

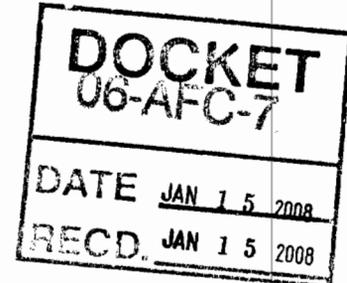


CH2MHILL

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January 15, 2008

Mr. John Kessler
Project Manager
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814



**Re: Humboldt Bay Repowering Project (06-AFC-7)
Amendment to Facility License**

Dear Mr. Kessler:

On behalf of the Pacific Gas and Electric Company, please find attached one original and 12 copies of the Amendment to Facility License (Amendment No. 23, License No. DPR-7).

If you have any questions about this matter, please contact me at (916) 286-0278 or Susan Strachan at (530) 220-7038.

Sincerely,

for

Douglas M. Davy, Ph.D.
AFC Project Manager

Attachment

cc: G. Lamberg
S. Strachan



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

PACIFIC GAS AND ELECTRIC COMPANY

DOCKET NO. 50-133

HUMBOLDT BAY POWER PLANT, UNIT NO. 3

AMENDMENT TO FACILITY LICENSE

Amendment No. 23
License No. DPR-7

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment filed by Pacific Gas and Electric Company (the licensee), dated July 30, 1984 as revised by letters dated February 28, 1985 through May 23, 1988, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations as set forth in 10 CFR Chapter I;
 - B. The facility will be maintained in conformity with the application, the provisions of the Act, and the regulations of the Commission;
 - C. There is reasonable assurance: (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations set forth in 10 CFR Chapter I;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, Facility License No. DPR-7 is hereby amended in its entirety to read as follows:

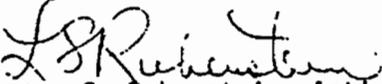
7/19/88

LVIII

- A. This license applies to the Humboldt Bay Power Plant Unit No. 3, consisting of a boiling water reactor (the facility) and associated components and equipment, which is owned by Pacific Gas and Electric Company (the licensee) and located in Humboldt County, California, and described in the licensee's application dated April 27, 1959, as amended.
- B. Subject to the conditions and requirements incorporated herein, the Commission hereby licenses Pacific Gas and Electric Company:
1. Pursuant to Section 104b of the Act and Title 10, CFR, Chapter I, Part 50, "Domestic Licensing of Production and Utilization Facilities," to possess but not operate the facility as a utilization facility at the designated located in Humboldt County, California and to place and maintain the facility in a SAFSTOR status as described in the licensee's Decommissioning Plan dated July 30, 1984 as revised.
 2. Pursuant to the Act and Title 10, CFR, Chapter I, Part 70, "Domestic Licensing of Special Nuclear Material", to possess and use
 - (a) 2 grams of uranium-235 in miniature ionization chambers;
 - (b) 10 grams of uranium-235 in ionization chambers; and
 - (c) 100 grams of plutonium encapsulated plutonium-beryllium neutron sources;and to possess
 - (d) 1000 kilograms of contained uranium-235 at any one time."
 3. Pursuant to the Act and Title 10, CFR, Chapter I, Part 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material", to receive, possess and use a maximum of:
 - (a) 12,000 curies of Antimony-124 in the form of two Antimony cylinders (for use in Antimony-Beryllium neutron sources) and 3000 curies of Antimony-124 in the form of two Antimony cylinders (for use in Antimony-Beryllium neutron sources) in storage awaiting transfer offsite;
 - (b) 30 curies of cobalt 60 in the form of two sealed sources; and
 - (c) 1 curie of various byproduct materials between atomic numbers 3 and 83 inclusive, and each of the radionuclides Am-241 and Ra-226, in any form, but not to exceed 100 millicuries of any one isotope.

