Southern California Edison Company



P. O. BOX 800

2244 WALNUT GROVE AVENUE ROSEMEAD, CALIFORNIA 91770 November 21, 1978

TELEPHONE 213-572-1472

J. T. HEAD, JR.

U.S. Nuclear Regulatory Commission Office of Inspection and Enforcement Region V Suite 202, Walnut Creek Plaza 1990 North California Boulevard Walnut Creek, California 94596

Attention: Mr. R. H. Engelken



Docket No. 50-206 San Onofre Unit 1

Dear Sir:

Reference: Letter dated November 16, 1976 from SCE (A. Arenal) to

NRC Region V (R. H. Engelken)

Re: Failed Thermal Sheild Flexures

This letter constitutes a follow-up report concerning the failed thermal shield flexures reported in the letter referenced above. During the 1976 refueling outage, cracks in four (4) of the six (6) flexure type supports of the thermal shield were found as a result of visual inspections performed on the reactor internals. In the referenced letter we stated the basis for our conclusion that continued operation with the flexures either intact or failed is satisfactory. Also, we stated our intention to examine visually 50 percent of the flexures (those at 124, 205, and 244 degrees) during the next refueling outage.

The visual examination identified above was performed during the just completed refueling outage. During the examination, two additional flexures were also visible and were inspected. Thus, the total number of flexures examined was increased from the planned three to a total of five.

Three of the five examined which had previously been found to be cracked (those at 21, 205 and 325 degrees) showed no discernible change in the degree of failure. One of the five examined which had not previously been found to be cracked (at 244 degrees) was now found to be cracked. One of the five examined continued to show no sign of failure (at 124 degrees). Thus, the results of visual examinations during the 1976 and the 1978 refueling outages indicate five of the six thermal shield flexures are cracked.

7811280245

AMO 78/128/1245

100×

USNRC Page Two



Based on the conclusions contained in the referenced letter, we have returned the unit to service and plan no further corrective action.

If you have any questions or require additional information, please let us ${\tt know.}$

Sincerely,

cc: Director, Office of Inspection and Enforcement (30)

Director, Office of Management Information and Program Control (3)

Southern California Edison Company



P. O. BOX 800

2244 WALNUT GROVE AVENUE ROSEMEAD, CALIFORNIA 91770 November 21, 1978

TELEPHONE 213-572-1472

J. T. HEAD, JR.

U.S. Nuclear Regulatory Commission Office of Inspection and Enforcement Region V Suite 202, Walnut Creek Plaza 1990 North California Boulevard Walnut Creek, California 94596

Attention: Mr. R. H. Engelken



Docket No. 50-206 San Onofre Unit 1

Dear Sir:

Reference: Letter dated November 16, 1976 from SCE (A. Arenal) to

NRC Region V (R. H. Engelken)

Re: Failed Thermal Sheild Flexures

This letter constitutes a follow-up report concerning the failed thermal shield flexures reported in the letter referenced above. During the 1976 refueling outage, cracks in four (4) of the six (6) flexure type supports of the thermal shield were found as a result of visual inspections performed on the reactor internals. In the referenced letter we stated the basis for our conclusion that continued operation with the flexures either intact or failed is satisfactory. Also, we stated our intention to examine visually 50 percent of the flexures (those at 124, 205, and 244 degrees) during the next refueling outage.

The visual examination identified above was performed during the just completed refueling outage. During the examination, two additional flexures were also visible and were inspected. Thus, the total number of flexures examined was increased from the planned three to a total of five.

Three of the five examined which had previously been found to be cracked (those at 21, 205 and 325 degrees) showed no discernible change in the degree of failure. One of the five examined which had not previously been found to be cracked (at 244 degrees) was now found to be cracked. One of the five examined continued to show no sign of failure (at 124 degrees). Thus, the results of visual examinations during the 1976 and the 1978 refueling outages indicate five of the six thermal shield flexures are cracked.

100×

USNRC Page Two

Based on the conclusions contained in the referenced letter, we have returned the unit to service and plan no further corrective action.

If you have any questions or require additional information, please let us know.

Sincerely,

cc: Director, Office of Inspection and Enforcement (30)

Director, Office of Management Information and Program Control (3)

Southern California Edison Company



P. O. BOX 800

2244 WALNUT GROVE AVENUE ROSEMEAD, CALIFORNIA 91770 November 21, 1978

TELEPHONE 213-572-1472

J. T. HEAD, JR.

U.S. Nuclear Regulatory Commission Office of Inspection and Enforcement Region V Suite 202, Walnut Creek Plaza 1990 North California Boulevard Walnut Creek, California 94596

Attention: Mr. R. H. Engelken



Docket No. 50-206 San Onofre Unit 1

Dear Sir:

Reference: Letter dated November 16, 1976 from SCE (A. Arenal) to

NRC Region V (R. H. Engelken)

Re: Failed Thermal Sheild Flexures

This letter constitutes a follow-up report concerning the failed thermal shield flexures reported in the letter referenced above. During the 1976 refueling outage, cracks in four (4) of the six (6) flexure type supports of the thermal shield were found as a result of visual inspections performed on the reactor internals. In the referenced letter we stated the basis for our conclusion that continued operation with the flexures either intact or failed is satisfactory. Also, we stated our intention to examine visually 50 percent of the flexures (those at 124, 205, and 244 degrees) during the next refueling outage.

The visual examination identified above was performed during the just completed refueling outage. During the examination, two additional flexures were also visible and were inspected. Thus, the total number of flexures examined was increased from the planned three to a total of five.

Three of the five examined which had previously been found to be cracked (those at 21, 205 and 325 degrees) showed no discernible change in the degree of failure. One of the five examined which had not previously been found to be cracked (at 244 degrees) was now found to be cracked. One of the five examined continued to show no sign of failure (at 124 degrees). Thus, the results of visual examinations during the 1976 and the 1978 refueling outages indicate five of the six thermal shield flexures are cracked.

100×

USNRC Page Two



Based on the conclusions contained in the referenced letter, we have returned the unit to service and plan no further corrective action.

If you have any questions or require additional information, please let us know.

Sincerely,

cc: Director, Office of Inspection and Enforcement (30)

Director, Office of Management Information and Program Control (3)