORT OF WASTE DISCHARGE IN ACCORDANCE WITH TITLE 23, CALIFORNIA ADMINISTRATIVE CODE, NOT LATER THAN 180 DAYS IN ADVANCE OF SUCH DATE AS APPLICATION FOR ISSUANCE OF NEW WASTE DISCHARGE REQUIREMENTS. IF THE DISCHARGE HEREINBEFORE DESCRIBED IS TERMINATED PRIOR TO JUNE 8, 1981, THE DISCHARGER SHALL SO NOTIFY THE REGIONAL BOARD IN WRITING. IN THAT EVENT, THE REGIONAL BOARD MAY RESCIND THIS ORDER.

3. IN THE EVENT OF ANY CHANGE IN CONTROL OR OWNERSHIP OF LAND OR WASTE DISCHARGE FACILITIES PRESENTLY OWNED OR CONTROLLED BY THE DISCHARGER, THE DISCHARGER SHALL NOTIFY THE SUCCEEDING OWNER OR OPERATOR OF THE EXISTENCE OF THIS ORDER BY LETTER, A COPY OF WHICH SHALL BE FORWARDED TO THIS BOARD.

4. THESE REQUIREMENTS ARE ESTABLISHED ONLY FOR A MAXIMUM DISCHARGE OF 2437.3 MILLION GALLONS PER DAY (106.8 M^3/SEC) OF COOLING WATER AND OTHER DISCHARGES AS DESCRIBED IN THE FINDINGS OF THIS ORDER AND THE DISCHARGER'S REPORT OF WASTE DISCHARGE.

5. NEITHER THE TREATMENT NOR THE DISCHARGE OF POLLUTANTS SHALL CREATE A POLLUTION, CONTAMINATION OR NUISANCE AS DEFINED BY THE CALIFORNIA WATER CODE.

6. THE PLANT GROUNDS AND DRAINAGE SHALL BE MAINTAINED SO THAT NO POLLUTANTS ENTER THE STORM DRAINAGE SYSTEM. STORM RUNOFF SHALL BE ROUTED TO PRECLUDE CONTACT WITH CHEMICALS OR CONTAMINANTS.

7. THIS ORDER INCLUDES ITEMS 1, 3, 5 AND 7 OF THE ATTACHED "REPORTING REQUIREMENTS."

8. THIS ORDER INCLUDES ITEMS 1, 2, 4, 5, 6, 7, 8, 9, 10 AND 11 OF THE ATTACHED "STANDARD PROVISIONS."

9. THIS ORDER INCLUDES THE ATTACHED "GENERAL MONITORING AND REPORTING PROVISIONS."

10. THE DISCHARGER SHALL COMPLY WITH THE ATTACHED MONITORING AND REPORTING PROGRAM UPON THE EFFECTIVE DATE OF THIS ORDER.

11. THE DISCHARGER SHALL COMPLY WITH ANY STANDARDS WHICH MAY BE ESTABLISHED BY THE ENVIRONMENTAL PROTECTION AGENCY PURSUANT TO SECTION 316(B) OF THE FEDERAL WATER POLLUTION CONTROL ACT.

12. THE EFFLUENT MONITORING PROGRAM FOR DISCHARGES 002 AND 003 (COMBINED DISCHARGE) INCLUDES MONITORING FOR CONSTITUENTS FOR WHICH EFFLUENT LIMITATIONS HAVE NOT BEEN ESTABLISHED. IF WARRANTED BY THE RESULTS OF THE MONITORING PROGRAM, THE BOARD MAY ESTABLISH EFFLUENT LIMITATIONS FOR THESE CONSTITUENTS.

13. THE DISCHARGE OF THERMAL WASTES SHALL COMPLY WITH LIMITATIONS NECESSARY TO ASSURE PROTECTION OF BENEFICIAL USES AND AREAS OF SPECIAL BIOLOGICAL SIGNIFICANCE.

I, LEONARD BURTMAN, EXECUTIVE OFFICER, DO HEREBY CERTIFY THE FOREGOING IS A FULL, TRUE, AND CORRECT COPY OF AN ORDER ADOPTED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, SAN DIEGO REGION, ON JUNE 14, 1976.

Leonard Burtman

LEONARD BURTMAN
EXECUTIVE OFFICER

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

FOOTNOTE REFERENCES FOR WASTE DISCHARGE REQUIREMENTS OF ORDER No. 76-21, (NPDES PERMIT No. CA0003395) SOUTHERN CALIFORNIA EDISON COMPANY AND SAN DIEGO GAS AND ELECTRIC COMPANY, SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3.

1. THE MONTHLY AVERAGE SHALL BE THE ARITHMETIC MEAN, USING THE RESULTS OF ANALYSES OF ALL SAMPLES COLLECTED DURING ANY 30 CONSECUTIVE CALENDAR DAY PERIOD.

2. THE DAILY MAXIMUM SHALL BE DETERMINED FROM THE RESULTS OF A SINGLE GRAB SAMPLE OR FROM THE RESULT OF A SINGLE COMPOSITE SAMPLE COLLECTED OVER A PERIOD OF 24 HOURS.

3. THE WEEKLY AVERAGE SHALL BE THE ARITHMETIC MEAN, USING THE RESULTS OF ANALYSES OF ALL SAMPLES COLLECTED DURING ANY SEVEN (7) CONSECUTIVE CALENDAR DAY PERIOD.

4. THE DISCHARGE RATE IN POUNDS PER DAY IS OBTAINED FROM THE FOLLOWING CALCULATION FOR ANY CALENDAR DAY:

$$\text{DISCHARGE RATE (LBS/DAY)} = \frac{8.34}{N} \sum_{1}^{N} Q_i C_i ,$$

IN WHICH N IS THE NUMBER OF SAMPLES ANALYZED IN ANY CALENDAR DAY. Q_i AND C_i ARE THE FLOW RATE (MGD) AND THE CONSTITUENT CONCENTRATION (MG/L) RESPECTIVELY, WHICH ARE ASSOCIATED WITH EACH OF THE N GRAB SAMPLES WHICH MAY BE TAKEN IN ANY CALENDAR DAY. IF A COMPOSITE SAMPLE IS TAKEN, C_i IS THE CONCENTRATION MEASURED IN THE COMPOSITE SAMPLE, AND Q_i IS THE AVERAGE FLOW RATE OCCURRING DURING THE PERIOD OVER WHICH SAMPLES ARE COMPOSITED.

5. THE INITIAL DILUTION ZONE SHALL BE AS DEFINED IN THE WATER QUALITY CONTROL PLAN, OCEAN WATERS OF CALIFORNIA, ADOPTED BY THE STATE WATER RESOURCES CONTROL BOARD ON JULY 6, 1972.

6. DEGRADATION SHALL BE DETERMINED BY ANALYSIS OF THE EFFECTS OF WASTE DISCHARGE ON SPECIES DIVERSITY, POPULATION DENSITY, GROWTH ANOMALIES, DEBILITY, OR SUPPLANTING OF NORMAL SPECIES BY UNDESIRABLE PLANT AND ANIMAL SPECIES.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAM NO. 76 - 21
FOR
SOUTHERN CALIFORNIA EDISON COMPANY
AND SAN DIEGO GAS AND ELECTRIC COMPANY
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 AND 3
SAN DIEGO COUNTY

A. FISH HANDLING SYSTEM MONITORING

THE DISCHARGER SHALL SUBMIT SEMIANNUAL REPORTS DESCRIBING THE OPERATION OF THE FISH HANDLING SYSTEMS FOR UNITS 2 AND 3. THE EXECUTIVE OFFICER MAY REQUEST ADDITIONAL MONITORING AFTER REVIEW OF THE REPORTS AND CONSULTATION WITH REPRESENTATIVES OF THE STATE DEPARTMENT OF FISH AND GAME.