4. Pursuant to the Act and Title 10, CFR, Chapter I, Parts 30 and 70, to possess, but not to separate, such byproduct and special nuclear materials which were produced by operation of the reactor.
- C. This license shall be deemed to contain and is subject to the conditions specified in Part 20, Section 30.34 of Part 30, Section 40.41 of Part 40, Section 50.54 and 50.59 of Part 50, and Section 70.32 of Part 70, of the Commission's regulations, and is subject to all applicable regulations and orders of the Commission now or hereafter in effect, and is subject to the additional conditions specified or incorporated below.
1. The licensee shall fully implement and maintain in effect all provisions of the physical security plan previously approved by the Commission and all amendments and revisions made pursuant to the authority of 10 CFR Part 50.90 and 10 CFR Part 50.54(p). The plan, which contains Safeguards Information protected under 10 CFR Part 73.21, is entitled: "Humboldt Bay Power Plant, Unit No. 3, Physical Security Plan," with revisions submitted through November 17, 1986. The Guard Training and Qualification Plan and the Safeguards Contingency Plan are incorporated into the Physical Security Plan as Chapters 6 and 9, respectively.
 2. Technical Specification
The Technical Specifications contained in Appendix A as revised through Amendment No. 23, are hereby incorporated in the license. The licensee shall maintain the facility in accordance with the Technical Specifications."
- D. This license amendment is effective as of the date of issuance and shall expire at midnight, November 9, 2015.

FOR THE NUCLEAR REGULATORY COMMISSION


Lester S. Rubenstein, Acting Director
Standardization and Non-Power
Reactor Project Directorate
Division of Reactor Projects III, IV,
V and Special Projects
Office of Nuclear Reactor Regulation

Enclosure:
Appendix A - Technical
Specifications

Date of Issuance: July 19, 1988



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

LBI-3
Attachment 2.1
Rev. 5-11/91
Page 1 of 9

SAFETY EVALUATION REPORT SUPPLEMENT 1
BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 23 TO FACILITY LICENSE NO. DPR-7
INCLUDING APPROVAL OF DECOMMISSIONING PLAN FOR
HUMBOLDT BAY POWER PLANT
UNIT NO. 3
DOCKET NO. 50-133

1.0 INTRODUCTION

Humboldt Bay Power Plant Unit No. 3 (Humboldt Bay Unit 3) has been shut down since July 2, 1976. In 1983, Pacific Gas and Electric Company (the licensee) decided to decommission Humboldt Bay Unit 3 and subsequently submitted a Proposed Decommissioning Plan, Proposed Technical Specifications (TS) and an Environmental Report (Schuyler, July 30, 1984). The licensee proposed (1) to amend License No. DPR-7 to possess-but-not-operate status; (2) to delete certain license conditions related to seismic modifications required before the NRC would authorize a return to power operation; (3) to revise the TS to reflect the possess-but-not-operate status; (4) to decommission Humboldt Bay Unit 3 in accordance with the plan included with the submittal; and (5) to extend License No. DPR-7 for 15 additional years, to November 9, 2015, to be consistent with the Decommissioning Plan.

In response, the NRC issued License Amendment No. 19 on July 16, 1985 (NRC, 1985) revising License No. DPR-7 to possess-but-not-operate status (Item 1 above) and published a Notice of Opportunity for Prior Hearing in the FEDERAL REGISTER on July 3, 1986 related to the remaining items in the proposed amendment. Pursuant to that notice, members of the public petitioned for leave to intervene and requested a hearing. Their request was granted by Atomic Safety and Licensing Board No. 86-536-07 LA (the Board).

By letters dated April 29 and May 6, 1987, respectively the NRC issued a Safety Evaluation Report (SER) and a Final Environmental Statement (FES) with respect to the above proposed amendment. Copies of the SER and FES were also provided to the Board on May 1 and May 8, 1987 respectively.

On February 9, 1988, the Board issued an order which dismissed all contentions and terminated the proceeding following a settlement of all disputed issues between the intervenors, the licensee and the NRC staff.

The SER (NRC, April 29, 1987) evaluated the proposed deletion of certain license conditions related to seismic modifications, the proposed revision to the TS, the proposed Decommissioning Plan, and the proposed extension of the license for 15 additional years. This evaluation covers changes in the TS and changes the Quality Assurance and Emergency Plan parts of the Decommissioning Plan that have been proposed since the issuance of the SER on April 29, 1987.

