



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
611 RYAN PLAZA DRIVE, SUITE 400  
ARLINGTON, TEXAS 76011-8064

JUN 14 2001

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: SUMMARY OF END-OF-CYCLE ASSESSMENT MEETING FOR SAN ONOFRE  
NUCLEAR GENERATING STATION

Dear Mr. Ray:

This refers to the public meeting conducted in San Clemente, California, on June 11, 2001, between your staff and the NRC. The participants discussed the results of the NRC's end-of-cycle assessment of San Onofre Nuclear Generating Station performance for the period April 2, 2000, through March 31, 2001.

The presentation included a brief overview of the reactor oversight program by the NRC for the benefit of the public. In addition, the NRC presented the overall assessment results based on inspection findings and performance indicators reported by the San Onofre Nuclear Generating Station.

The attendance list and presentation are enclosed with this summary (Enclosures 1 and 2).

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be 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 Reading Room).

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

Sincerely,

A handwritten signature in cursive script, reading "Charles S. Marschall", is written over the typed name.

Charles S. Marschall, Chief  
Project Branch C  
Division of Reactor Projects

Enclosures:

1. Attendance List
2. Licensee Presentation

Dockets: 50-361  
50-362

Licenses: NPF-10  
NPF-15

cc w/enclosures:

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Southern California Edison Co.

-4-

City Manager  
City of San Juan Capistrano  
32400 Paseo Adelanto  
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City Manager  
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Dana Point, California 92629

City Manager  
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Electronic distribution from ADAMS by RIV:

Regional Administrator (**EWM**)

DRP Director (**KEB**)

DRS Director (**ATH**)

Senior Resident Inspector (**JAS7**)

Branch Chief, DRP/C (**CSM**)

Senior Project Engineer, DRP/C (**DPL**)

Section Chief, DRP/TSS (**PHH**)

J. Isom, NRR (**JAI**)

**RidsNrrDipmlipb**

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RIV SPE DRP/C	C DRP/C			
DPLoveless,df	CSMarschall			
6/15/01	6/14/01			

OFFICIAL RECORD COPY

T=Telephone

E=E-mail

F=Fax

## San Onofre Assessment Meeting

## Attendance List

6/11/01, 4:00 P.m.

Name	Affiliation
Russell D. Hoffman	Concerned Citizen
Sharon L. Hoffman	Concerned citizen
Ray Waldo	Southern California Edison
Clyde Osterholtz	NRC
John Kramer	NRC - RI
Alberto Garcia	NRC -
Omid Tebatabai	NRC - HQS
A.E. Skellern	SCE
Elmo Collins	NRC - RIV
Charles Marschall	NRC - RIV
BARBARA CULVERHOUSE	SOUTHERN CAL EDISON
MICHAEL SHORT	SCE
PAMELA HANDLEY	SONGS/SCE
Wright Nunn	SONGS/SCE
Phil Diehl	No. Co. Times
Nancy Ayn	FOX 6 NEWS
Eric Lee	FOX 6 NEWS
RAY GOLDEN	SCE - SONGS
WILFRED REINSCH	DYNAC Syst.
Bruce Lieberman	San Diego Union-Tribune
Wei Wei Chin	Calif State Dept. of Taxes Control
WALTER BAHM	CAL/EPA
Luis R. Berg	Citizen - San Clemente



# **NRC Public Meeting**

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End of Cycle Assessment of San Onofre Nuclear  
Generating Station