B. COOLING WATER INTAKE MONITORING (UNITS 2 AND 3)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
TEMPERATURE	°F	MEASUREMENT	CONTINUOUS**	MONTHLY
TOTAL SUSPENDED SOLIDS*	MG/L	GRAB	MONTHLY	"
GREASE AND OIL*	"	"	"	"
COPPER*	"	"	"	"

C. EFFLUENT MONITORING

1. DISCHARGES 002 AND 003 (COMBINED DISCHARGES)

* COOLING WATER INTAKE SAMPLES AND EFFLUENT SAMPLES FROM THE COMBINED DISCHARGES TO BE COLLECTED SYNOPTICALLY.

** TEMPERATURE SHALL BE RECORDED AT A MINIMUM FREQUENCY OF ONCE EVERY TWO HOURS. THE AVERAGE AND MAXIMUM TEMPERATURE FOR EACH 24-HOUR PERIOD SHALL BE REPORTED.

NOTE: °F = DEGREES FAHRENHEIT
MG/L = MILLIGRAMS PER LITER

MONITORING AND REPORTING PROGRAM NO. 76-21

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
FLOW	GPD	—	DAILY	MONTHLY
TEMPERATURE	°F	MEASUREMENT	CONTINUOUS**	"
TOTAL SUSPENDED SOLIDS*	MG/L	GRAB	MONTHLY	"
GREASE AND OIL*	MG/L	"	"	"
	LBS/DAY			
TOTAL COPPER*	MG/L	"	"	"
	LBS/DAY			
FREE AVAILABLE CHLORINE	MG/L	"	"	"
	LBS/DAY			
pH	UNITS	"	"	"
RADIOACTIVITY***	—	—	—	—
TURBIDITY	JTU	GRAB	SEMIANNUAL	SEMIANNUAL
METALS				
ARSENIC	MG/L	"	"	"
CADMIUM	"	"	"	"
TOTAL CHROMIUM	"	"	"	"
LEAD	"	"	"	"
MERCURY	"	"	"	"
NICKEL	"	"	"	"
SILVER	"	"	"	"
ZINC	"	"	"	"
CYANIDE	"	"	"	"
PHENOLIC COMPOUNDS	"	"	"	"
AMMONIA (AS NITROGEN)	"	"	"	"
TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS****	"	"	"	"
TOXICITY CONCENTRATION	TU	"	"	"

** TEMPERATURE SHALL BE RECORDED AT A MINIMUM FREQUENCY OF ONCE EVERY TWO HOURS. THE AVERAGE AND MAXIMUM TEMPERATURE FOR EACH 24-HOUR PERIOD SHALL BE REPORTED.

*** COPIES OF ALL REPORTS TO THE NUCLEAR REGULATORY COMMISSION PERTAINING TO MONITORING OF RADIOACTIVE WASTE DISPOSAL SHALL BE TRANSMITTED TO THE REGIONAL BOARD.

**** TOTAL IDENTIFIABLE CHLORINATED HYDROCARBONS SHALL BE MEASURED BY SUMMING THE INDIVIDUAL CONCENTRATIONS OF DDT, DDD, DDE, ALDRIN, BHC, CHLORDANE, ENDRIN, HEPTACHLOR, LINDANE, DIELDRIN, POLYCHLORINATED BIPHENYLS, AND OTHER IDENTIFIABLE CHLORINATED HYDROCARBONS.

NOTE: GPD = GALLONS PER DAY
LBS/DAY = POUNDS PER DAY
JTU = JACKSON TURBIDITY UNITS
TU = TOXICITY UNITS

2. DISCHARGES 002B AND 003B (LOW VOLUME WASTES EXCLUDING NUCLEAR SERVICES AND RADWASTE SYSTEMS)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
FLOW	GPD	—	DAILY	MONTHLY
TOTAL SUSPENDED SOLIDS	MG/L	24-HR. COMPOSITE	MONTHLY	"
	LBS/DAY			
GREASE AND OIL	MG/L	GRAB	"	"
	LBS/DAY			

3. DISCHARGES 002C AND 003C (YARD DRAINS)

CONSTITUENTS	UNITS	SAMPLE TYPE	MINIMUM FREQUENCY OF ANALYSIS	REPORTING FREQUENCY
OIL AND GREASE	MG/L	GRAB	MONTHLY	MONTHLY

D. RECEIVING WATER AND SEDIMENT MONITORING

RECEIVING WATER AND SEDIMENT MONITORING SHALL BE CONDUCTED AS SPECIFIED BELOW. STATION LOCATION, SAMPLING, SAMPLE PRESERVATION AND ANALYSIS, WHEN NOT SPECIFIED, SHALL BE BY METHODS DESCRIBED IN THE DISCHARGER'S REPORT TITLED "ENVIRONMENTAL SURVEILLANCE," SUBMITTED TO THE REGIONAL BOARD ON FEBRUARY 19, 1976, OR APPROVED BY THE EXECUTIVE OFFICER. THE MONITORING PROGRAM MAY BE MODIFIED BY THE EXECUTIVE OFFICER AT ANY TIME.

DISPERSION AREA STATIONS: THE DISPERSION AREA ZONES AND SAMPLING STATIONS ARE SHOWN ON FIGURES 1 AND 2. A NARRATIVE DESCRIPTION OF THE PRECISE LOCATIONS OF THE SURVEILLANCE ZONES AND STATIONS SHALL BE FURNISHED BY THE DISCHARGER WITHIN 180 DAYS AFTER THE ADOPTION OF THIS ORDER. ZONE AND STATION DESIGNATIONS AND THE FIGURE WHERE EACH IS SHOWN ARE AS FOLLOWS:

ZONE	STATION	FIGURE
0A	0A-1 TO 0A-12	1
1A	1A-1, 1A-2	1
2A	2A-1, 2A-2	1
2B	2B-1	1
3A	3A-1	1
0A	1 TO 12, B0, X0, C0, D0	2
0B	13, 14, E0, F0	2
1A	18 TO 24	2
1B	25	2
2A	26 TO 32, 34 TO 36	2
2B	33	2
3A	16	2
3B	17	2
4A	37	2
4B	38	2

REFERENCE AREA STATIONS: REFERENCE AREA ZONES AND STATIONS ARE SHOWN ON FIGURES 1 AND 2. A NARRATIVE DESCRIPTION OF PRECISE LOCATIONS OF THE STATIONS SHALL BE FURNISHED BY THE DISCHARGER WITHIN 180 DAYS AFTER THE ADOPTION OF THIS ORDER. ZONE AND STATION DESIGNATIONS AND THE FIGURE WHERE EACH IS SHOWN ARE AS FOLLOWS:

ZONE	STATION	FIGURE
6	6-1 TO 6-5	1
6	39 TO 41	2
5	15	2

INTERTIDAL STATIONS: INTERTIDAL ZONES AND STATIONS ARE SHOWN ON FIGURE 1. A NARRATIVE DESCRIPTION OF THE PRECISE LOCATIONS OF THE STATIONS SHALL BE FURNISHED BY THE DISCHARGER WITHIN 180 DAYS AFTER THE ADOPTION OF THIS ORDER. ZONE AND STATION DESIGNATIONS AND THE FIGURE WHERE EACH IS SHOWN ARE AS FOLLOWS:

ZONE	STATION	FIGURE
0A	I-2, I-3	1
3A	I-1	1
2A	I-4	1
2A	I-5	1

1. RECEIVING WATER MONITORING SHALL BE CONDUCTED AS FOLLOWS:

DETERMINATIONS	UNITS	STATIONS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
pH	UNITS	0A-1, 0A-4, 6-1	GRAB	BIMONTHLY
TEMPERATURE	°F	0A-9, 6-4 (NEAR SURFACE, MIDDEPTH, NEAR BOTTOM)	—	EVERY TWO HOURS
		I-1, I-3, I-4, I-5	—	BIMONTHLY
		1 THROUGH 41 (SURFACE AND DEPTH PROFILE)	—	BIMONTHLY
		AERIAL INFRARED RADIOMETRY	—	ONCE PER CALENDAR QUARTER
LIGHT TRANSMITTANCE	METER (SECCHI DISK)	1 THROUGH 41, XO, CO, DO, EO, FO	GRAB	BIMONTHLY
	%/M	1 THROUGH 41, XO, CO, DO, EO, FO	GRAB	BIMONTHLY

NOTE: %/M = PERCENT PER METER

DETERMINATIONS	UNITS	STATIONS	TYPE OF SAMPLE	MINIMUM FREQUENCY OF ANALYSIS
TURBIDITY	—	AERIAL PHOTOGRAPH	GRAB	ONCE PER CALENDAR QUARTER
DISSOLVED OXYGEN	MG/L	OA-1, OA-4, 6-4	GRAB	BIMONTHLY
CHLORINE	MG/L	OA-1, OA-9 THROUGH OA-12, 6-4	GRAB	BIMONTHLY
CHLORINE DEMAND	MG/L	OA-1, OA-9 THROUGH OA-12, 6-4	GRAB	BIMONTHLY
COLIFORM	MPN/100 ML	XO, 36 AND AT STATIONS LOCATED 300 FEET (1) UP-COAST, (2) DOWNCOAST, (3) OFFSHORE, (4) IN-SHORE OF STATION XO	GRAB	BIMONTHLY
METALS				
CHROMIUM	MG/L	OA-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
COPPER	MG/L	OA-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
NICKEL	MG/L	OA-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
IRON	MG/L	OA-1, 1A-1, 2A-1, 6-4	GRAB	ONCE PER CALENDAR QUARTER
ZOOPLANKTON (WATER COLUMN)	IDENTIFICATION, AND ENUMERATION	OA-7, OA-10, 1A-2, 1A-1, 2A-1, 2A-2, 6-4	—	BIMONTHLY
PHYTOPLANKTON (NEAR SURFACE)	IDENTIFICATION AND ENUMERATION	OA-7, OA-10, 1A-2, 1A-1, 2A-1, 2A-2, 6-4	—	BIMONTHLY
PHYTOPLANKTON (NEAR BOTTOM)	IDENTIFICATION AND ENUMERATION	OA-7, OA-10, 1A-2 1A-1, 2A-1, 2A-2, 6-4	—	BIMONTHLY
NEKTON	IDENTIFICATION	OA-2, OA-6, OA-8, 6-2 6-3, 6-4	—	ONCE PER CALENDAR QUARTER

2. Bottom sediment monitoring shall be conducted as follows:

Determinations	Units	Stations	Type of Sample	Minimum Frequency of Analysis
Metals				
Chromium	mg/L	0A-1, 1A-1, 2A-1, 6-4	Grab	Once per Calendar Quarter
Copper	mg/L	0A-1, 1A-1, 2A-1, 6-4	Grab	Once per Calendar Quarter
Nickel	mg/L	0A-1, 1A-1, 2A-1, 6-4	Grab	Once per Calendar Quarter
Iron	mg/L	0A-1, 1A-1, 2A-1, 6-4	Grab	Once per Calendar Quarter
Benthic Rock Habitat	Identification and Enumeration	0A-1, 0A-3, 0A-5, 0A-7, 6-1 through 6-5, 2B-1, 3A-1	—	Once per Calendar Quarter
Kelp Bed Study	—	6-5, 2B-1, 3A-1	Grab	Once per Calendar Quarter
Settling Plates Biota	Identification and Enumeration	0A-1, 6-4	—	Once per Calendar Quarter
Intertidal Rock Habitat	Identification and Enumeration	I-1 through I-5	—	Once per Calendar Quarter

3. Receiving water and sediment monitoring reports shall be submitted to the Board according to the dates in the following schedule:

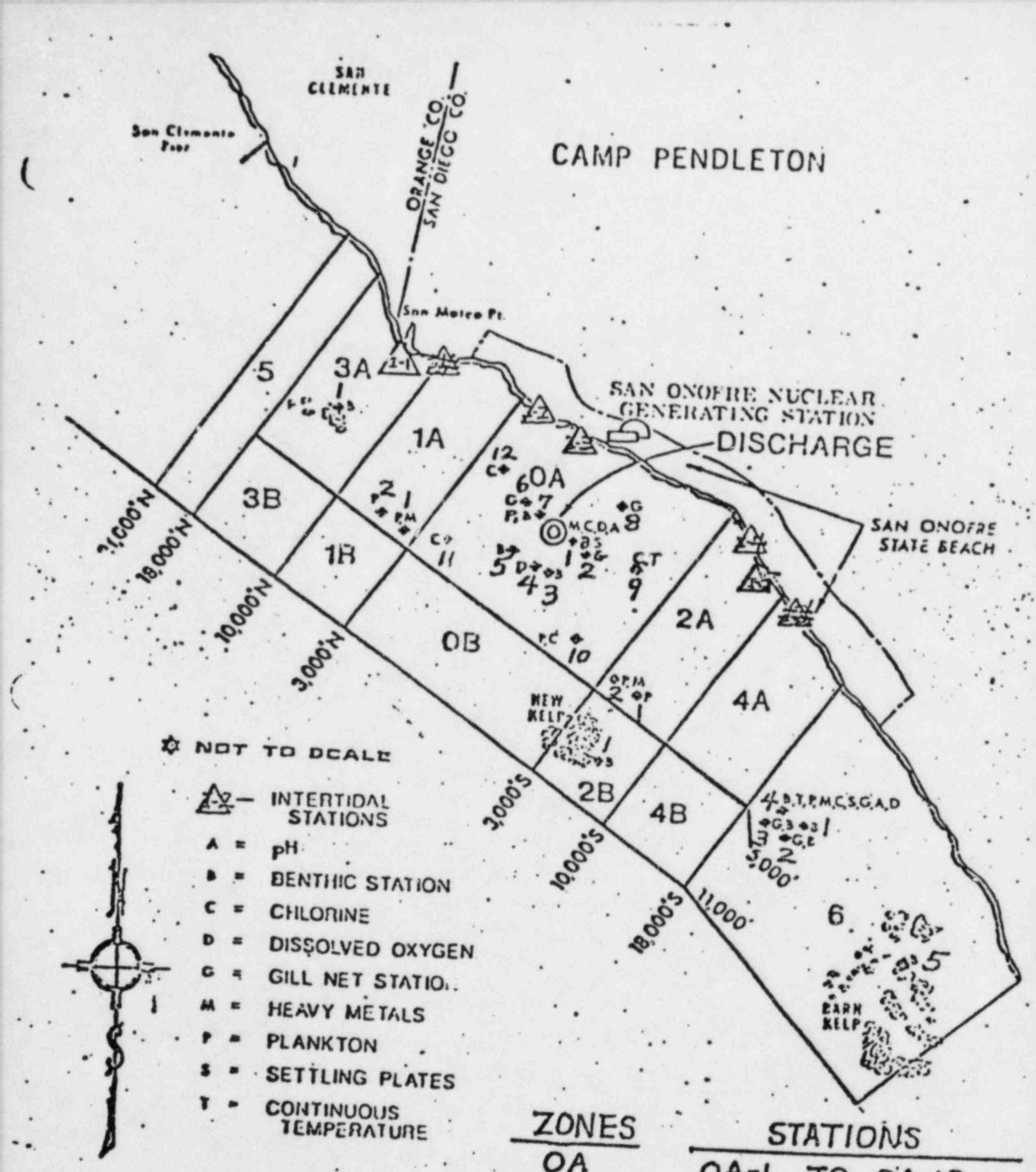
A. An annual summary and preliminary report shall be submitted before March 31 of each year.