2.0 EVALUATION

Proposed additional changes to the TS, the Quality Assurance Plan and the Emergency Plan are evaluated below.

2.1 Technical Specifications (TS)

The TS proposed by the licensee (Shiffer, March 13 and May 23, 1986 and March 20, 1987) are evaluated in the SER (April 29, 1987) and were found acceptable by the staff (SER Page 5-1). Following issuance of the SER the NRC re-evaluated the proposed TS with respect to regional inspections and determined that certain changes would improve surveillance, clarify TS requirements and reduce misunderstanding during these inspections. A letter (NRC July 23, 1987) documented our request for additional information. The licensee provided their response to the request with changes to their proposed TS (Shiffer, November 16, 1987). The licensee also made further editorial and clarification changes subsequent to their November 16, 1987 submittal (Maneatis, March 16, 1988, and Shiffer May 23, 1988). The TS revisions that have been proposed by the licensee since issuance of the SER are evaluated below.

2.1.1 Site Boundaries

A map, Figure II-1, was provided which specifies the location of the fence line used for offsite dose calculations. A second map, Figure II-2, shows the location of the site restricted area as defined in 10 CFR Part 20.3(a)(14). These proposed changes specifically identify the location of site boundaries for dose calculation and for onsite radiation control and are acceptable.

2.1.2 Clarification of Requirements

Proposed changes involved clarification of: the basis for the Offsite Dose Calculations Manual (Section I.B.4.); the description of the principal activities on site (Section II.C); the water level limits for the spent fuel pool and liner gap (Section III.B.2); water chemistry requirements by the use of the word "limits" rather than "acceptable range" (Table III-2); reports on Fire Water System inoperability that would be sent to the NRC Region V Administrator rather than the Region V Director of Regulatory Operations (Section IV.B.3.b); the minimum specific gravity allowed for the fire pump diesel starting batteries (Section IV.B.3.C(9)); the offsite dosimetry and water sampling locations (Section V.A.4); the locations and radionuclides sampled onsite (Section V.A.6);

ENCLOSURE TO LICENSE AMENDMENT NO. 23

FACILITY LICENSE NO. DPR-7

DOCKET NO. 50-133

Replace all of the pages of the Appendix A Technical Specifications with the enclosed pages.

DOCKET NO. 50-133
APPENDIX A
LICENSE NO. DPR-7
TECHNICAL SPECIFICATIONS
FOR
HUMBOLDT BAY POWER PLANT
UNIT 3

Amendment No. 23

July 1988

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I. INTRODUCTION

A. SCOPE

These Technical Specifications set forth the principal DESIGN FEATURES and OPERATING LIMITS AND REQUIREMENTS for Unit 3 (the Unit) at Pacific Gas and Electric Company's (the Company's) Humboldt Bay Power Plant (the Plant).

The Unit originally operated as a nuclear power plant with a single-cycle, natural circulation, boiling water reactor and associated turbine generator. As part of the decommissioning of the Unit, most systems have been removed from service. Systems still in operation are used for the storage of spent reactor fuel, the monitoring and surveillance of the Unit during SAFSTOR and the processing of radioactive wastes generated during SAFSTOR. Systems and components that have been removed from service are not described in these Technical Specifications.

Section II of these Technical Specifications describes the site. Sections III through VI describe structures, systems, and components used during SAFSTOR and specify the conditions under which they shall be controlled and monitored. Each of Sections III through VI consists of:

- A description of significant DESIGN FEATURES. Where thermal, hydraulic, and nuclear characteristics of various systems are given, they are subject to normal manufacturing tolerances unless specific tolerances are stated.

- A list of the OPERATING LIMITS AND REQUIREMENTS. Whenever a condition occurs that requires corrective action to ensure operation or maintenance within these limits and requirements, such action shall be taken in a timely manner.

Section VII of these Technical Specifications covers administrative and procedural requirements, including the review of proposed changes in DESIGN AND OPERATING LIMITS, REQUIREMENTS, and procedures. It also requires procedures for normal and emergency conditions during SAFSTOR.