# Agenda

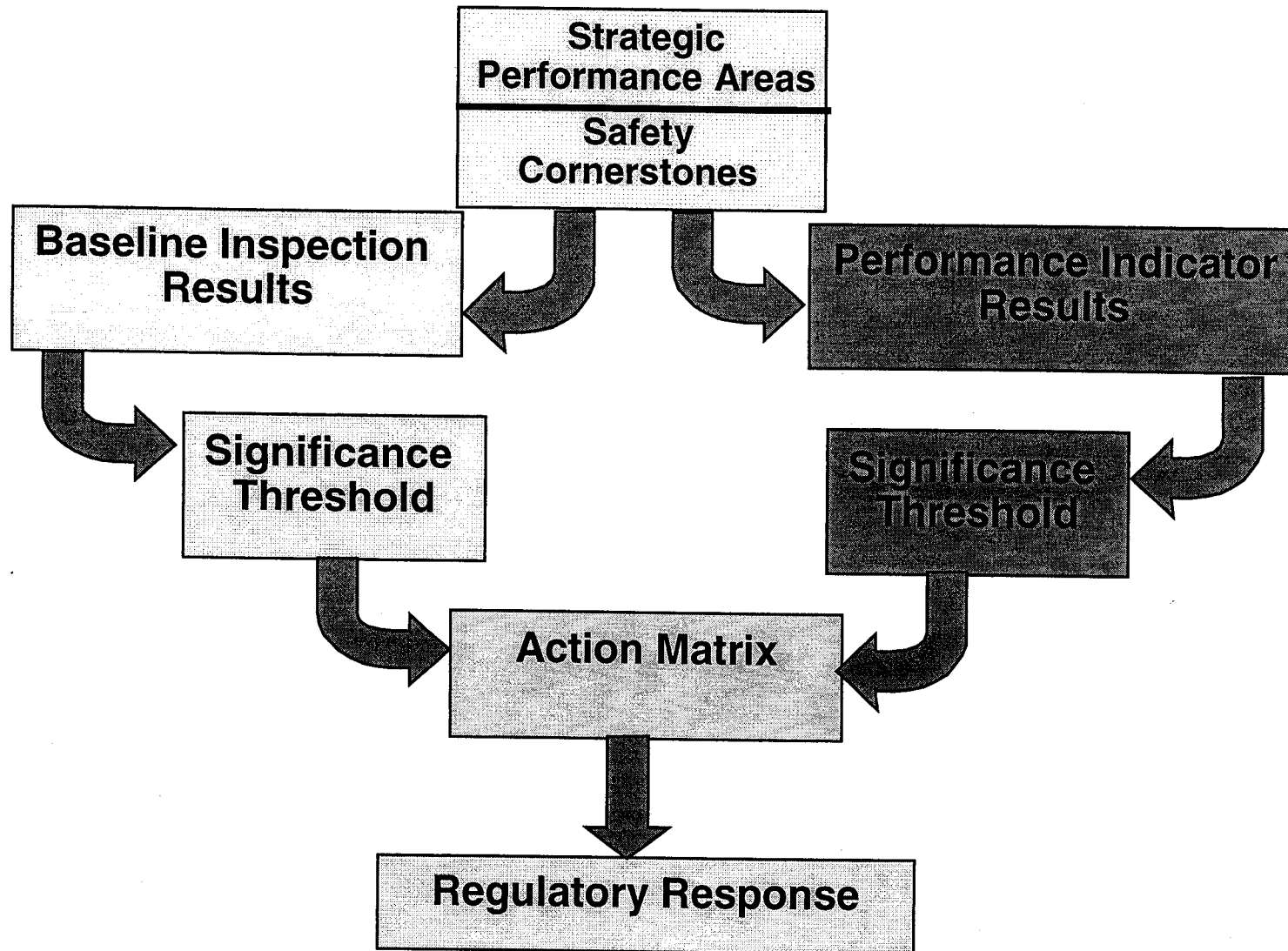
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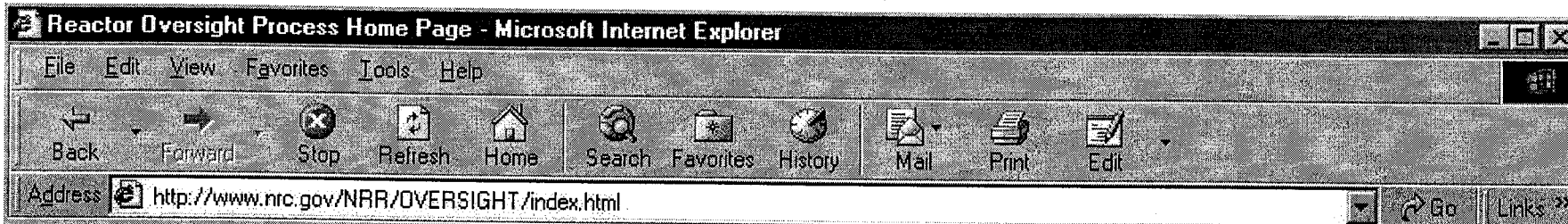
- Introduction and opening comments - Elmo Collins
- Introduction and opening comments- Dwight Nunn
- Presentation of assessment - Charles Marschall
- Discussion of assessment - NRC and San Onofre staff
- Closing remarks - Dwight Nunn
- Closing remarks - Elmo Collins
- Adjourn



