



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
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October 19, 2000

Harold B. Ray, Executive Vice President  
Southern California Edison Co.  
San Onofre Nuclear Generating Station  
P.O. Box 128  
San Clemente, California 92674-0128

SUBJECT: NRC'S SAN ONOFRE NUCLEAR GENERATING STATION INITIAL  
EXAMINATION REPORT NO. 50-361/00-301; 50-362/00-301

Dear Mr. Ray:

On September 28, 2000 the NRC completed initial examinations at the San Onofre Nuclear Generating Station, Units 2 and 3, facilities. The enclosed report presents the results of this examination. The results of this examination were discussed on September 28, 2000, with Mr. Dwight Nunn, Vice President, Engineering and Technical Services, and other members of your facility.

The examination included the evaluation of one applicant for a reactor operator license and three applicants for senior operator licenses. We determined that all applicants satisfied the requirements of 10 CFR Part 55, and the appropriate licenses have been issued.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter, its enclosure(s), and your response will be made available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/NRC/ADAMS/index.html> (the Public Electronic Reading Room).

Should you have any questions concerning this examination, we will be pleased to discuss them with you.

Sincerely,

/RA/

John L. Pellet, Chief  
Operations Branch  
Division of Reactor Safety

Docket Nos.: 50-361; 50-362  
License Nos.: NPF-10; NPF-15

Enclosure:

NRC Examination Report No.  
50-361/00-301; 50-362/00-301

cc w/enclosure:

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NRR Event Tracking System (**IPAS**)

SONGS Site Secretary (**SFN1**)

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**ENCLOSURE**

U.S. NUCLEAR REGULATORY COMMISSION  
REGION IV

Docket Nos.: 50-361; 50-362  
License Nos.: NPF-10; NPF-15  
Report No.: 50-361/00-301; 50-362/00-301  
Licensee: Southern California Edison Co.  
Facility: San Onofre Nuclear Generating Station, Units 2 and 3  
Location: 5000 S. Pacific Coast Hwy.  
San Clemente, California  
Dates: September 25-28, 2000  
Examiners: Thomas F. Stetka, Chief Examiner, Operations Branch  
Howard F. Bundy, Senior Operations Engineer, Operations Branch  
Approved By: John L. Pellet, Chief  
Operations Branch  
Division of Reactor Safety

ATTACHMENTS:

Attachment 1: Supplemental Information

Attachment 2: NRC's Revised Oversight Process

### SUMMARY OF FINDINGS

IR 05000361-00-301, IR 05000362-00-301, on 09/25-28/2000, Southern California Edison, San Onofre Nuclear Generating Station, Units 2 & 3. Initial examination of applicants for operator licenses.

An NRC examination team evaluated the competency of one applicant for a reactor operator license and three applicants for senior operator licenses at the San Onofre Nuclear Generating Station, Units 1 and 2, facilities. The NRC developed the written examination and the facility developed the operating examination using NUREG-1021, "Operator Licensing Examination Standards for Power Reactors," Revision 8, Supplement 1. The NRC examination team administered the operating tests on September 25 to 28, 2000. The written examinations were administered to all applicants on September 29, 2000, by facility proctors in accordance with instructions provided by the chief examiner.

Cross-cutting Issues: Human Performance

- No findings were identified.

## Report Details

### 4. OTHER ACTIVITIES

#### 4OA4 Initial License Examinations

##### .1 Operator Knowledge and Performance

###### a. Scope

The NRC examination team administered the various portions of the operating examination to the four applicants on September 25 to 28, 2000. The reactor operator applicant participated in two dynamic simulator scenarios, a control room and facilities walkthrough test consisting of ten system tasks, and an administrative test consisting of five administrative tasks. The three applicants that were upgrading from a reactor operator license to a senior operator license, each participated in one dynamic simulator scenario, a control room and facilities walkthrough test consisting of five system tasks, and an administrative test consisting of five administrative tasks.

On September 29, 2000, the licensee proctored the administration of the written examination to all four applicants. The licensee staff graded the written examinations and presented the results to the NRC on October 3, 2000.

###### b. Findings

All applicants passed all parts of the examinations. The NRC examination team did not identify any problems with communications, alarm response, or peer checking. For the written examinations, the average score was 91 percent. The scores ranged from 86 to 95 percent. The text of the examination questions may be accessed in the ADAMS system under Accession ML003758628.

During the post-examination review, the chief examiner identified five written examination questions that were missed by 50 percent or more of the senior reactor operator applicants responding to the questions. The chief examiner reviewed these five written questions and found that there were no generic weaknesses in the initial license training program, based on the specific questions, applicant responses, and other items testing similar systems or areas.

##### .2 Initial Licensing Examination Development

The NRC developed the written examinations in accordance with NUREG-1021, Revision 8, Supplement 1, and utilized facility training and operations staff on the security agreement to validate the examination. The licensee developed the operating examinations in accordance with NUREG-1021, Revision 8, Supplement 1, using facility training and operations staff that were listed on the security agreement.

