



April 20, 1993

Dear Subscriber,

The Seismic Qualification Utility Group (SQUG) has entered the implementation phase of Generic Letter 87-02, "Verification of Seismic Adequacy of Mechanical and Electrical Equipment in Operating Reactors, Unresolved Safety Issue (USI) A-46." One of SQUG's goals during this phase of USI A-46 is to provide member utilities and their contractors with training, technical, and licensing support to facilitate A-46 evaluations. This includes assistance in resolving common problems and a means for focused communications among participants. One vehicle for accomplishing this goal is a newsletter which SQUG will publish on a periodic basis. Publishing this newsletter also satisfies SQUG's commitment to the Nuclear Regulatory Commission (NRC) to provide a mechanism for exchange of information among the SQUG utilities.

This is the first issue of the SQUG Newsletter. It provides a brief status report of the SQUG activities currently underway and planned for 1993. Future issues will report, in detail, on some of these topics and will disseminate lessons learned during the plant walkdowns. If you have suggestions for topics to be covered in future issues, send these to the editor at the address listed in the back of this newsletter.

So that this information receives as wide a distribution as possible, we are sending this newsletter to SQUG member representatives, SQUG contractors, selected NRC Staff members, individuals who have taken one of the SQUG-developed training courses, and others. If there are others in your organization who would also like to receive this newsletter, have them send their name and address to the editor listed on the back of this newsletter.

A handwritten signature in black ink that reads "Neil P. Smith".

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Neil P. Smith  
*SQUG Chairman*

A handwritten signature in black ink that reads "Robert P. Kassawara".

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Robert P. Kassawara  
*EPRI Program Manager*



## SQUG NEWSLETTER

In an effort to provide useful information to the SQUG membership on resolution of US1 A-46 and other seismic topics, SQUG will be publishing a periodic newsletter. This first issue provides a brief status report on the SQUG activities currently underway and planned for 1993. Future issues will report on some of these topics and others in more detail.

## SQUG ENTERS IMPLEMENTATION PHASE

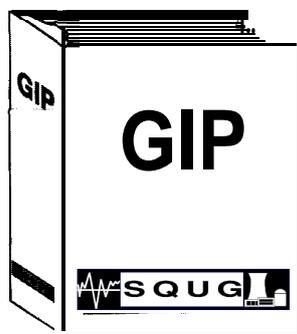
Calendar year 1992 saw the completion and approval of the SQUG methodology for resolution of US1 A-46. Subsequently, SQUG members made commitments to initiate implementation of the SQUG resolution and the program has now entered the implementation phase.

SQUG has two goals during this phase. The first is to provide members with training, technical, and licensing support to facilitate A-46 evaluations. This includes ensuring uniformity and coherence in response to the NRC and providing means for focused communications among utilities.

The second goal of SQUG is to develop the procedures for using the SQUG method for new and replacement equipment and parts in the future.

## GIP REVISION 2A

A revision to the GIP has been prepared which incorporates the provisions of the NRC's Supplemental Safety Evaluation Report No. 2 (SSER#2). It also includes minor editorial improvements and typographical changes.



There are no new changes in the technical requirements except as required in SSER#2.

The purpose for issuing Revision 2A is to provide all necessary A-46 implementation requirements and guidelines in one document. This will help SQUG members avoid having to make independent (and possibly conflicting) interpretations of how SSER#2 affects implementation of GIP Revision 2, Corrected 2/14/92 (designated GIP-2 in SSER#2).

The full SQUG membership has been given the opportunity to review a draft version of Rev. 2A and

comments have been incorporated. SQUG then submitted Rev. 2A to the NRC for approval on March 26, 1993. As there are no new technical topics included in Revision 2A, NRC approval is expected within their 60-day review period. Members will then be encouraged to adopt Revision 2A of the GIP by a simple letter to the NRC. Guidance on preparing this letter will be provided by our legal counsel.

## GIP REVISION 3

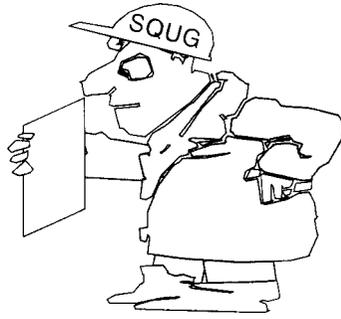
Plans and actions are already in progress to develop Revision 3 of the GIP. This revision will contain three main technical changes:

- *New expansion anchor bolt data* — New expansion anchor bolt data developed by SQUG in 1992 will be added to the GIP in order to provide additional data on anchor bolt types not presently covered by GIP rules and to relax some of the strength reduction factors which were added during the NRC's review of GIP-2.
- *In-cabinet amplification data* — A report on in-cabinet amplification data for a new category of cabinets, described as relay panels, has been prepared and will be included in GIP Rev. 3. This report defines a generic in-cabinet amplification factor for relay panels. It also justifies the use of the GENRS computer program to calculate in-cabinet response spectra for relay panels.
- *Update of experience data base* — The SQUG/EPRI earthquake experience data base has been updated over the years to include significant earthquakes through 1992. Only those earthquakes through about mid-1985 have been reviewed and are utilized as the basis for the SQUG equipment descriptions and caveats in the GIP. The post-earthquake investigations of earthquakes since mid-1985 have been performed and documented and the Class of 20 report has been updated to include them. In 1993, we plan to have these new data reviewed by peer reviewers and the NRC and to reflect any changes as a result of these earthquakes in the GIP. The primary motivation for this review process is to provide a substantial body of new vintage equipment in the experience data base for use in the qualification of new and replacement equipment in A-46 plants in the future.