# Reactor Oversight Process

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# Reactor Oversight Process

[Nuclear Reactors](#) | [NRC Home Page](#) | [NRC Site Contents](#) | [Search](#)

Plant  
Assessment  
Results

[NEW ROP  
Program  
Documents](#)

[NEW Initial  
Implementation  
Evaluation  
Panel](#)

[ROP "Plain  
Language"  
Description](#)

[Meeting  
Notices &  
Summaries](#)

## Lessons Learned Public Workshop

March 26 - 28, 2001 in Gaithersburg, MD

[Agenda](#)

[Summary Slides from Closing Session](#)

[NEW Meeting Summary](#) [NEW](#)

[Federal Register Notice: Request for Public Comment on the First Year of Initial Implementation of the Reactor Oversight Process](#)

### ***Role of the Reactor Oversight Process***

The Nuclear Regulatory Commission's (NRC's) mission is to ensure adequate protection of the public health and safety and the environment, as it relates to the peaceful use of nuclear materials in the United States. The agency itself does not operate nuclear power plants. Rather, it regulates the operation of the nation's 103 nuclear power plants by establishing regulatory requirements for the design, construction and operation of such plants. The NRC issues licenses for the plants to operate, licenses the plant operators, and establishes plant specific technical specifications for plant operators to follow to ensure that the plants are operated safely within these requirements.

US NRC Reactor Oversight Process - Plant Assessment Results

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit

Address <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html> Go Links

US NRC Reactor Oversight Process

Plant Assessment Results

PI Summary Inspection Findings Summary Action Matrix Summary Inspection Reports List Cornerstones & PI Home

Alphabetical listing of plants  
A B C D F G H I K L M N O  
P Q R S T V W

Region 1 plants

Region 2 plants

Region 3 plants

Region 4 plants

Alphabetical listing of plants:

A

Arkansas 1  
Arkansas 2

B

Beaver Valley 1  
Beaver Valley 2  
Braidwood 1  
Braidwood 2  
Browns Ferry 2  
Browns Ferry 3  
Brunswick 1  
Brunswick 2  
Byron 1  
Byron 2

C

Callaway  
Calvert Cliffs 1  
Calvert Cliffs 2  
Catawba 1  
Catawba 2  
Clinton  
Columbia Generating Station  
Comanche Peak 1  
Comanche Peak 2  
Cooper (Pilot Plant)  
Crystal River 3

D

D.C. Cook 1

New This Quarter

New format of Action Matrix Summary

Action Matrix Designation on plant performance summaries

Individual Plant Performance Summaries

- Performance information is summarized for each plant and sorted by the seven cornerstones of safety. This information can be viewed by selecting the plant name from the left column (organized alphabetically as well as by the region where the plants are located). For each plant, the current Action Matrix designation is displayed along with the performance indicators (PIs) and a summary of NRC inspection findings. Links are also provided to NRC assessment letters, inspection plans, and inspection reports.

Comprehensive Performance Summary Matrices

- The most recent quarterly performance indicator color designations for all plants are summarized in a PI Summary matrix. The most significant inspection finding color designations over the previous 4 quarters for all plants is summarized in an Inspection Findings Summary matrix. Based on the latest applicable performance indicators and inspection findings, the current Action Matrix designation for each plant is available in the Action Matrix Summary. The Action Matrix Summary provides a matrix of the five columns with the plants listed within their applicable column. You can drill down into more detailed information from any of these three summaries.

Background

- Both PIs and inspection findings are evaluated and given a color designation based on their safety significance. Green inspection findings or PIs indicate a very low risk significance and therefore have little or no impact on safety. White, yellow, or red inspection findings or PIs each, respectively, represent a greater degree of safety significance.

