

MAY 4 1983

Docket Nos.: 50-361
and 50-362

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Mr. Gary D. Cotton
Mr. Louis Bernath
San Diego Gas & Electric Company
101 Ash Street
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Gentlemen:

Subject: Issuance of Amendment No. 19 to Facility Operating License NPF-10
and Amendment No. 7 to Facility Operating License NPF-15 -
San Onofre Nuclear Generating Station, Units 2 and 3

The Nuclear Regulatory Commission (the Commission) has issued the enclosed Amendment No. 19 to Facility Operating License NPF-10 and Amendment No. 7 to Facility Operating License NPF-15 for the San Onofre Nuclear Generating Station, Units 2 and 3, located in San Diego County, California. The amendments modify (1) the Technical Specifications covering radioactive liquid effluents and effluent monitoring instrumentation to add a steam generator blowdown bypass line as an alternative release path, along with the associated effluent sampling and monitoring; and (2) the Technical Specification covering radiation monitoring alarm instrumentation to change the alarm setpoint for the containment high range monitors. These changes were requested by your letter dated April 15, 1983.

A copy of the Safety Evaluation supporting these amendments is enclosed. Also enclosed is a copy of the related notice which has been sent to the Office of the Federal Register for publication.

Sincerely,

Original signed by:
George W. Knighton

George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

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Enclosures:

1. Amendment No. 19 to NPF-10
2. Amendment No. 7 to NPF-15
3. Safety Evaluation
4. Federal Register Notice

W no legal objection to this amendment.

cc w/enclosures:

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San Diego County
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Mayor, City of San Clemente
San Clemente, California 92672

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Region IX Office
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San Francisco, California 94111

Director, Energy Facilities Siting Division
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California State Library
Government Publications Section
Library and Courts Building
Sacramento, California 95841
ATTN: Ms. Mary Schell



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

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-361

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 17
License No. NPF-10

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment for the San Onofre Nuclear Generating Station, Unit 2 (the facility) filed by the Southern California Edison Company on behalf of itself and San Diego Gas and Electric Company, The City of Riverside and The City of Anaheim, California (licensees) dated February 24, 1983, as supplemented by letters dated March 4, 1983, April 14, 1983, and April 19, 1983, 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 operate in conformity with the application, as amended, 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 license amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - 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.

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2. Accordingly, the license is hereby amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and changing paragraphs 2.C(2) and 2.C(19)i of Facility Operating License No. NPF-10 to read as follows:

(2) Technical Specifications

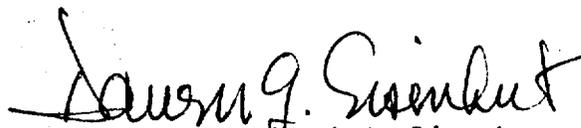
The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 17, are hereby incorporated in the license. SCE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(19)i Post Accident Sampling System (NUREG-0737 Item II.B.3)

1. By June 1, 1983, SCE shall substantially complete all of the PASS procedures identified in Enclosure 3 of the SCE letter of April 14, 1983.
2. Prior to September 1, 1983, SCE shall maintain in effect all compensatory measures other than the PASS that are identified in the SCE letter of April 14, 1983, that are not already covered by Technical Specification surveillance requirements.
3. By September 1, 1983, the PASS shall be operable and the post accident sampling program shall be implemented.
4. Until September 1, 1983, SCE shall provide monthly progress reports on PASS testing, surveillance, maintenance and modifications, and operator training.

3. This amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: APR 29 1983

- 3 -

ATTACHMENT TO LICENSE AMENDMENT NO. 17FACILITY OPERATING LICENSE NO. NPF-10DOCKET NO. 50-361

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Also to be replaced are the following overleaf pages to the amended pages.

Amendment Page

6-15

Overleaf Page

6-16

ADMINISTRATIVE CONTROLS

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- (i) Training of personnel,
- (ii) Procedures for monitoring, and
- (iii) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- (i) Identification of a sampling schedule for the critical variables and control points for these variables,
- (ii) Identification of the procedures used to measure the values of the critical variables,
- (iii) Identification of process sampling points, including monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,
- (iv) Procedures for the recording and management of data,
- (v) Procedures defining corrective actions for all off-control point chemistry conditions, and
- (vi) A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

d. Post-Accident Sampling

A program* which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program* shall include the training of personnel, the procedures for sampling and analysis and the provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

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

*Not required to be implemented until September 1, 1983.