.2.1 Operating Examination Outline and Examination Package

a. Scope

The facility licensee submitted the operating examination outlines during a meeting with the chief examiner in the Region IV office on June 26, 2000. The chief examiner reviewed the submittal against the requirements of NUREG-1021, Revision 8, Supplement 1, and provided comments to the licensee. The facility licensee submitted the draft operating examination package on August 7, 2000. The chief examiner reviewed the draft submittal against the requirements of NUREG-1021, Revision 8, Supplement 1, and provided comments to the licensee on the operating examination on August 10, 2000. The chief examiner conducted an onsite validation of the operating examinations and provided further comments during the period of August 30 through September 1, 2000. The licensee satisfactorily completed comment resolution on September 18, 2000.

b. Findings

The chief examiner approved the initial examination outline and advised the licensee to proceed with the operating examination development.

The chief examiner determined that the operating examinations initially submitted by the licensee were within the range of acceptability expected for a proposed examination and were satisfactory.

No findings were identified.

.2.2 Simulation Facility Performance

a. Scope

The examination team observed simulator performance with regard to plant fidelity during the examination validation and administration.

b. Findings

No findings were identified.

.2.3 Examination Security

a. Scope

The chief examiner reviewed examination security during the onsite preparation and examination administration for adherence to NUREG-1021 requirements. Plans for simulator security and applicant control were discussed.

b. Findings

No findings were identified.

4OA5 Management Meetings

Exit Meeting Summary

The examination team presented the examination results to Mr. Dwight Nunn, Vice President, Engineering and Technical Services, and other members of the licensee's management staff at the conclusion of the inspection on September 28, 2000. The licensee acknowledged the findings presented.

The licensee did not identify as proprietary any information or materials examined during the examination.

**ATTACHMENT 1**

PARTIAL LIST OF PERSONS CONTACTED

Licensee

W. Lyke, Supervisor, Operations Training  
K. Rauch, Control Room Supervisor  
L. Germann, Training Specialist  
R. Hall, Training Specialist  
G. Dyer, Training Specialist  
L. Zilli, Training Specialist

NRC

J. Sloan, Senior Resident Inspector

ADAMS DOCUMENTS REFERENCED

Accession No.:

ML003758628      Final Reference Exam

## ATTACHMENT 2

### **NRC'S REVISED REACTOR OVERSIGHT PROCESS**

The federal Nuclear Regulatory Commission (NRC) revamped its inspection, assessment, and enforcement programs for commercial nuclear power plants. The new process takes into account improvements in the performance of the nuclear industry over the past 25 years and improved approaches of inspecting safety performance at NRC licensed plants.

The new process monitors licensee performance in three broad areas (called strategic performance areas): reactor safety (avoiding accidents and reducing the consequences of accidents if they occur), radiation safety (protecting plant employees and the public during routine operations), and safeguards (protecting the plant against sabotage or other security threats). The process focuses on licensee performance within each of seven cornerstones of safety in the three areas:

<b>Reactor Safety</b>	<b>Radiation Safety</b>	<b>Safeguards</b>
<ul style="list-style-type: none"><li>•Initiating Events</li><li>•Mitigating Systems</li><li>•Barrier Integrity</li><li>•Emergency Preparedness</li></ul>	<ul style="list-style-type: none"><li>•Occupational</li><li>•Public</li></ul>	<ul style="list-style-type: none"><li>•Physical Protection</li></ul>

To monitor these seven cornerstones of safety, the NRC used two processes that generate information about the safety significance of plant operations: inspections and performance indicators. Inspection findings will be evaluated according to their potential significance for safety, using the Significance Determination Process, and assigned colors of GREEN, WHITE, YELLOW or RED. GREEN findings are indicative of issues that, while they may not be desirable, represent very low safety significance. WHITE findings indicate issues that are of low to moderate safety significance. YELLOW findings are issues that are of substantial safety significance. RED findings represent issues that are of high safety significance with a significant reduction in safety margin.

Performance indicator data will be compared to established criteria for measuring licensee performance in terms of potential safety. Based on prescribed thresholds, the indicators will be classified by color representing varying levels of performance and incremental degradation in safety: GREEN, WHITE, YELLOW, and RED. GREEN indicators represent performance at a level requiring no additional NRC oversight beyond the baseline inspections. WHITE corresponds to performance that may result in increased NRC oversight. YELLOW represents performance that minimally reduces safety margin and requires even more NRC oversight. And RED indicates performance that represents a significant reduction in safety margin but still provides adequate protection to public health and safety.

The assessment process integrates performance indicators and inspection so the agency can reach objective conclusions regarding overall plant performance. The agency will use an Action Matrix to determine in a systematic, predictable manner which regulatory actions should be taken based on a licensee's performance. The NRC's actions in response to the significance (as represented by the color) of issues will be the same for performance indicators as for inspection findings. As a licensee's safety performance degrades, the NRC will take more and increasingly significant action, which can include shutting down a plan, as described in the Action Matrix.

More information can be found at: <http://www.nrc.gov/NRR/OVERSIGHT/index.html>.