B. A report containing detailed analyses of the data shall be submitted by July 1 of each year.

C. The annual report requirement in the "General Provisions for Reporting" will not apply to the Receiving Water and Sediment Monitoring.

Ordered by Leonard Burtman

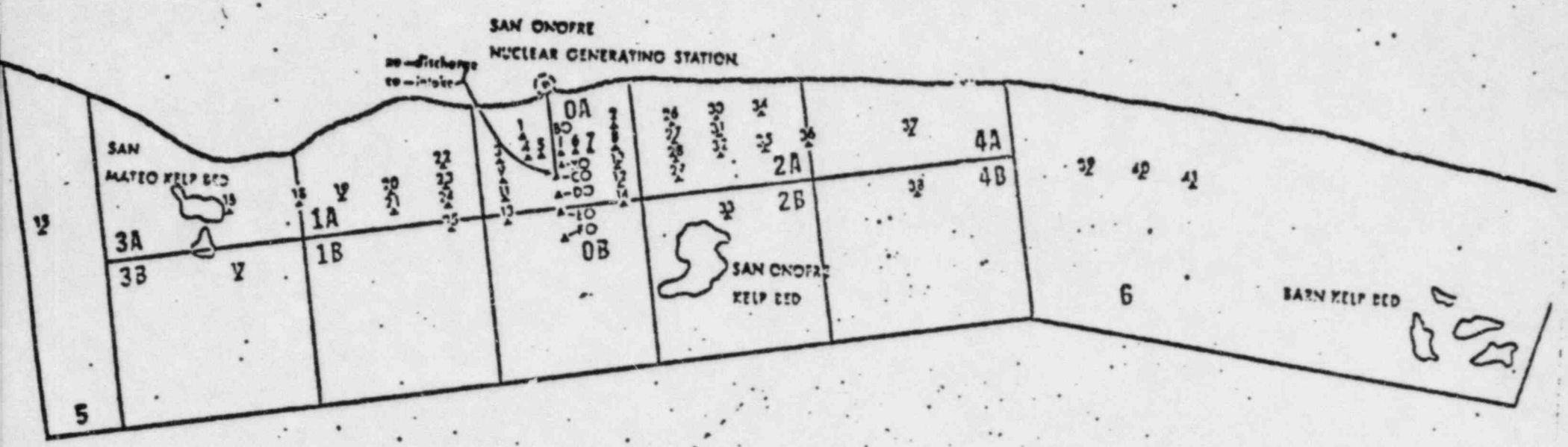
Leonard Burtman
Executive Officer
June 14, 1976



ZONES	STATIONS
OA	OA-1 TO OA-12
1A	1A-1, 1A-2
2A	2A-1, 2A-2
2B	2B-1
3A	3A-1
6	6-1 TO 6-5

Figure 1

HYDROGRAPHIC MONITORING STATIONS



ENVIRONMENTAL SURVEILLANCE ZONES

Suspended Sediments taken at stations:
1, 2, 10 & 14.

Bottom Sediments taken at stations:
1, 4, 5, 6, 7, 8, 9, 10, 11, 14, 23, 24, 27, 28, 35, EO, CO, DO & EO.

Δ All temperature-depth profile stations and all turbidity stations.

FIGURE 2

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

REPORTING REQUIREMENTS

1. The discharger shall file with the Board and the Regional Administrator of the Environmental Protection Agency technical reports on self-monitoring work performed according to the detailed specifications contained in any Monitoring and Reporting Program as directed by the Executive Officer.

*2. The discharger shall file a written report with the Board within 90 days after the average dry-weather waste flow for any month equals or exceeds 75 percent of the design capacity of his waste treatment and/or disposal facilities. The discharger's senior administrative officer shall sign a letter which transmits that report and certifies that the policymaking body is adequately informed about it. The report shall include:

   Average daily flow for the month, the date on which the instantaneous peak flow occurred, the rate of that peak flow, and the total flow for that day.

   The discharger's best estimate of when the average daily dry-weather flow rate will equal or exceed the design capacity of his facilities.

   The discharger's intended schedule for studies, design, and other steps needed to provide additional capacity for his waste treatment and/or disposal facilities before the waste flow rate equals the capacity of present units. (Reference: Sections 13260, 13267(e), and 13268, California Water Code.)

**3. The discharger shall notify the Board not later than 180 days in advance of implementation of any plans to alter production capacity of the product line of the manufacturing, producing or processing facility by more than ten percent. Such notification shall include estimates of proposed production rate, the type of process, and projected effects on effluent quality. Notification shall include submittal of a new Report of Waste Discharge and appropriate filing fee.

**4. The discharger shall notify the Board of (a) new introduction into such works of pollutants from a source which would be a new source as defined in Section 306 of the Federal Water Pollution Control Act, or amendments thereto, if such source were discharging pollutants to the waters of the United States, (b) new introductions of pollutants into such works from a source which would be subject to Section 301 of the Federal Water

---

* Publicly owned facilities only
** For nonpublic facilities only

Pollution Control Act, or amendments thereto, if it were discharging such pollutants to the waters of the United States, (c) a substantial change in the volume or character of pollutants being introduced into such works by a source introducing pollutants into such works at the time the waste discharge requirements were adopted. Notice shall include a description of the quantity and quality of pollutants and the impact of such change on the quantity and quality of effluent from such publicly owned treatment works. A substantial change in volume is considered an increase of ten percent in the mean dry-weather flow rate. The discharger shall forward a copy of such notice directly to the Regional Administrator.

5. The discharger shall file with the Board a Report of Waste Discharge at least 120 days before making any material change or proposed change in the character, location or volume of discharge.

**6. This Board requires the discharger to file with the Board, within 90 days after the effective date of this Order, a technical report on his preventive (fail-safe) and contingency (cleanup) plans for controlling accidental discharges, and for minimizing the effect of such events. The technical report should:

Identify the possible sources of accidental loss, untreated waste bypass, and contaminated drainage. Loading and storage areas, power outage, waste treatment unit outage, and failure of process equipment, tanks and pipes should be considered.

Evaluate the effectiveness of present facilities and procedures and state when they became operational.

Describe facilities and procedures needed for effective preventive and contingency plans.