ADMINISTRATIVE CONTROLS

STARTUP REPORT

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

6.9.1.2 The startup report shall address each of the tests identified in the FSAR and shall include a description of the measured values of the operating conditions or characteristics obtained during the test program and a comparison of these values with design predictions and specifications. Any corrective actions that were required to obtain satisfactory operation shall also be described. Any additional specific details required in license conditions based on other commitments shall be included in this report.

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

ANNUAL REPORTS*

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

6.9.1.5 Reports required on an annual basis shall include a tabulation on an annual basis of the number of station, utility, and other personnel (including contractors) receiving exposures greater than 100 mrem/yr and their associated manrem exposure according to work and job functions,** e.g., reactor operations and surveillance, inservice inspection, routine maintenance, special maintenance (describe maintenance), waste processing, and refueling. The dose assignments to various duty functions may be estimated based on pocket dosimeter, TLD, or film badge measurements. Small exposures totalling less than 20 percent of the individual total dose need not be accounted for. In the aggregate, at least 80 percent of the total whole body dose received from external sources should be assigned to specific major work functions.

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

** This tabulation supplements the requirements of §20.407 of 10 CFR Part 20.



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

SOUTHERN CALIFORNIA EDISON COMPANY

SAN DIEGO GAS AND ELECTRIC COMPANY

THE CITY OF RIVERSIDE, CALIFORNIA

THE CITY OF ANAHEIM, CALIFORNIA

DOCKET NO. 50-362

SAN ONOFRE NUCLEAR GENERATING STATION, UNIT 3

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 5
License No. NPF-15

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment for the San Onofre Nuclear Generating Station, Unit 3 (the facility) filed by the Southern California Edison Company on behalf of itself and San Diego Gas and Electric Company, The City of Riverside and The City of Anaheim, California (licensees) dated February 24, 1983, as supplemented by letters dated March 4, 1983, April 14, 1983, and April 19, 1983, 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 operate in conformity with the application, as amended, 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 license amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.

2. Accordingly, the license is hereby amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and changing paragraphs 2.C(2) and 2.C(17)d of Facility Operating License No. NPF-15 to read as follows:

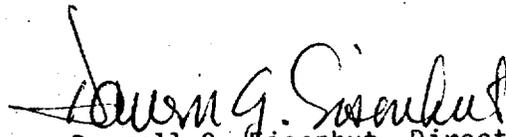
(2) Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 5, are hereby incorporated in the license. SCE shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

(17)d Post Accident Sampling System (NUREG-0737 Item II.B.3)

1. By June 1, 1983, SCE shall substantially complete all of the PASS procedures identified in Enclosure 3 of the SCE letter of April 14, 1983.
 2. Prior to September 1, 1983, SCE shall maintain in effect all compensatory measures other than the PASS that are identified in the SCE letter of April 14, 1983, that are not already covered by Technical Specification surveillance requirements.
 3. By September 1, 1983, the PASS shall be operable and the post accident sampling program shall be implemented.
 4. Until September 1, 1983, SCE shall provide monthly progress reports on PASS testing, surveillance, maintenance and modifications, and operator training.
3. This amendment is effective as of the date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION



Darrell G. Eisenhut, Director
Division of Licensing
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: APR 29 1983

APR 29 1983

- 3 -

ATTACHMENT TO LICENSE AMENDMENT NO. 5

FACILITY OPERATING LICENSE NO. NPF-15

DOCKET NO. 50-362

Replace the following pages of the Appendix A Technical Specifications with the enclosed pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Also to be replaced are the following overleaf pages to the amended pages.

Amendment Page

6-16

Overleaf Page

6-15

ADMINISTRATIVE CONTROLS

- g. PROCESS CONTROL PROGRAM implementation.*
- h. OFFSITE DOSE CALCULATION MANUAL implementation.
- i. Quality Assurance Program for effluent and environmental monitoring, using the guidance in Regulatory Guide 4.15 Rev. 1, February 1979.
- j. Modification of Core Protection Calculator (CPC) Addressable Constants.

