

SOUTH CAROLINA ELECTRIC & GAS COMPANY

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VICE PRESIDENT AND GROUP EXECUTIVE
NUCLEAR OPERATIONS

November 14, 1980

UNITED STATES NUCLEAR REGULATORY COMMISSION
Region II
101 Marietta Street, N.W.
Atlanta, GA 30303

ATTENTION: Mr. James P. O'Reilly, Director

Subject: V.C. Summer Nuclear Station
Unit #1, Reportable Item in
Accordance with 10CFR50.55(e),
Welded Hilti bolts

Ref: SCE&G letter to Region II,
Reportable Items in Accordance
with 10CFR50.55(e), dated
September 27, 1979

Gentlemen:

SCE&G sent the referenced letter to Region II identifying concerns relative to welded Hilti bolts. At that time, we considered this item to be potentially reportable and referenced inspection programs in progress to identify the extent of the problem. These inspection programs evolved because of the following nonconforming conditions:

- 1) Daniel Construction Company (DCC) Nonconformance Notice (NCN) initiated on 4/25/79, identified a Hilti bolt wedged in a piping support by a piece of a file. This condition was evaluated by Engineering and determined not reportable.
- 2) A Hilti bolt was found welded to the base plate of a piping support and documented on DCC NCN 717, dated 4/23/79. This condition was detected during the normal course of inspection by the construction QC organization and was not considered a 10CFR50.55(e) reportable item since no quality program breakdown occurred.
- 3) As a result of the conditions noted in the pipe hanger area, SCE&G/QC randomly reinspected the electrical support Hilti bolt installations. A Hilti bolt was found welded to a plate that was not detected by prior QC inspections and SCE&G NCN 831 was initiated accordingly on 6/21/79. An Engineering evaluation determined that this condition was not reportable.

The results of the three nonconforming conditions indicated the need for further evaluation for extent. To accomplish the reinspection, the disposition of DCC NCN 722 and SCE&G NCN 831E, directed the DCC/QC and SCE&G/QC organization to establish reinspection programs for piping supports and electrical supports,

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respectively. Subsequently, SCE&G/QC took over the inspection of the pipe hanger program and initiated a reinspection of pipe support plates for welded Hiltis.

The reinspection of the electrical support Hilti bolts has been completed by SCE&G/QC. Approximately 1062 electrical supports to include approximately 6372 Hilti bolts have been reinspected. As a result, 30 bolts were found to be welded to the baseplate, 1 bolt wedged and 3 bolts spliced. In conjunction with this reinspection, 19 pipe rupture restraints were reinspected with 1 Hilti bolt found to be welded. These bolts are to be either accepted "as is" upon Engineering evaluation or replaced.

The reinspection of the pipe hanger support Hilti bolts is in process with approximately 5500 out of the 7305 hangers having been reinspected. To date, 2 Hilti bolts have been found to be welded to base plates. These two Hilti bolts are documented on SCE&G NCN's 1030H and 1040H and will be replaced.

Cause

The cause remains as stated in our 9/27/79 letter in that there was an arbitrary violation of procedures on the part of the craft workers in the employ of the Constructor, Daniels Construction Company (DCC) to give the appearance of properly installed Hilti bolts in lieu of correcting the problems encountered during installation in accordance with procedure and program requirements.

Safety Indications

It must be concluded that some of the Hilti bolts found to be welded or wedged would have had an adverse safety impact if the condition remained "as is" since some of the electrical and pipe hanger support bolts must be replaced as determined by Engineering.

Actions to Correct Conditions

The conditions found as a result of the reinspection programs are being evaluated by Engineering for "accept as is" or replacement.

Corrective Actions to Prevent Recurrence

Since the electrical and pipe hanger support work is essentially complete, corrective action to prevent recurrence is moot. However, the applicable procedures have been revised to provide for more QC coverage during the Hilti bolt installation.

SCE&G has also assumed direct control of QC responsibilities in pipe hangers and by stricter inspections has verified the elimination of these conditions in hangers of recent vintage. SCE&G continues to work with the DCC site management and corporate office management to determine the best methods to preclude recurrence of craft problems in the future.

Based on the above, SCE&G considers this a final report on this subject. Information supporting our actions is available at the site for NRC review. Should any questions arise or further information be required, please contact us.

Very truly yours,

T. C. Nichols Jr.

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Scary

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