Predict the effectiveness of the proposed facilities and procedures and provide an implementation schedule containing interim and final dates when they will be constructed, implemented, or operational. (Reference: Sections 13267(b) and 13268, California Water Code.)

This Board, after review of the technical report, may establish conditions which it deems necessary to control accidental discharges and to minimize the effects of such events. Such conditions may be incorporated as part of this Order, upon notice to the discharger.

**7. The discharger shall submit to the Board, by January 30 of each year, an annual summary of the quantities of all chemicals listed by both trade and chemical names, which are used for cooling and/or boiling water treatment and which are discharged.

** For nonpublic facilities only

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

STANDARD PROVISIONS

1. THE REQUIREMENTS PRESCRIBED HEREIN DO NOT AUTHORIZE THE COMMISSION OF ANY ACT CAUSING INJURY TO THE PROPERTY OF ANOTHER, NOR PROTECT THE DISCHARGER FROM HIS LIABILITIES UNDER FEDERAL, STATE, OR LOCAL LAWS, NOR GUARANTEE THE DISCHARGER A CAPACITY RIGHT IN THE RECEIVING WATERS.

2. THE DISCHARGE OF ANY RADIOLOGICAL, CHEMICAL, OR BIOLOGICAL WARFARE AGENT OR HIGH LEVEL RADIOLOGICAL WASTE IS PROHIBITED.

*3. THE DISCHARGER SHALL REQUIRE ANY INDUSTRIAL USER OF THE TREATMENT WORKS TO COMPLY WITH APPLICABLE SERVICE CHARGES AND TOXIC AND PRETREATMENT STANDARDS PROMULGATED IN ACCORDANCE WITH SECTIONS 204(B), 307, AND 308 OF THE FEDERAL WATER POLLUTION CONTROL ACT OR AMENDMENTS THERETO. THE DISCHARGER SHALL REQUIRE EACH INDIVIDUAL USER TO SUBMIT PERIODIC NOTICE (OVER INTERVALS NOT TO EXCEED NINE MONTHS) OF PROGRESS TOWARD COMPLIANCE WITH APPLICABLE TOXIC AND PRETREATMENT STANDARDS DEVELOPED PURSUANT TO THE FEDERAL WATER POLLUTION CONTROL ACT OR AMENDMENTS THERETO. THE DISCHARGER SHALL FORWARD A COPY OF SUCH NOTICE TO THE BOARD AND THE REGIONAL ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY.

4. THE DISCHARGER SHALL PERMIT THE REGIONAL BOARD:

   (A) ENTRY UPON PREMISES IN WHICH AN EFFLUENT SOURCE IS LOCATED OR IN WHICH ANY REQUIRED RECORDS ARE KEPT;

   (B) ACCESS TO COPY ANY RECORDS REQUIRED TO BE KEPT UNDER TERMS AND CONDITIONS OF THIS ORDER;

   (C) INSPECTION OF MONITORING EQUIPMENT OR RECORDS, AND

   (D) SAMPLING OF ANY DISCHARGE.

5. ALL DISCHARGES AUTHORIZED BY THIS ORDER SHALL BE CONSISTENT WITH THE TERMS AND CONDITIONS OF THIS ORDER. THE DISCHARGE OF ANY POLLUTANT MORE FREQUENTLY THAN OR AT A LEVEL IN EXCESS OF THAT IDENTIFIED AND AUTHORIZED BY THIS ORDER SHALL CONSTITUTE A VIOLATION OF THE TERMS AND CONDITIONS OF THIS ORDER.

6. THE DISCHARGER SHALL MAINTAIN IN GOOD WORKING ORDER AND OPERATE AS EFFICIENTLY AS POSSIBLE ANY FACILITY OR CONTROL SYSTEM INSTALLED BY THE DISCHARGER TO ACHIEVE COMPLIANCE WITH THE WASTE DISCHARGE REQUIREMENTS.

---

* PUBLICLY OWNED FACILITIES ONLY

7. COLLECTED SCREENINGS, SLUDGES, AND OTHER SOLIDS REMOVED FROM LIQUID WASTES SHALL BE DISPOSED OF AT A LEGAL POINT OF DISPOSAL, AND IN ACCORDANCE WITH THE PROVISIONS OF DIVISION 7.5 OF THE CALIFORNIA WATER CODE. FOR THAT PURPOSE OF THIS REQUIREMENT, A LEGAL POINT OF DISPOSAL IS DEFINED AS ONE FOR WHICH WASTE DISCHARGE REQUIREMENTS HAVE BEEN PRESCRIBED BY A REGIONAL WATER QUALITY CONTROL BOARD AND WHICH IS IN FULL COMPLIANCE THEREWITH.

8. AFTER NOTICE AND OPPORTUNITY FOR A HEARING, THIS ORDER MAY BE TERMINATED OR MODIFIED FOR CAUSE, INCLUDING, BUT NOT LIMITED TO:

   (A) VIOLATION OF ANY TERM OR CONDITION CONTAINED IN THIS ORDER;

   (B) OBTAINING THIS ORDER BY MISREPRESENTATION, OR FAILURE TO DISCLOSE FULLY ALL RELEVANT FACTS;

   (C) A CHANGE IN ANY CONDITION THAT REQUIRES EITHER A TEMPORARY OR PERMANENT REDUCTION OR ELIMINATION OF THE AUTHORIZED DISCHARGE.

9. IF A TOXIC EFFLUENT STANDARD OR PROHIBITION (INCLUDING ANY SCHEDULE OF COMPLIANCE SPECIFIED IN SUCH EFFLUENT STANDARD OR PROHIBITION) IS ESTABLISHED UNDER SECTION 307(A) OF THE FEDERAL WATER POLLUTION CONTROL ACT, OR AMENDMENTS THERETO, FOR A TOXIC POLLUTANT WHICH IS PRESENT IN THE DISCHARGE AUTHORIZED HEREIN AND SUCH STANDARD OR PROHIBITION IS MORE STRINGENT THAN ANY LIMITATION UPON SUCH POLLUTANT IN THIS ORDER, THE BOARD WILL REVISE OR MODIFY THIS ORDER IN ACCORDANCE WITH SUCH TOXIC EFFLUENT STANDARD OR PROHIBITION AND SO NOTIFY THE DISCHARGER.

10. THERE SHALL BE NO DISCHARGE OF HARMFUL QUANTITIES OF OIL OR HAZARDOUS SUBSTANCES, AS SPECIFIED BY REGULATION ADOPTED PURSUANT TO SECTION 311 OF THE FEDERAL WATER POLLUTION CONTROL ACT, OR AMENDMENTS THERETO.