NOTE: Modification to the CPC addressable constants based on information obtained through the Plant Computer - CPC data link shall not be made without prior approval of the Onsite Review Committee.

6.8.2 Each procedure of 6.8.1 above, and changes thereto, shall be approved by the Station Manager; or by (1) the Deputy Station Manager, (2) the Manager, Operations, (3) the Manager, Maintenance, (4) the Manager, Technical, or (5) the Manager, Health Physics as previously designated by the Station Manager; prior to implementation and shall be reviewed periodically as set forth in administrative procedures.

6.8.3 Temporary changes to procedures of 6.8.1 above may be made provided:

- a. The intent of the original procedure is not altered.
- b. The change is approved by two members of the plant management staff, at least one of whom holds a Senior Reactor Operator's License on the unit affected.
- c. The change is documented, reviewed and approved by the Station Manager; or by (1) the Deputy Station Manager, (2) the Manager, Operations, (3) the Manager, Maintenance, (4) the Manager, Technical, or (5) the Manager, Health Physics as previously designated by the Station Manager; within 14 days of implementation.

6.8.4 The following programs shall be established, implemented, and maintained:

- a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the high pressure safety injection recirculation, the shutdown cooling system, the reactor coolant sampling system (post-accident sampling piping only), the containment spray system, the radioactive waste gas system (post-accident sampling return piping only) and the liquid radwaste system (post-accident sampling return piping only). The program shall include the following:

- (i) Preventive maintenance and periodic visual inspection requirements, and
- (ii) Integrated leak test requirements for each system at refueling cycle intervals or less.

*See Specification 6.13.1

ADMINISTRATIVE CONTROLS

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

- (i) Training of personnel,
- (ii) Procedures for monitoring, and
- (iii) Provisions for maintenance of sampling and analysis equipment.

c. Secondary Water Chemistry

A program for monitoring of secondary water chemistry to inhibit steam generator tube degradation. This program shall include:

- (i) Identification of a sampling schedule for the critical variables and control points for these variables,
- (ii) Identification of the procedures used to measure the values of the critical variables,
- (iii) Identification of process sampling points, including monitoring the discharge of the condensate pumps for evidence of condenser in-leakage,
- (iv) Procedures for the recording and management of data,
- (v) Procedures defining corrective actions for all off-control point chemistry conditions, and
- (vi) A procedure identifying (a) the authority responsible for the interpretation of the data, and (b) the sequence and timing of administrative events required to initiate corrective action.

d. Post-Accident Sampling

A program* which will ensure the capability to obtain and analyze reactor coolant, radioactive iodines and particulates in plant gaseous effluents, and containment atmosphere samples under accident conditions. The program* shall include the training of personnel, the procedures for sampling and analysis and the provisions for maintenance of sampling and analysis equipment.

6.9 REPORTING REQUIREMENTS

ROUTINE REPORTS AND REPORTABLE OCCURRENCES

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

*Not required to be implemented until September 1, 1983.

SAFETY EVALUATION
AMENDMENTS 17 AND 5 TO NPF-10 AND -15
SAN ONOFRE NUCLEAR GENERATING STATION, UNITS 2 & 3
DOCKET NOS.: 50-361 AND 50-362

Introduction

By letters dated February 24, March 4, April 14, and April 19, 1983, SCE requested changes in the license conditions and Technical Specifications covering the Post Accident Sampling System (PASS). The proposed changes would extend the date for PASS operability to September 1, 1983. Our evaluation of the proposed License Condition changes and the associated Technical Specification modifications is given below. Units 2 and 3 share a common Post Accident Sampling System.

Background

In Amendment No. 8 to Facility Operating License NPF-10, the NRC modified the San Onofre 2 license to change the date for PASS operability and post accident sampling program (PASP) implementation to January 1, 1983. In the San Onofre 3 license, NPF-15, the date for PASS operability and PASP implementation is prior to exceeding 5% power (currently estimated to be mid-May, 1983).