# **San Onofre Operating Summary - Unit 2**

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- Refueling outage, October - November 2000
- Otherwise, essentially full power operation

# **San Onofre Operating Summary - Unit 3**

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- Refueling outage, January - February 2001
- Forced outage, February - May 2001
- Otherwise, essentially full power operation

# **San Onofre Mid-cycle Assessment**

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Completed November 6, 2000

- Licensee Response Column
  - ▶ All inspection findings had very low safety significance (Green)
  - ▶ No performance indicators required additional NRC oversight

# **San Onofre Overall Performance**

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- Preserved public health and safety
- Met all cornerstone objectives

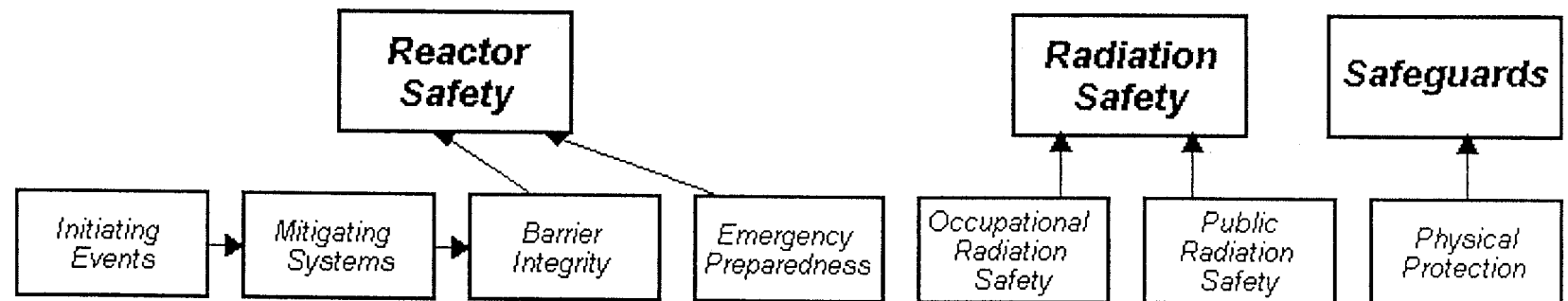
# **San Onofre Performance for the Inspection Cycle**

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- Performance Indicators for the most recent quarter
- All in the licensee response band