11. IN THE EVENT THE DISCHARGER IS UNABLE TO COMPLY WITH ANY OF THE CONDITIONS OF THIS ORDER DUE TO:

   (A) BREAKDOWN OF WASTE TREATMENT EQUIPMENT;

   (B) ACCIDENTS CAUSED BY HUMAN ERROR OR NEGLIGENCE; OR

   (C) OTHER CAUSES SUCH AS ACTS OF NATURE,

   THE DISCHARGER SHALL NOTIFY THE EXECUTIVE OFFICER BY TELEPHONE AS SOON AS HE OR HIS AGENTS HAVE KNOWLEDGE OF THE INCIDENT AND CONFIRM THIS NOTIFICATION IN WRITING WITHIN TWO WEEKS OF THE TELEPHONE NOTIFICATION. THE WRITTEN NOTIFICATION SHALL INCLUDE PERTINENT INFORMATION EXPLAINING REASONS FOR THE NONCOMPLIANCE AND SHALL INDICATE WHAT STEPS WERE TAKEN TO CORRECT THE PROBLEM AND THE DATES THEREOF, AND WHAT STEPS ARE BEING TAKEN TO PREVENT THE PROBLEM FROM RECURRING.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

GENERAL MONITORING AND REPORTING PROVISIONS

GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

UNLESS OTHERWISE NOTED, ALL SAMPLING, SAMPLE PRESERVATION, AND ANALYSES SHALL CONFORM TO THE U. S. ENVIRONMENTAL PROTECTION AGENCY APPROVED TEST PROCEDURES FOR THE ANALYSIS OF POLLUTANTS DESCRIBED IN PART 136, VOLUME 38 (NO. 199) OF FEDERAL REGISTER PUBLISHED ON OCTOBER 16, 1973, OR THE LATEST EDITION OF FEDERAL REGISTER, OR AS APPROVED BY THE EXECUTIVE OFFICER. ALL ANALYSES SHALL BE PERFORMED IN A LABORATORY CERTIFIED TO PERFORM SUCH ANALYSES BY THE CALIFORNIA STATE DEPARTMENT OF PUBLIC HEALTH OR A LABORATORY APPROVED BY THE EXECUTIVE OFFICER.

EFFLUENT SAMPLES SHALL BE TAKEN DOWNSTREAM OF ANY ADDITION TO THE TREATMENT WORKS AND PRIOR TO MIXING WITH THE RECEIVING WATERS.

THE DISCHARGER SHALL CALIBRATE AND PERFORM MAINTENANCE PROCEDURES ON ALL MONITORING INSTRUMENTS AND EQUIPMENT TO INSURE ACCURACY OF MEASUREMENTS, OR SHALL INSURE THAT BOTH ACTIVITIES WILL BE CONDUCTED.

A GRAB SAMPLE IS DEFINED AS AN INDIVIDUAL SAMPLE COLLECTED IN FEWER THAN 15 MINUTES.

A COMPOSITE SAMPLE IS DEFINED AS A COMBINATION OF NO FEWER THAN EIGHT INDIVIDUAL SAMPLES OBTAINED OVER THE SPECIFIED SAMPLING PERIOD. THE VOLUME OF EACH INDIVIDUAL SAMPLE IS PROPORTIONAL TO THE DISCHARGE FLOW RATE AT THE TIME OF SAMPLING. THE SAMPLING PERIOD SHALL EQUAL THE DISCHARGE PERIOD, OR 24 HOURS, WHICHEVER PERIOD IS SHORTER.

GENERAL PROVISIONS FOR REPORTING

FOR EVERY ITEM WHERE THE REQUIREMENTS ARE NOT MET, THE DISCHARGER SHALL SUBMIT A STATEMENT OF THE ACTIONS UNDERTAKEN OR PROPOSED WHICH WILL BRING THE DISCHARGE INTO FULL COMPLIANCE WITH REQUIREMENTS AT THE EARLIEST TIME AND SUBMIT A TIME-TABLE FOR CORRECTION.

BY JANUARY 30 OF EACH YEAR, THE DISCHARGER SHALL SUBMIT AN ANNUAL REPORT TO THE BOARD. THE REPORT SHALL CONTAIN BOTH TABULAR AND GRAPHICAL SUMMARIES OF THE MONITORING DATA OBTAINED DURING THE PREVIOUS YEAR. IN ADDITION, THE DISCHARGER SHALL DISCUSS THE COMPLIANCE RECORD AND THE CORRECTIVE ACTIONS TAKEN OR PLANNED WHICH MAY BE NEEDED TO BRING THE DISCHARGE INTO FULL COMPLIANCE WITH THE WASTE DISCHARGE REQUIREMENTS.

GENERAL MONITORING AND REPORTING PROVISIONS

THE DISCHARGER SHALL MAINTAIN ALL SAMPLING AND ANALYTICAL RESULTS, INCLUDING STRIP CHARTS; DATE, EXACT PLACE, AND TIME OF SAMPLING; DATE ANALYSES WERE PERFORMED; ANALYST'S NAME; ANALYTICAL TECHNIQUES USED; AND RESULTS OF ALL ANALYSES. SUCH RECORDS SHALL BE RETAINED FOR A MINIMUM OF THREE YEARS. THIS PERIOD OF RETENTION SHALL BE EXTENDED DURING THE COURSE OF ANY UNRESOLVED LITIGATION REGARDING THIS DISCHARGE OR WHEN REQUESTED BY THE BOARD AND THE REGIONAL ADMINISTRATOR OF THE ENVIRONMENTAL PROTECTION AGENCY. MONITORING RESULTS SHALL BE SUBMITTED ON FORMS PROVIDED BY THE BOARD.

MONITORING REPORTS SHALL BE SIGNED BY:

(A) IN THE CASE OF CORPORATIONS, BY A PRINCIPAL EXECUTIVE OFFICER AT LEAST OF THE LEVEL OF VICE-PRESIDENT OR HIS DULY AUTHORIZED REPRESENTATIVE IS RESPONSIBLE FOR THE OVERALL OPERATION OF THE FACILITY FROM WHICH THE DISCHARGE ORIGINATES;

(B) IN THE CASE OF A PARTNERSHIP, BY A GENERAL PARTNER;

(C) IN THE CASE OF A SOLE PROPRIETORSHIP, BY THE PROPRIETOR;

(D) IN THE CASE OF A MUNICIPAL, STATE OR OTHER PUBLIC FACILITY, BY EITHER A PRINCIPAL EXECUTIVE OFFICER, RANKING ELECTED OFFICIAL, OR OTHER DULY AUTHORIZED EMPLOYEE.

THE DISCHARGER SHALL MAIL A COPY OF EACH MONITORING REPORT ON THE APPROPRIATE FORM TO BE SUPPLIED BY THE BOARD TO:

EXECUTIVE OFFICER
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
6154 MISSION GORGE ROAD, SUITE 205
SAN DIEGO, CALIFORNIA 92120

REGIONAL ADMINISTRATOR
ENVIRONMENTAL PROTECTION AGENCY
100 CALIFORNIA STREET
SAN FRANCISCO, CALIFORNIA 94111

ATTENTION: PERMITS BRANCH

PART 4. BOND ISSUE

4.1 Estimated total amount of the financing with a tabulation of proposed use of bond proceeds.

$225,000,000

4.1.1 Project cost (from Part 3).

$181,000,000

4.1.2 Legal, printing and related fees.

Rating Fee	$ 50,000
PUC Filing Fee	118,500
Printing	65,000
Accounting Fee	10,000
Legal	100,000
Trustee	50,000
Miscellaneous	21,500
	$415,000

4.1.3 Financing costs and fees.

Underwriters Discount	$5,625,000

4.1.4 Capitalized interest.

$36,835,000

4.1.5 Other costs, including CPCFA and guarantee fees.

Administrative fee which includes

$5,000 filing fee $1,125,000

4.2 Estimated target date of financing.

Before 12/31/83.

4.3 Estimated terms of financing.

Still to be determined.

4.4 Type of bond sale (private placement, underwritten offering).

Still to be determined.

PART 5. PUBLIC BENEFITS

5.1 Description of the benefits that will accrue to the public as a result of the installation of this facility and the use of this method of financing, vis-a-vis a conventional method.