By letter dated December 21, 1982, SCE informed the NRC staff that the PASS had been installed and modifications completed, and testing of individual components had been completed. However, SCE stated that the planned system demonstration test had not been completed due to plant outages. The PASS was tested during January and February, 1983, and as a result, SCE concluded that although most PASS functions had, at one time or another, been successfully carried out, the PASS was not reliable enough to be declared operable in the near future. Also, additional time is required during which both the PASS is functioning and one of the two units is at operating temperature and pressure (MODE 3 or higher). This additional time is required for training of plant operating personnel, and revision of procedures.

As a result, in its letter of February 24, 1983, SCE requested that the Unit 2 and 3 licenses be amended to allow until September 1, 1983 to make the PASS operable and to fully implement the PASP.

Following the February 24, 1983 request, the staff met with SCE on February 25 and March 2, 1983, and at the staff's request SCE submitted additional information by letter dated March 4, 1983. Subsequently, the staff visited the San Onofre site on April 4-8, 1983, to observe a demonstration test of the PASS and to discuss the PASS, the PSAP, and compensatory measures with SCE.

Observations

From the site visit and review of submitted documents, the staff concludes:

1. SCE has made a concerted effort to meet the PASS requirements.

2. The SONGS PASS status is at least equal, if not ahead of other licensees who have selected similar equipment for meeting this requirement.
3. Implementation of this NUREG-0737 requirement has proven substantially more difficult than expected.
4. The SONGS PASS, though installed and functioning, is not fully operable because:
 - . all the procedures have not been completed and many of the approved procedures have not been verified through use by plant personnel;
 - . the training of personnel to use the PASS has not been completed; and
 - . experience with the system is too limited to provide high confidence in the results.
5. While the SONGS PASS has features that are superior to other PASS systems and which go beyond the requirements, it also has shortcomings such as:
 - . it will not be used during normal operations so training, surveillance, maintenance, etc., will all be special efforts and personnel will lack day-to-day familiarity with it;
 - . access to the PASS is limited; and
 - . it may be inherently incapable of meeting the 3-hour time limit for analysis results.

Evaluation

The NRC staff has evaluated the SCE request for additional time to make the PASS operable and fully implement the post accident sampling program, and has concluded that the request is acceptable for the reasons given below, subject to the additional conditions discussed below.

1. PASS Capabilities - The Post Accident Sampling System is installed and has demonstrated the capability to obtain information relevant to post-accident conditions. The PASS has not yet been declared operable because it has not been fully checked out and debugged. Successful operation of the PASS at this time frequently requires more than following procedures. That is, system repair or procedure alteration may be required in order to cope with problems that arise. In particular, the three-hour time limit for obtaining the required information may not be met. Thus, at this time the licensee does not consider the PASS operable. However, the NRC staff has reviewed the system and witnessed successful demonstration tests on April 5, 1983, and believes that when manned by qualified personnel, the PASS is capable of providing additional information for evaluating post-accident reactor conditions, although not necessarily within the time constraints identified in NUREG-0737.

2. Availability of Qualified PASS Operators - At this time, only a few people at San Onofre are qualified to operate the PASS. By letters dated April 14, and April 19, 1983, SCE has committed to take action that provides reasonable assurance that qualified operators will be available when needed. In the April 19, 1983 letter, SCE stated that it is their intent to normally have sufficient qualified PASS operators on site. In the April 14, 1983 letter, SCE stated that their PASS operator training program provides, in the short term, a sufficient number of qualified SCE personnel to assure that at least two could be called to report in a timely manner following an accident.
3. Development and Modification of Procedures - In its letters of March 4, and April 14, 1983, the licensee defined the status of all PASS procedures and defined the schedule for completion of all procedures except the one for core damage assessment. Many of the procedures are complete now, and all except the core damage assessment procedure are scheduled to be complete by May 1, 1983. We will condition the San Onofre 2 and 3 licenses to require that all PASS procedures be substantially complete by June 1, 1983. During our site visit on April 4-8, 1983, the NRC staff reviewed a number of the existing PASS procedures and observed the procedures being used during a PASS demonstration test. While all the procedures are not yet in their final form, reviewed and approved by the licensee, they appear to be sufficiently developed that they can be used by the present operators to operate the PASS.
4. Compensatory Measures - The availability of backup measures reduces the significance of possible unavailability of portions of the PASS. These compensatory measures were identified in the SCE letters of March 4, and April 14, 1983. Surveillance and maintenance of these compensatory measures is required by a license condition.

