

SOUTH CAROLINA ELECTRIC & GAS COMPANY

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O. W. DIXON, JR.  
VICE PRESIDENT  
NUCLEAR OPERATIONS

September 24, 1982

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Virgil C. Summer Nuclear Station  
Docket No. 50/395  
Operating License No. NPF-12  
Seismic Confirmatory Programs

Dear Mr. Denton:

In the Atomic Safety and Licensing Board's Partial Initial Decision on the Virgil C. Summer Nuclear Station, issued July 20, 1982, two license conditions were stated. The first condition was a requirement for the continuation of the seismic monitoring program as discussed in section 2.5.3 of the Virgil C. Summer Nuclear Station Safety Evaluation Report (NUREG 0717). The second condition was a requirement to complete during the first year of operation a "confirmatory program on plant equipment and components within the guidelines established in the findings." Both of the conditions were summarily included in the facility operating license (NPF-12) as conditions 24 and 25, issued for the Virgil C. Summer Nuclear Station on August 6, 1982.

South Carolina Electric and Gas Company (SCE&G) acting for itself and on behalf of its Co-Licensee, South Carolina Public Service Authority, hereby submits its Seismic Confirmatory Program for Equipment and Components of the Virgil C. Summer Nuclear Station in fulfillment of licensing condition 25.

Additionally, in a letter dated April 15, 1981 SCE&G committed to extending its "studies of the seismic design margin within the Virgil C. Summer Nuclear Station to include all systems and components whose functions are important to the assurance of the continuing removal of shutdown heat."

This commitment was based on a recommendation by the ACRS for continuation of these studies. This recommendation was contained in a letter dated March 18, 1981 to NRC Chairman, Joseph Hendrie, concerning ACRS review of the Virgil C. Summer Operating License Application. At the time of the ACRS

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recommendation and SCE&G's commitment, the seismic margin studies to be completed were an extension of information and work presented in February and March, 1981 at the ACRS meetings on the Virgil C. Summer Operating License Application. Because of the protracted ASLB hearing on the seismic issue, much additional work concerning the Reservoir Induced Seismicity (RIS) issue has been completed since the ACRS meetings and additional information has come to light. Consequently, the condition imposed by the ASLB (requiring a seismic margin confirmatory program) involved comparison of the SSE spectrum to a different RIS spectrum than that recommended by the ACRS.

The Seismic Confirmatory Program attached was originally presented to the NRC Staff in a meeting on September 1, 1982. SCE&G's position presented at that meeting was that the program to meet the ASLB condition superseded the program recommended by the ACRS. Support for this position was derived primarily from the ASLB Partial Initial Decision, Finding 113 at 72. The ASLB stated that "Applicants and Staff have demonstrated that there will be no damage to the nuclear plant structures or equipment from a maximum magnitude (RIS) earthquake occurring at normal tectonic depths." The ACRS program involved comparison of an earthquake spectrum (representing a magnitude 4.5 earthquake at normal tectonic depths) anchored at .22g peak ground acceleration. At the September 1, 1982 meeting and again at another meeting on September 15, 1982, the Staff indicated that it could not necessarily agree with our interpretation of the ASLB program as superseding the ACRS program.

To prevent delay in satisfaction of the ASLB condition pending resolution of this issue, SCE&G submits the attached Seismic Confirmatory Program in response only to licensing condition 25. SCE&G considers the deadline for completion of this program to be one year after connection of the Virgil C. Summer Nuclear Station to the SCE&G electrical grid. The target schedule in the attachment provides for the final report to be issued to the NRC by July, 1983.

If not superseded by the ASLB's program, the ACRS commitment must be addressed separately. Because of the nature of the work to be performed for the ASLB program (involving reduction of recorded earthquake motion to obtain equivalent structural foundation motions) certain information applicable to the ACRS program may be derived by the ASLB program. Additionally,

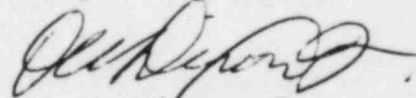
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if equipment margin analysis is required for completion of the ASLB program, these studies may be applicable to an ACRS equipment margin analysis program. For these reasons, SCE&G will not submit a complete program for addressing the ACRS commitment at this time. We will proceed with the Seismic Confirmatory Program as described and re-evaluate the ACRS commitment and its interface with the ASLB program after completion and evaluation of the relationship between surface and foundation motion.

Completion of the ACRS program is planned to be prior to start-up after the first refueling outage of the Virgil C. Summer Nuclear Station. The target completion date of June, 1982 provided in the April 15, 1981 letter became inapplicable because of the continued evaluation of the seismic issue at that time by the ASLB and subsequent delay in the issuance of an operating license. The completion schedule at first refueling is consistent with Staff interpretation expressed at the time of the ACRS commitment and reinforced at the September 15, 1982 meeting.

We request your prompt response to this program so that we may proceed with satisfaction of license condition 25.

Very truly yours,



O. W. Dixon, Jr.

NEC:OWD/fjc

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