# San Onofre 2 1Q/2001 Performance Summary

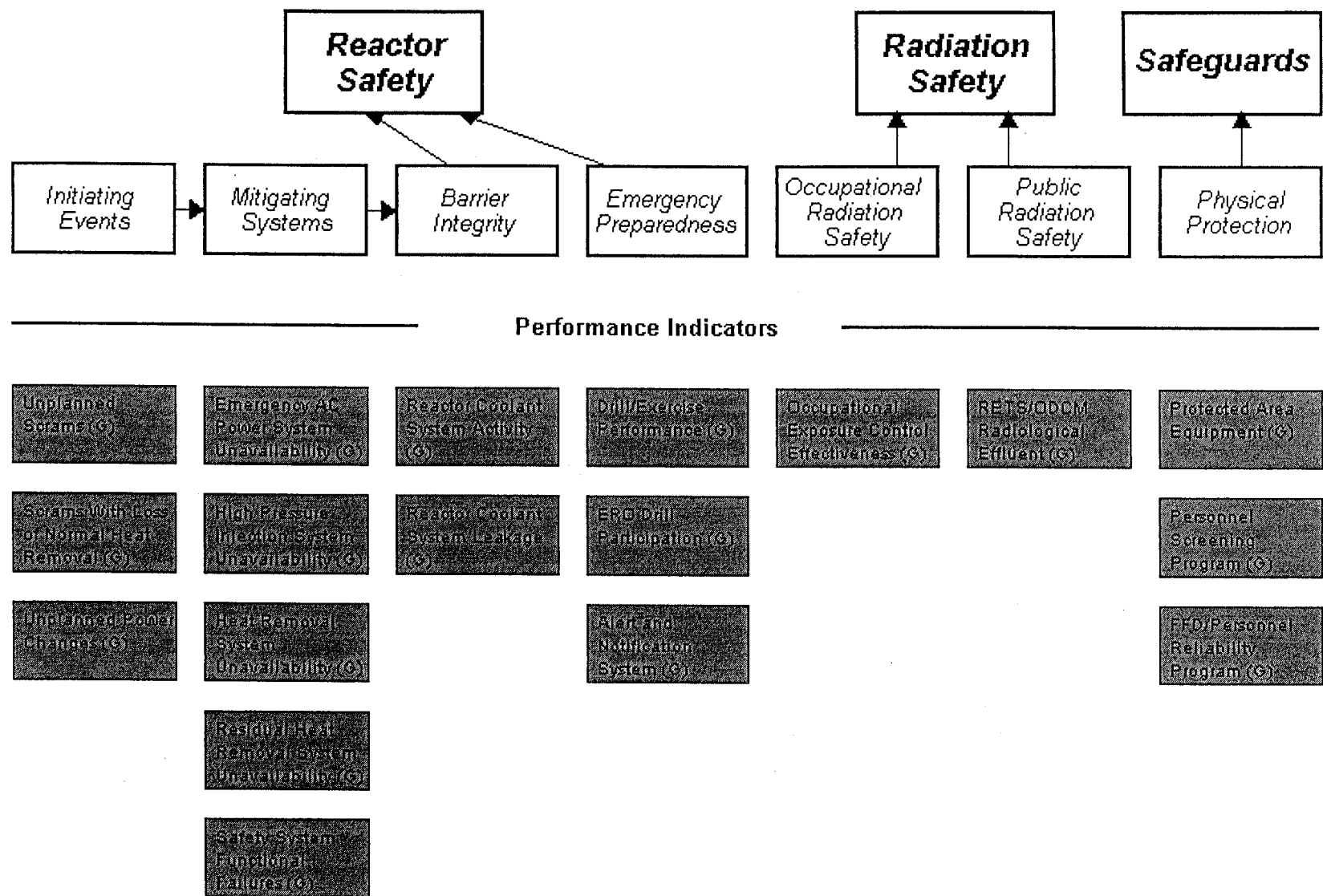


## Performance Indicators

Unplanned Scrams (G)	Emergency AC Power System Unavailability (G)	Reactor Coolant System Activity (G)	Drill/Exercise Performance (G)	Occupational Exposure Control Effectiveness (G)	RETS/ODCM Radiological Effluent (G)	Protected Area Equipment (G)
Scrams With Loss of Normal Heat Removal (G)	High Pressure Injection System Unavailability (G)	Reactor Coolant System Leakage (G)	EPC Drill Participation (G)			Personnel Screening Program (G)
Unplanned Power Changes (G)	Heat Removal System Unavailability (G)		Alarm and Notification System (G)			PFD/Personnel Reliability Program (G)
	Residual Heat Removal System Unavailability (G)					
	Safety System Functional Failures (G)					

# San Onofre 3

## 1Q/2001 Performance Summary



*Initiating  
Events*



*Mitigating  
Systems*



*Barrier  
Integrity*

*Emergency  
Preparedness*

*Occupational  
Radiation  
Safety*

*Public  
Radiation  
Safety*

*Physical  
Protection*

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**Most Significant Inspection Findings**

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1Q/2001

No findings  
this quarter

G

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

4Q/2000

No findings  
this quarter

G

G

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

3Q/2000

G

G

No findings  
this quarter

Findings without  
color designation

No findings  
this quarter

No findings  
this quarter

G

2Q/2000

G

G

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

No findings  
this quarter

*Miscellaneous  
findings*

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**Additional Inspection & Assessment Information**

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**☒ Assessment Letters/Inspection Plans:**

- 1Q/2001
- 4Q/2000
- 3Q/2000
- 2Q/2000

**☒ Inspection Reports**

Initiating Events → Mitigating Systems → Barrier Integrity      Emergency Preparedness      Occupational Radiation Safety      Public Radiation Safety      Physical Protection

### Most Significant Inspection Findings

1Q/2001	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
4Q/2000	No findings this quarter	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter
3Q/2000	No findings this quarter	G	No findings this quarter	Findings without color designation	No findings this quarter	No findings this quarter	G
2Q/2000	G	G	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter	No findings this quarter

Miscellaneous findings

### Additional Inspection & Assessment Information

#### ☒ Assessment Letters/Inspection Plans:

- 1Q/2001
- 4Q/2000
- 3Q/2000
- 2Q/2000

#### ☒ Inspection Reports

# San Onofre Performance for the Inspection Cycle (cont'd)

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## Licensee Response Column

- All inspection findings in San Onofre corrective action system
  - Very low risk significance
- Baseline inspection planned for San Onofre Units 2 and 3

**An Action Matrix is used to assess overall plant safety performance and specify thresholds for NRC Enforcement Actions**