The requirements of NUREG-0737 did not classify the PASS as safety related, and therefore, it is not required to meet redundancy requirements. During system checkout, moreover, the PASS will be even less reliable. Thus, the backup provisions become more important and their availability has contributed to the staff conclusion that reactor operation during PASS checkout prior to the PASS being declared operable is acceptable.

The primary purpose of the PASS is to assist in assessing conditions after a severe accident; it is expected to provide additional information that may be useful. This information is to be obtained from radiological and chemical analysis of the reactor coolant, the containment atmosphere and the containment sump fluid. As discussed in the following paragraphs, alternative sources of data exist for each measurement.

The determination of hydrogen in the containment atmosphere can be made with the in-containment hydrogen monitors. These instruments are seismic Category I, Quality Class II, and 1E powered and, thus, are reliable. As a further backup, estimates of containment hydrogen are available from core temperature measurements. If both the PASS and the in-containment hydrogen monitors are inoperable, the recombiner can be energized as a precautionary measure if core temperatures ever exceed levels that would support metal-water reactions.

Radioactivity in containment atmosphere can be determined from the high range area radiation monitors inside containment. These monitors measure dose rate but do not provide gamma spectra data. The staff has concluded that reasonable estimates of the radioactivity in the containment atmosphere can be made, based on the high range area monitor readings, using the analyses and methods developed by SCE. These instruments are qualified to function in a post-accident environment and are considered to be reliable.

Other available backup approaches to determine radioactivity in containment utilize (1) the normal sampling system, and (2) the high range effluent monitoring system. Thus, even without the PASS there will be capability for determining the level of radioactivity in the containment atmosphere.

Dilute samples of the containment atmosphere are not explicitly required but would be provided by the PASS. A diluted sample is needed to facilitate the analysis called for in NUREG-0737 because of the potentially high radiation levels. A single ml (stp) of containment atmosphere could produce radiation levels of 0.4 R/hr at a distance of one foot, three hours after the accident. Without the PASS, there are no provisions for taking a diluted sample, so the specified analysis could not be performed. The backup provision is a measurement of direct radiation from the normal sampling system. While this would not provide the desired accuracy, it could provide information essential to coping with an emergency.

In addition to analysis of the containment atmosphere, provisions are required for analyses of reactor coolant for radionuclides, boron, chloride, and dissolved gases (or hydrogen).

Radioactivity in the reactor coolant can be estimated, without the PASS, using the area radiation monitors in containment in all cases where a substantial quantity of coolant is released to containment. While this would not provide the specified radionuclide data, it would provide a basis for estimating core damage utilizing the methods developed by SCE. Direct radiation measurements from normal sample lines would provide some information in the improbable event of serious core damage without coolant release to containment.

Determining the chloride content of the primary coolant is difficult without the PASS available to provide a diluted sample. The chloride determination, however, can safely be delayed several hours. Thus, there is time to take the necessary action to return the PASS to service even if it were not operational at the start of the accident. Consequently, there is reasonable assurance that this information can be obtained if needed.

The boron determination is needed to provide assurance that cooldown and xenon decay will not cause nuclear criticality. The need exists because the control rods do not provide enough negative reactivity to compensate for complete loss of boron. The PASS is not designed to provide information for use during an accident transient so initially reliance must be placed on other instrumentation, primarily the excore neutron detectors backed-up by the incore neutron instruments. These same instruments will provide timely information if the reactor returns to a critical state after being shutdown. The PASS measurement of boron would only confirm these measurements and possibly provide some advance warning of a possible return to criticality. As a further backup measure, SCE had developed a procedure for calculating boron concentration based on known pre-accident concentrations and on tank level measurements.

