

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

In the Matter of

SOUTHERN CALIFORNIA EDISON CO.  
AND SAN DIEGO GAS & ELECTRIC CO.

(San Onofre Nuclear Generating  
Station, Unit 1)

Docket No. 50-206

CONTINGENT RESCISSION OF SUSPENSION

I

The Southern California Edison (SCE) and the San Diego Gas and Electric Company (the licensees) hold Provisional Operating License No. DPR-13, which authorizes Southern California Edison Company to operate the San Onofre Nuclear Generating Station, Unit 1 (the facility) at power levels not in excess of 1347 megawatts (thermal) rated power. The facility, which is located at the licensees' site in San Diego County, California, is a pressurized water reactor (PWR) used for the commercial generation of electricity.

II.

The seismic design basis upon which San Onofre Unit 1 was initially licensed for structures, systems and components important to the safety of the plant was what, in today's terminology, would be consistent with a 0.25g Housner response spectra Operating Basis Earthquake (OBE) and a 0.5g Housner response spectra Safe Shutdown Earthquake (SSE). A number of actions have been taken in recent years, however, to upgrade the plant to 0.67g, the peak ground acceleration used as the seismic criteria applied to Units 2 and 3 that were later built on the same site.

Analyses of the seismic capability of the plant at 0.67g and submitted in the April-May 1982 time period as part of the ongoing seismic reevaluation

- 2 -

program, indicated high stress values for certain equipment, piping and supports and, therefore, raised questions as to whether this equipment met the original licensing basis (0.5g Housner spectra SSE). The staff informed the licensee that further information demonstrating that the plant met its initial licensing design basis would be necessary before the plant, which was then shut down, would be permitted to restart. In letters dated June 15 and June 24, 1982, the licensee informed the staff that undertaking analyses to reconfirm that the plant met its original design basis would consume significant resources and would not contribute to the overall goal of upgrading the plant to 0.67g. Therefore, the licensee instead proposed to establish an implementation plan for upgrading the plant to 0.67g and committed itself to keeping the plant shut down until necessary reanalyses and plant modifications were completed. The staff agreed with the licensee that its program to upgrade the facility to 0.67g would resolve the staff's concerns about the ability of the plant to meet its licensed design basis, i.e., 0.5g. However, in view of the staff's conclusion that the plant should not restart until the concerns about the plant's capability to shut down after the 0.5g design basis earthquake were resolved, the staff issued an order on August 11, 1982, to confirm the licensee's commitments to suspend operation of the plant and to undertake the plant modifications. The "Order Confirming Licensee Commitments on Seismic Upgrading" required that the licensees "[m]aintain San Onofre Unit 1 in the shutdown condition until modifications described in their submittal dated June 15, 1982 as supplemented by letter dated June 24, 1982 are completed and NRC approval is obtained for restart." 47 Fed. Reg. 36058, 36059 (Aug. 18, 1982).

Since the August 1982 Order was issued, the licensee has continued to make modifications to upgrade the capability of many plant structures, systems and components to 0.67g. Although not all the potentially necessary modifications are complete to assure that the plant could be brought to a cold-shutdown condition in the event of a postulated 0.67g earthquake, the licensee has proposed to return the plant to service for a limited period of time while the seismic reevaluation program is being completed.

On the basis of the staff's evaluation of the plant modifications and the licensee's analyses, the staff believes that there is reasonable assurance that operation of San Onofre Unit 1 can be resumed prior to completion of the seismic reevaluation program without posing an undue risk to public health and safety. It should be recalled that the suspension of operation imposed by the August 1982 order was based primarily on questions about whether the plant met its licensed design basis, 0.5g. Currently, the staff believes that the licensee has reasonably established the seismic capability of the systems which would provide the capability to achieve and maintain a hot standby condition in the event of a 0.67g modified Housner spectrum earthquake. Moreover, with respect to other systems, the staff believes that available information indicates that the plant should withstand a 0.5g seismic event, and may even withstand larger seismic events without substantial damage. Thus, the staff believes that plant operation with systems necessary to achieve hot standby upgraded to 0.67g is sufficient to assure public health and safety until the overall seismic reevaluation is completed because (1) the seismic integrity of

the primary system and its isolation boundaries has been established such that a severe seismic event would not be expected to cause an accident requiring systems that have not been completely upgraded, and (2) there is sufficient time available to manually set up cooling water supplies to achieve and maintain cold shutdown in the event that a severe seismic event were to occur. The bases for the staff's conclusions are discussed in greater detail in the Safety Evaluation Report being issued on this date.


To ensure the safety of long-term operation in terms of providing suitable margins, the seismic reevaluation program and additional modifications necessary to upgrade the plant's seismic capability should be completed in a timely manner. The staff believes that the reevaluation program should be completed before the return to power after the next refueling outage after restart and that the modifications should be completed by the same time unless the licensee provides a case-by-case justification for any extension of time for completion.

### III.

Based on the staff's evaluation, the public health and safety no longer requires suspension of plant operation. Therefore, the suspension of operation imposed by the Order of August 11, 1982 is hereby rescinded provided that the remainder of the seismic reevaluation program and the resulting plant modifications are completed by the end of the next refueling outage unless the licensee provides to the Director, Division of Licensing, a justification for any extension of time for completion of any modification and the Director is satisfied that continued operation

may be permitted. Such justification, if any, should be provided prior to the commencement of the next scheduled refueling outage after this restart.

FOR THE NUCLEAR REGULATORY COMMISSION



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

Dated at Bethesda, Maryland,  
this 21<sup>st</sup> day of November, 1984.