The benefits to be realized by the San Onofre Nuclear Generating Station Unit 3 pollution control systems are a reduction of impact to the immediate environment and maintenance of the beneficial uses of the adjacent public lands and the coastal waters of the Pacific Ocean, as established in the Comprehensive Water Quality Control Plan Report, San Diego Basin (9).

Total costs associated with the pollution control systems are estimated to be $225 million. Those construction costs incurred to date have been funded through the Company's general treasury. Without authorization from the California Pollution Control Financing Authority (CPCFA) to pursue tax-exempt financing, the Company's treasury would be reimbursed, and the future construction costs funded, primarily through the public issuance of conventional mortgage bonds. Accordingly, the Company's ability to finance the facilities on a tax-exempt basis provides a vehicle for substantially lowering interest costs. The interest rate advantage of tax-exempt securities over conventional mortgage debt has been at least 200 basis points and is currently 300 basis points. This translates to estimated annual interest savings of $5 to $6 million over the life of the facilities. Such savings could double depending on the type of securities issued.

Under established rate making policy of the California Public Utilities Commission (CPUC), the full benefit of interest savings accrue directly to the Company's customers via a reduction in the embedded cost of debt. The embedded cost of debt represents the weighted average cost of all outstanding debt securities, which when combined with the costs of preferred stock and common equity, comprises the

Company's cost of capital. The cost of capital is a major component of the Company's revenue requirement which represents annual revenues to be obtained from rates charged to customers. Accordingly, the interest savings derived through tax-exempt financing would be fully reflected through reductions to the future rates charged to the Company's customers.

The Company's service territory comprises 50,000 square miles of southern and central California with a population of more than 9 million. The Company's customers, not only residential but agricultural, commercial and industrial will receive the benefit of the lower costs associated with tax-exempt financing. Approximately 54% of the Company's revenues from energy sales come from commercial and industrial users. The lower financing costs provide these customers with an economic benefit which may further accrue to the general public. The Company also provides energy sales to public authorities and other public utilities, both municipal and investor owned. The benefits of lower cost financing will also directly benefit these customers and their constituencies.

APPLICANT CERTIFICATION

I hereby certify that the foregoing application, to the best of my knowledge and belief, contains no false or incorrect information or data; and the application, including exhibits and attachments hereto, is descriptive of the project.

I further represent that Southern California Edison Company is familiar with the provisions of the California Pollution Control Financing Authority Act and its regulations, as amended.

H. L. Noel
Vice President and Treasurer

Dated October 27, 1983

2573t

MEMO TO Mr. Harry Rood

November 19, 1984
DATE PREPARED

SUBJECT: NRR Certification of Pollution Control Systems
San Onofre Units 2 & 3

On December 30, 1983, NRR certified the design of certain San Onofre Unit 3 pollution control facilities. Consistent with this December 30, 1983 NRR certification, the California Pollution Control Financing Authority has recently requested that the NRC certify the design of additional pollution control facilities at Units 2 & 3 which are described in the SCE August 31, 1984 Supplement to the previous application for financing.

Enclosed, please find 2 copies of information pertinent to this certification request, which was forwarded to Mr. Edson G. Case from NRC Region V on approximately November 1, 1984. It is requested that the NRR certification be provided to the California Pollution Control Financing Authority by December 10, 1984.

If you have any questions or need additional information, please contact Mr. T. Derrick Mercurio (818/302-2645) or your Mr. L. Chandler may wish to contact Mr. D. R. Pigott (415/392-1122) who is representing SCE in this matter.

cc: P. Neel
D. R. Pigott
NRC Files

From F. R. NANDY

FRN by

C-8

SHAW, PITTMAN, POTTS & TROWBRIDGE

A PARTNERSHIP OF PROFESSIONAL CORPORATIONS

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WASHINGTON, D. C. 20036

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TELECOPIER

(202) 822-1090 & 822-1091

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TELEX

89 2503 (SHAWLAW WSH)

CABLE "SHAWLAW"

JOHN F. DEALY*

B. SCOTT CUSTER, JR.

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DEAN D. AULICK, P.C.

JOHN ENGEL, P.C.
C. THOMAS HICKS III, P.C.
CHARLES B. TENKIN, P.C.
STEPHEN B. HUTTLER, P.C.
WINTHROP N. BROWN, P.C.
JAMES B. HANLIN, P.C.
RANDALL B. REAL, P.C.
ROBERT E. ZAHLER, P.C.
ROBERT B. ROBBINS, P.C.
STEVEN M. LUCAS, P.C.
DAVID M. RUBENSTEIN, P.C.
MATIAS F. TRAVIESO-DIAZ, P.C.
VICTORIA J. PERKINS, P.C.
JOHN M. O'NEILL, JR., P.C.
JAY A. EPSTEIN, P.C.
JEFFERY L. TAELON, P.C.
JACK MCKAY, P.C.
RICHARD E. SALEN
ELISABETH W. PENDLETON
HARRY H. GLASSPIEGEL
THOMAS H. MCCORMICK
GILLIAN P. BARR
CHARLES H. MONTANGE
JEAN M. GALLOWAY
JOHN L. CARR, JR.
PHILIP J. HARVEY
ROBERT M. GORDON
BARBARA J. MORGEN
BONNIE S. GOTTLIEB
HOWARD M. SHAFFERMAN

DEBORAH B. BAUER
SCOTT A. ARENBERG
CAMPBELL BILLEPES
PAUL M. THOMAS
JOHN M. BAYSON, II
GEORGE F. ALBRIGHT, JR.*
DAVID J. GYNAMON
SETH M. HOOGASIAN
SHEILA MCC. HARVEY
DE LISSA A. RIDGWAY
KENNETH J. NAUTMAN
DAVID LAWRENCE MILLER
FREDERICK L. KLEIN
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ELLEN A. FREDEL
ROBERT C. BOEHM
MARIE N. POLAND
THOMAS C. HILL
DIANE E. BURKLEY
L. DUANE CHEEK
HANNAH E. M. LIEBERMAN
JUDITH A. SANDLER
EDWARD D. YOUNG, III
ANDREW D. ELLIS
RICHARD A. SAMP
THOMAS E. CROCKER, JR.
YUKI R. HAMOMO
PETER J. FERRARA
HELEN TORELLI

MARTHA BOONE ROWAN*
KENNETH R. MILLER
WENDELIN A. WHITE
STANLEY W. BANG
LESLIE R. SMITH
VIRGINIA S. RUTLEDGE
KATHERINE P. CHEEK
TRAVIS T. BROWN, JR.
RICHARD M. KROHNTHAL
STEPHEN B. HEIMANN
SANDRA E. BRUSCA
EILEEN L. BROWNELL
PAMELA W. ANDERSON
ALEXANDER D. TOMASZCZUK
JEFFREY J. A. GIBBS
LAURENCE W. COHEN
PHILIP D. PORTER
MICHAEL A. SWIGER
ELLEN SHERIFF
ANITA J. FINKELSTEIN
EILEEN M. GLEMER
DAVID M. BAHR
C. BOWDOIN TRAIN
JEFFREY W. KAMPELMAN
KENNETH A. GALLO
KENNETH D. AUERBACH
ALAN D. WASSERMAN
DAVID K. RYAN
RICHARD A. BECKER
GILBERT WASHINGTON II

* NOT ADMITTED IN D.C.

