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Dwight E. Nunn
Vice President

December 3, 2003

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, DC 20555

Subject: **Docket No. 50-206**
Amendment Application No. 219
San Onofre Nuclear Generating Station, Unit 1

Gentlemen:

By letter dated July 25, 2003, Southern California Edison (SCE) submitted Amendment Application No. 219 to the NRC. The amendment is a request to revise sections of the San Onofre Unit 1 Defueled Safety Analysis Report (DSAR) concerning modifications to the turbine gantry crane and turbine building and movement of spent fuel to the Independent Spent Fuel Storage Installation (ISFSI). Subsequently, an NRC reviewer raised questions regarding cold proof load testing as discussed in NUREG-0554, Section 2.4 and travel stops described in NUREG-0612 Appendix C. Provided as an enclosure is additional information on SCE's plans for the Unit 1 gantry crane.

If you have any questions regarding this matter, please contact Dave Pilmer at (949) 368-1486.

Sincerely,

Enclosure

cc: B. S. Mallett, Regional Administrator, NRC Region
D. B. Spitzberg, NRC Region IV, San Onofre Unit 1
W. C. Huffman, NRC Project Manager, San Onofre Unit 1
C. C. Osterholtz, NRC Senior Resident Inspector, San Onofre Units 2 & 3

lym5501

Unit 1 Gantry Crane Additional Information

QUESTION:

The proposed revision to the DSAR (page 3.2-13j) states: "The minimum operating temperature of the crane is 32 F, per the DSAR." I searched the previous DSAR revisions available in ADAMS, but I didn't find any reference to crane operating temperature. I would like to understand the basis for the crane operating temperature limit. If there is no adequate basis, I need to understand how their commitments to load testing relate to "cold proof" testing.

RESPONSE:

The statement, "The minimum operating temperature of the crane is 32 °F, per the DSAR", is based upon the minimum ambient temperatures recorded at the San Onofre site for the months of October thru March. In Appendix A, Historical Information, on page A-11 of the DSAR is Table A2-2 titled "Monthly Temperatures and Precipitation at Camp Pendleton Surf and Weather Station."

Clarification is provided below to address the Unit 1 gantry crane's minimum operating temperature and "cold proof" testing as discussed in NUREG-0554 section 2.4.

The Unit 1 Gantry Crane will undergo a 125% "cold proof" load test at completion of all structural modifications to the crane. The load test will be performed at a time when the ambient atmospheric temperature, measured in the vicinity of the crane, is relatively cold, although likely to be well above 32 °F. The ambient temperature at the time of load testing will be recorded and established as the minimum operating temperature of the crane for all spent fuel transfer cask lifts. Operation of the crane will be in accordance with the requirements of NUREG-0554 section 2.4.

Prior to conducting the cold proof load test, a visual inspection at critical structural locations of the gantry crane will be performed. Critical locations are at member welds essential to the structural integrity of the crane handling system. Upon completion of load testing, these same locations will be inspected again to ensure that no structural damage or non-conformance with design requirements were introduced as a result of performing the load test. Qualified and certified personnel in accordance with the San Onofre Quality Assurance Program will conduct VT-1 type inspections. A record will be made of the inspection and testing results.

QUESTION:

How is NUREG-0612, Appendix C item # 9 (travel stops) addressed by the design?

RESPONSE:

Safety devices are included in the handling system design to ensure that the X-SAM trolley and the gantry crane are located within the analyzed limits of the North Extension Structure. The gantry bridge design includes end of travel limit switches and mechanical end stops for the X-SAM trolley. Gantry crane movement in the north direction is restricted by an existing mechanical end stop at column line "A". Gantry movement in the south direction is restricted by a seismic bumper attached above the equalizer pin which will impact with a support member on the seismic restraint structure.