The dissolved gas measurement is itself a backup measurement. Reactor coolant normally will contain a limited amount of excess hydrogen. If the coolant contains an abnormally large amount of gas, it suggests that inadequate core cooling may have resulted in a metal-water reaction. Direct measurements of coolant temperature and pressure, however, provided a better and more reliable measure of inadequate core cooling. When available, the PASS provides measurements of dissolved oxygen and hydrogen but these are not required. The oxygen measurement supports the chloride measurement to provide information about corrosion. The hydrogen measurement would provide further assurance that the inadequate core cooling determination was correct. The PASS is expected to be capable of providing this information but initially, at least, the 3-hour time criterion may not be met. Thus, the staff concludes that the dissolved gas information will be available to meet emergency needs.

In summary, as discussed above, the staff concludes that adequate compensatory provisions exist for obtaining the information needed for coping with an emergency, if one should occur, when the PASS is not operable.

5. Time Requirement - The SONGS PASS performs many analyses on-line, thus, once the system is in operation, measurements can be repeated easily and the measurements can be reasonably reliable. However, there is a startup problem. SCE estimates that 4 hours may be needed to assemble trained personnel, provide them with health physics equipment, verify a safe atmosphere, conduct a health physics survey, send the people to the PASS area, energize and verify the system and select the sample points. If these preliminaries are complete before a decision is made to take a sample, the 3-hour time limit can be met. If the "clock starts" before initiation of the preliminaries, the time to obtain results may approach 7 hours.

The staff has reviewed this issue and concluded that the system is acceptable, at least on an interim basis. Principle considerations are the lack of a direct impact on public health and safety of the failure to obtain PASS results, and the determination that PASS results would most probably be useful only several hours after the initiation of an accident. However SCE has committed to exert best efforts to reduce the time requirement to three hours prior to or during the first refueling outage.

6. Operability Date - We will condition the San Onofre 2 and 3 licenses to require that the PASS be operable and the post accident sampling program be fully implemented by September 1, 1983, the date requested in the SCE letter of February 24, 1983. In the staff's opinion, this allows sufficient time, from June 1 to September 1, 1983, for the licensee to finalize all PASS procedures, train a full complement of operators, and resolve all hardware and hardware reliability problems associated with the PASS.
7. Surveillance Criteria - In their April 14, 1983 letter, SCE proposed surveillance criteria for the PASS measurements. The staff finds these criteria acceptable except that for the "gross gamma activity spectrum", the range should be from 1.0 Ci/ml to 10.0 Ci/ml.

Furthermore the staff recommends that SCE endeavor to improve the accuracy of the reactor coolant hydrogen monitor in the low concentration range. This instrument might be used to determine the probability of oxygen in the coolant after a LOCA. For this purpose, it is necessary to measure below normal concentrations of hydrogen.

8. Operability Definition - In their April 14, 1983 letter, SCE proposed a definition of operability for the PASS for use in evaluating compliance with the relevant license conditions. The staff agrees that a special definition for this system is appropriate for SONGS. Further, the staff has reviewed the definition proposed by SCE and has concluded that it is acceptable if modified to read:

The PASS is considered operable if:

1. Routine surveillances described in Surveillance Procedure (S0123-III-8.1) are conducted at the prescribed intervals when plant conditions permit and any necessary actions are taken expeditiously to make the system meet the approved acceptance criteria.
2. In the event of a PASS component malfunction, the specific alternate method of sampling listed in the "Alternate Methods of Post-Accident Parameter Sampling" procedure (S0123-III-8.8) is available and measures are being taken to effect repairs to the component that has malfunctioned.
3. Calibration of PASS Instruments is current.
9. Progress Reports - To allow the NRC staff to monitor SCE's progress in moving toward PASS operability and full implementation of the post accident sampling program, the San Onofre 2 and 3 licenses will be conditioned to require monthly progress reports, from the present time until September 1, 1983.
10. In addition to the above, the asterisks in Specification 6.8.4.b, In-Plant Radiation Monitoring, in the Technical Specifications for San Onofre Unit 2, NPF-10, are removed. The asterisks were inadvertently not removed in Amendment No. 8 to NPF-10 dated September 17, 1982, as they should have been. The In-Plant Radiation Monitoring program required in Specification 6.8.4.b is implemented and the asterisked statement "not required to be implemented until September 1, 1983" is not applicable to this program. The asterisks in Specification 6.8.4.b, In-Plant Radiation Monitoring, have, therefore, been removed.