B. DEFINITIONS

1. ADMINISTRATIVE CONTROLS: The provisions relating to the organization, management, procedures, record keeping, reviews and audits, and reporting that are necessary to ensure maintenance of the Plant in a safe condition during SAFSTOR.
2. DESIGN FEATURES: Those features of the Plant which, if altered or modified, could have a significant effect on the ability of a system, component, or structure to perform its intended function.
3. ELEVATION: All elevations shall apply to a datum of mean lower low water (MLLW) level except where noted.
4. OFFSITE DOSE CALCULATION MANUAL: The offsite dose calculation manual (ODCM) follows the applicable portions of the Regulatory Guide

1.109 and shall contain the methodology and parameters used in the calculation of offsite doses and concentrations due to radioactive gaseous and liquid effluents and in the calculation of gaseous and liquid effluent monitoring alarm setpoints.

5. OPERABLE, OPERABILITY: A system, subsystem, train, component, or device may be considered OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electric power sources, cooling or seal water, lubrication, or other auxiliary equipment that are required for the system, subsystem, train, component, or device to perform its function(s) are also capable of performing their related support function(s).
6. OPERATING LIMITS: The lowest functional capability, performance levels, or safety limits of structures, systems, or components required during SAFSTOR.
7. OPERATING REQUIREMENTS: Those requirements relating to operation, test, calibration, surveillance, or inspection to ensure that operating limits will be met.
8. SAFSTOR: The period of time during which the Unit is maintained in a condition of monitored protective storage until the final decommissioning of the Unit.

9. SPENT FUEL: Nuclear fuel that has been removed from the reactor vessel after having been used in critical power generation.
10. STAGGERED TEST BASIS: (a) A test schedule for n (where n is equal to a number) systems, subsystems, trains, or other designated components obtained by dividing the specified test interval into n equal subintervals, and (b) the testing of one system, subsystem, train, or other designated component at the beginning of each subinterval.

II. SITE

A. LOCATION

The Unit is located in Humboldt County, California, approximately 4 miles southwest of the center of the city of Eureka, on a site owned and controlled by the Company.

B. PLANT AREAS

The unrestricted area used in the offsite dose calculations for gaseous and liquid effluent is shown in Figure II-1. Ingress and egress are controlled by the Company. The restricted area, as defined in 10 CFR 20.3(a)(14), is shown in Figure II-2.

C. PRINCIPAL ACTIVITIES

The principal activities of the Plant are those related to the generation and transmission of electric power and the associated service activities. Activities associated with the Unit consist of storage and surveillance of SPENT FUEL, monitoring and surveillance of the decommissioned facility, and operations and maintenance to support the above-mentioned activities in accordance with Regulatory Guide 1.86, Section C.5.