WRITER'S DIRECT DIAL NUMBER
(202)822-1084

May 4, 1984

RECEIVED
NUCLEAR RECORDS

MAY 8 1984

ILN: 84-1527

Sherwin E. Turk, Esquire
Office of Executive Legal Director
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Turk:

I enclose for NRC review and requested execution a certificate of pollution control facilities related to Unit 3 of the Waterford Steam Electric Generating Station in Taft, Louisiana. The format is based on past NRC certifications of this type related to other facilities.

Please address any questions you may have regarding this matter and return the executed certificate to me. It is hoped that the certificate could be completed and returned by May 31, 1984, however, if this schedule cannot be met, please advise promptly.

Sincerely,

Ernest L. Blake, Jr.

Ernest L. Blake, Jr.,
Counsel for Louisiana Power & Light

Enclosure

bcc: Chadi Groome

C2

CERTIFICATE

UNIT 3 (NUCLEAR) WATERFORD STEAM ELECTRIC GENERATING STATION

POLLUTION CONTROL FACILITIES

The Nuclear Regulatory Commission (the NRC) hereby certifies as follows:

(a) that it has examined Exhibit A attached hereto which is entitled "General Description of the Facilities" and which describes certain facilities which have been constructed, are under construction or are to be constructed at the Unit 3 (Nuclear) Waterford Steam Electric Generating Station, a nuclear electric power generating plant located in St. Charles Parish at Taft, Louisiana, which plant is owned by Louisiana Power & Light Company; and

(b) that such facilities, as designed, are in furtherance of the purpose of abating or controlling atmosphere pollutants or contaminants or water pollutants resulting from the generation of electricity at the Unit 3 (Nuclear) Waterford Steam Electric Generating Station.

For the Nuclear Regulatory Commission

Edson G. Case, Deputy Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this _____ day of _____, 1984.

GENERAL DESCRIPTION OF THE FACILITIES Exhibit A

STEAM GENERATOR BLOWDOWN WASTE TREATMENT SYSTEM

The steam generator blowdown waste treatment system processes and treats effluent from the steam generator blowdown system through electromagnetic filters to remove magnetic corrosion particles and demineralizers to remove dissolved solids prior to effluent discharge to the environment.

The system consists of that portion of the steam generator blowdown system that is for cleanup of regeneration and filter flush wastes, including the regenerative waste tank, the filter flush tank, the acid storage tank, the caustic storage tank, and associated pumps, piping, wiring and instrumentation.

CONDENSATE POLISHER WASTE TREATMENT SYSTEM

The condensate polisher waste treatment system disposes of demineralizer filter backwash from the condensate polishing system.

The backwash treatment equipment will process backwash water containing spent resins, corrosion products and particulates. The system consists of the backwash transfer pump, the dewatering filter, the holding tank, the backwash recovery pump, the polishing filter, the polishing filter drain pump, the fluffing pump, the treated water backwash storage tank and associated piping, wiring, sump pumps, motors and instrumentation.

LIQUID RADIOACTIVE WASTE TREATMENT SYSTEM

The liquid radioactive waste treatment system processes and disposes of liquid radiological effluents to maintain plant discharges at ALARA (as low as reasonably achievable) levels, in accordance with 10 CFR 50, Appendix I. The liquid radioactive waste treatment system is comprised of three subsystems: the low level liquid waste subsystem, the boron management subsystem and the laundry waste management system, which are described below.

Low Level Liquid Waste Subsystem:

The low level liquid waste subsystem collects potentially radioactive liquids from various plant systems and processes and treats them to remove both radioactive and nonradioactive contamination prior to discharging the effluent to the environment.

This subsystem includes the auxiliary boiler, two waste batching tanks, the oil filter and separator, the waste filter, the waste concentrator, the waste condensate ion exchanger, the waste condensate tank and associated pumps, drives, piping, wiring, drains, sumps, instrumentation and radiation monitoring equipment.

Boron Management Subsystem:

The boron management subsystem removes boron and low level radioactivity from reactor coolant blowdown, thereby reducing the concentration of boron discharged to within applicable regulatory limits.

The system consists of the reactor drain tank, the equipment drain tank, the flash tank, the holdup tank, the boric acid precondensate filters and ion exchangers, boric acid concentrators, the boric acid condensate ion exchangers, boric acid condensate tanks, heat tracing, thermal insulation, associated pumps and motors, piping, wiring and radiation monitors.

Laundry Waste Management Subsystem:

The laundry waste management subsystem collects, treats and disposes of liquid detergent wastes from the laundry, laundry sump, contaminated showers and sinks, and the chemistry laboratory dishwasher.

This system includes the laundry waste tanks and filter, piping, pumps, motors and associated electrical and mechanical equipment.

GASEOUS WASTE MANAGEMENT SYSTEM

The gaseous waste management system collects, stores, samples and monitors and disposes of potentially radioactive gaseous wastes generated during normal plant operations. This system insures that releases of radioactive materials are ALARA, in accordance with 10 CFR 50, Appendix I.

The system consists of the gas surge tank, the waste gas decay tanks, the waste gas compressors, the gas analyzers, filters, fans and related piping, wiring, instrumentation and radiation monitoring equipment.

SOLID WASTE MANAGEMENT SYSTEM

The solid waste management system prepares solid wastes for disposal and storage. This system is comprised of the following subsystems: the solid waste subsystem, the resin waste management subsystem, the compactor building and storage pad, the hot machine shop/decontamination station and hot laundry. The system processes, packages and stores high activity liquid and solid radioactive wastes and low activity solid radioactive wastes prior to shipment for offsite burial. The wastes processed through this system include waste concentrator bottoms, spent ion exchange resins, used filter cartridges and miscellaneous refuse (dry active waste).

Solid Waste Subsystem:

The solid waste subsystem treats waste concentrates and chemical wastes from the waste and boric acid concentrators, and the chemical waste tank.

Solid Waste Subsystem: (Continued)

The subsystem consists of a concentrate storage tank and metering pump and associated piping, pumps, wiring and instrumentation.

Resin Waste Management Subsystem:

The resin waste management subsystem treats spent radioactive ion exchanger resin from the various process demineralizers. Resin wastes are collected, stored and transferred to the portable solidification system.

The subsystem includes the spent resin tank and transfer pump, the spent resin sampling system and control panel and associated piping, pumps, wiring and instrumentation.

Compactor Building and Storage Pad:

The compactor building houses equipment for the sorting and packaging of dry active waste (miscellaneous contaminated refuse such as protective clothing, gloves, paper and boxes). The interim radwaste storage pad provides a secure area for the retention and storage of processed radwaste until an off-site disposal site is available.

The major equipment in the Compactor Building consists of the granulator (shredding machine), compactor, sorting cabinets, a forklift, platform scale and air filtration equipment.

Hot Machine Shop/Decontamination Station:

The Hot Machine Shop/Decontamination Station provides facilities to decontaminate and repair tools and system components which have become radioactively contaminated while in use in the Plant. Equipment located in the Hot Machine Shop includes lathes, a drill press, milling machines, a valve lapping machine, grinders, a radial drill and a power saw. The Decontamination Station is equipped with an ultrasonic cleaning assembly, a spray booth and associated apparatus, rinse tanks, a work bench, fume hoods, a radiation monitor, and monorails for moving heavy equipment.

Hot Laundry:

The Hot Laundry, located in the Reactor Auxiliary Building, provides onsite facilities to launder contaminated protective clothing prior to reuse. There are two washing machines and three dryers. The laundry room drains are plumbed into the Liquid Radioactive Waste Treatment System for treatment prior to discharge to the environment.