In light of the ability to use the PASS to perform a number of its intended functions, the present availability of a number of qualified operators and procedures, and the existence of desirable compensatory measures, we find acceptable the proposal to extend the date for operability of the PASS to September 1, 1983 and for finalization of procedures to June 1, 1983.

Environmental Consideration

The NRC staff has determined that these amendments do not authorize a change in effluent types or total amount nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that these amendments involve actions which are insignificant from the standpoint of environmental impact and pursuant to 10 CFR Section 51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments.

Conclusion

Based upon our evaluation of the proposed changes to the San Onofre, Unit 2 and 3 Operating License and Technical Specifications, we have concluded that: (1) because these amendments do not involve a significant increase in the probability or consequences of accidents previously considered, do not create the possibility of an accident of a type different from any evaluated previously, and do not involve a significant decrease in a safety margin, these amendments do not involve a significant safety hazards consideration; (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of these amendments will not be inimical to the common defense and security or to the health and safety of the public. We, therefore, conclude that the proposed changes are acceptable.

Dated: APR 29 1983

UNITED STATES NUCLEAR REGULATORY COMMISSIONDOCKET NOS. 50-361 AND 50-362SOUTHERN CALIFORNIA EDISON COMPANY, ET ALNOTICE OF ISSUANCE OF AMENDMENTSFACILITY OPERATING LICENSE NOS. NPF-10 AND NPF-15

The U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 17 to Facility Operating License No. NPF-10, and Amendment No. 5 to Facility Operating License NPF-15 to Southern California Edison Company (SCE), San Diego Gas and Electric Company, The City of Riverside, California and The City of Anaheim, California (licensees) for the San Onofre Nuclear Generating Station, Units 2 and 3 (the facility) located in San Diego County, California. These amendments are effective April 29, 1983.

The amendments modify the license condition and Technical Specifications covering the Post Accident Sampling System (PASS) to require availability and training of operators, development of procedures, implementation of interim compensatory measures, monthly progress reports, and full operability by September 1, 1983. These amendments were requested by the SCE letters of February 24, March 4, April 14, and April 19, 1983.

Issuance of these amendments complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's regulations. The Commission has made appropriate findings as required by the Act and the Commission's regulations in 10 CFR Chapter I, which are set forth in the license amendments.

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Prior public notice of these amendments is not required because the amendments do not involve a significant hazards consideration.

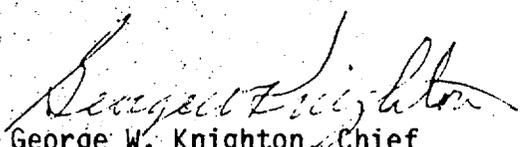
The Commission has determined that the issuance of these amendments will not result in any significant environmental impact and pursuant to 10 CFR 51.5(d)(4) an environmental impact statement, or negative declaration and environmental impact appraisal need not be prepared in connection with issuance of the amendments.

For further details with respect to this action, see (1) Southern California Edison Company's letters dated February 24, March 4, April 14 and April 19, 1983, (2) Amendment No. 17 to Facility Operating License No. NPF-10, (3) Amendment No. 5 to Facility Operating License NPF-15, and (4) the Commission's related Safety Evaluation.

These items are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and the San Clemente Library, 242 Avenida Del Mar, San Clemente, California 92672. A copy of items (2), (3) and (4) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Licensing.

Dated at Bethesda, Maryland, this 29th day of April, 1983.

FOR THE NUCLEAR REGULATORY COMMISSION


George W. Knighton, Chief
Licensing Branch No. 3
Division of Licensing

AMENDMENT NO. 17 TO FACILITY OPERATING LICENSE NPF-10 AND AMENDMENT NO. 5
TO FACILITY OPERATING LICENSE NPF-15 - SAN ONOFRE NUCLEAR GENERATING STATION,
UNITS 2 AND 3

APR 29 1983

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