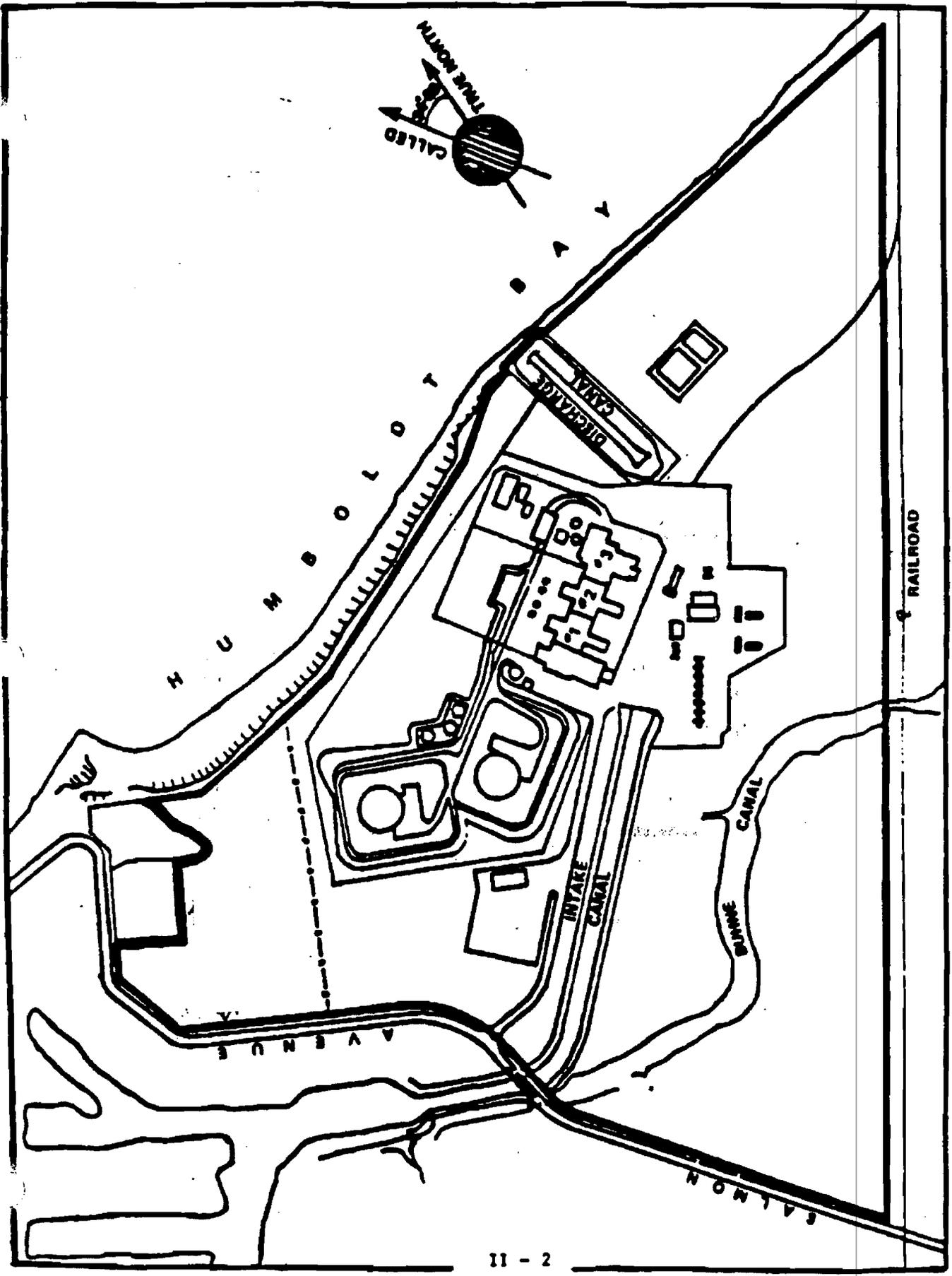


Fig. I-1 Unrestricted Area used for Offsite Dose Calculations for Gaseous and Liquid Effluents

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION OF THE
STATE OF CALIFORNIA

APPLICATION FOR CERTIFICATION FOR THE
HUMBOLDT BAY REPOWERING PROJECT
BY PACIFIC GAS AND ELECTRIC COMPANY

Docket No. 06-AFC-7
PROOF OF SERVICE
(Revised 10/25/07)

INSTRUCTIONS: All parties shall 1) send an original signed document plus 12 copies OR 2) mail one original signed copy AND e-mail the document to the web address below, AND 3) all parties shall also send a printed OR electronic copy of the documents that shall include a proof of service declaration to each of the individuals on the proof of service:

CALIFORNIA ENERGY COMMISSION
Attn: Docket No. 06-AFC-07
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DECLARATION OF SERVICE

I, Jeannette Harris, declare that on January 15, 2008, I deposited the required copies of the attached Amendment to License filed in support of the Application for Certification for the Humboldt Bay Repowering Project (06-AFC-07) in the United States mail at Sacramento, California with first-class postage thereon fully prepaid and addressed to those identified on the Proof of Service list above. I declare under penalty of perjury that the foregoing is true and correct.

OR

Transmission via electronic mail was consistent with the requirements of California Code of Regulations, title 20, sections 1209, 1209.5, and 1210. All electronic copies were sent to all those identified on the Proof of Service list above.

I declare under penalty of perjury that the foregoing is true and correct.



Jeannette Harris