	Licensee Response Column		Regulatory Response Column	Degraded Cornerstone Column	Multiple/ Repetitive Degraded Cornerstone Column	Unacceptable Performance Column
RESULTS		All Assessment Inputs (Performance Indicators (PIs) and Inspection Findings) Green; Cornerstone Objectives Fully Met	One or Two White Inputs (in different cornerstones) in a Strategic Performance Area; Cornerstone Objectives Fully Met	One Degraded Cornerstone (2 White Inputs or 1 Yellow Input) or any 3 White Inputs in a Strategic Performance Area; Cornerstone Objectives Met with Minimal Reduction in Safety Margin	Repetitive Degraded Cornerstone, Multiple Degraded Cornerstones, Multiple Yellow Inputs, or 1 Red Input; Cornerstone Objectives Met with Longstanding Issues or Significant Reduction in Safety Margin	Overall Unacceptable Performance; Plants Not Permitted to Operate Within this Band, Unacceptable Margin to Safety
RESPONSE	Regulatory Performance Meeting	None	Branch Chief (BC) or Division Director (DD) Meet with Licensee	DD or Regional Administrator (RA) Meet with Licensee	RA (or EDO) Meet with Senior Licensee Management	Commission meeting with Senior Licensee Management
	Licensee Action	Licensee Corrective Action	Licensee root cause evaluation and corrective action with NRC Oversight	Licensee Self Assessment with NRC Oversight	Licensee Performance Improvement Plan with NRC Oversight	
	NRC Inspection	Risk-Informed Baseline Inspection Program	Baseline and supplemental inspection procedure 95001	Baseline and supplemental inspection procedure 95002	Baseline and supplemental inspection procedure 95003	
	Regulatory Actions	None	Supplemental inspection only	Supplemental inspection only	-10 CFR 2.204 DFI -10 CFR 50.54(f) Letter - CAL/Order	Order to Modify, Suspend, or Revoke Licensed Activities
COMMUNICATION	Assessment Letters	BC or DD review/sign assessment report (w/ inspection plan)	DD review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan)	RA review/sign assessment report (w/ inspection plan) Commission Informed	
	Annual Public Meeting	SRI or BC Meet with Licensee	BC or DD Meet with Licensee	RA (or designee) Discuss Performance with Licensee	EDO (or Commission) Discuss Performance with Senior Licensee Management	Commission Meeting with Senior Licensee Management
	INCREASING SAFETY SIGNIFICANCE ----->					

# Action Matrix Summary

<u>Licensee Response Column</u>	<u>Regulatory Response Column</u>	<u>Degraded Cornerstone Column</u>	<u>Multiple/Repetitive Degraded Cornerstone Column</u>	<u>Unacceptable Performance Column</u>
<u>Arkansas Nuclear 1</u>	<u>Calvert Cliffs 1</u>	<u>Callaway</u>	<u>Indian Point 2</u>	
<u>Arkansas Nuclear 2</u>	<u>Cooper</u>	<u>Kewaunee</u>		
<u>Beaver Valley 1</u>	<u>Fermi 2<sup>1</sup></u>	<u>Millstone 2</u>		
<u>Beaver Valley 2</u>	<u>FitzPatrick</u>			
<u>Braidwood 1</u>	<u>Harris 1<sup>2</sup></u>			
<u>Braidwood 2</u>	<u>North Anna 2<sup>3</sup></u>			
<u>Browns Ferry 2</u>	<u>Oconee 1</u>			
<u>Browns Ferry 3</u>	<u>Point Beach 1</u>			
<u>Brunswick 1</u>	<u>Prairie Island 1<sup>4</sup></u>			
<u>Brunswick 2</u>	<u>Prairie Island 2<sup>5</sup></u>			
<u>Byron 1</u>	<u>Quad Cities 1<sup>6</sup></u>			
<u>Byron 2</u>	<u>Quad Cities 2<sup>7</sup></u>			
<u>Calvert Cliffs 2</u>	<u>Summer<sup>8</sup></u>			
<u>Catawba 1</u>	<u>Susquehanna 1<sup>9</sup></u>			
<u>Catawba 2</u>	<u>Susquehanna 2<sup>10</sup></u>			
<u>Clinton</u>				
<u>Columbia Generating Station</u>				
<u>Comanche Peak 1</u>				

# **Major Baseline Inspections through May 31, 2002**

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- Problem Identification and Resolution
  - July 2001
- Emergency Preparedness Exercise
  - September 2001
- Triennial Fire Protection
  - October 2001
- Radiation Protection Team
  - January 2002



# **San Onofre Overall Performance**

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- Preserved public health and safety
- Met all cornerstone objectives



# NRC Public Meeting

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- Closing remarks
  - Dwight Nunn, Southern California Edison
- Closing remarks
  - Elmo Collins, NRC
- Adjourn