We expect Rev. 3 of the GIP to be complete and issued to the NRC in the second half of the year.

## SQUG TRAINING CLASSES

SQUG training courses which were initiated in 1991 and 1992 will continue in 1993. To date, a total of 570 utility and utility-sponsored trainees have completed SQUG courses.



The 1993 training courses will include one safe-shutdown equipment selection and relay evaluation course, four walkdown courses and four IPEEE add-on courses. Note that a fourth session of the walkdown and IPEEE add-on courses has been added to handle the very high demand for the three sessions originally scheduled for 1993. Workshops will also be held as the demand dictates and funding permits. The current schedule for 1993 training courses and workshops is shown below.

Course Name	Dates	Location
<i>Equipment Selection and Relay Review</i>		
Course	3/22 - 3/24	Washington, DC
Workshops	5/24	TBD
	Nov-Dec	TBD
<i>Walkdown Screening and Seismic Evaluation (A-46)</i>		
Courses	2/1 - 2/5	Denver
	5/3 - 5/7	New Orleans
	8/2 - 8/6	Boston
	November	TBD
Workshops	5/25	TBD
	Nov-Dec	TBD
<i>Seismic IPEEE Add-On</i>		
Courses	3/2 - 3/4	Denver
	6/8 - 6/10	New Orleans
	8/31 - 9/2	Boston
	December	TBD
Workshops	Nov-Dec	TBD

## SQUG VIDEOTAPE COURSE

In addition to standup lectures described above, SQUG is developing a videotape version of the Walkdown Screening and Seismic Evaluation Training Course. Significant effort is continuing on this course. To date approximately 12 of a total of 27 training modules have been completed in either draft or final form, and we expect to deliver the completed video course by September of this year.

In addition, each SQUG representative will be receiving shortly a videotape cassette containing Module IA, "Introduction to SQUG Walkdown Course," Module IB, "History of US1 A-46 and SQUG," and Module IC, "Description of Equipment

Databases," for information and internal use. These introductory modules provide a good overview of the entire SQUG program and the scope of work required to resolve A-46. They may be used in briefing management, technical, and training personnel who will be administering this course at their utility.

## SQUG MANAGEMENT GUIDELINES

The SQUG Management Guidelines originally issued in draft form in late 1991 are currently being updated and supplemented to provide implementation guidance and lessons learned since 1991. Chapters to be updated or added include Licensing Considerations, Guidelines for Conducting Plant Walkdowns, and Guidelines for Seismic Verification for New and Replacement Equipment and Parts.

## SEISMIC VERIFICATION OF NEW AND REPLACEMENT EQUIPMENT AND PARTS

Guidelines on how to apply the SQUG methodology in the procurement of new and replacement equipment and parts are being finalized and will be included as a chapter in the SQUG Management Guidelines. These guidelines are for use with seismic Category 1 equipment in US1 A-46 plants. The electronic data base containing the inventory of equipment which has been subjected to strong motion earthquakes through 1992 has also been completed and is being used on a trial basis by a few utilities. The electronic data base will be on CD-ROM or optical disk. A report will be issued containing a users manual and examples. These are expected to be available in May '93.

These guidelines are being coordinated with the EPRI industry-wide guidance on "Seismic Technical Evaluation of Replacement Items (STERI)."

At the request of a substantial number of members, we plan to follow up issuance of the guidelines and the electronic data base with at least one two-day training seminar on their use. Depending on demand and funding limitations, additional training sessions may be offered.

## SQUG ELECTRONIC BULLETIN BOARD SYSTEM

The SQUG Electronic Bulletin Board System (BBS) is now in place and operational. Approximately 43 participants have been registered and have access to the system. These include 30 utility participants, representatives of EPRI, the SQUG Steering Group and SQUG contractors. Testing of the system indicates that it works well and is very useful for communication and transfer of information.

In response to requests from some of you, we plan to load onto the system the entire text of GIP-2. We also plan to put Revision 2A on the BBS as soon as it is approved by the NRC. You will then be able to access GIP-2A from the BBS and to download the WordPerfect 5.1 files onto your terminal.

We encourage all SQUG members to sign up for the SQUG BBS system. A SQUG-specific user's manual for the system was issued on March **15, 1993**, to those who had previously registered. Access to the SQUG BBS is limited to the SQUG utility members and their representatives.

### **FOLIO INFOBASE OF GIP**

Since the GIP is a rather large set of guidelines, some members have expressed interest in being able to quickly scan and search it for topics of interest. To accommodate that need, we have been entering the GIP into a text database system called FOLIO Infobase. It will allow the user to quickly scan for any word or group of words in the GIP. It also has other useful features. We had expected to send this GIP Infobase to SQUG members in January, however, unexpected difficulties arose in converting it from the WordPerfect format to the FOLIO Infobase

format. We currently expect to be able to send each SQUG member this infobase program with the GIP on it in April, 1993.

### **PERIODIC NEWSLETTER/ BULLETIN BOARD INFORMATION**

We are already beginning to receive inputs from members on lessons learned and problems encountered in preliminary and final walkdowns. We will be sharing these in this newsletter and will be posting them to the Bulletin Board as we obtain them.

### **PLANS FOR 1993 SQUG MEETINGS**

Considering the number of activities in progress and the fact that a number of utilities have actively started the implementation process, we believe that a meeting of the full SQUG membership in July will be needed. Please mark your calendars and watch the Bulletin Board for an announcement.

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## **SEISMIC QUALIFICATION UTILITY GROUP (SQUG)**

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### **Utility Steering Group:**

Neil Smith, Chairman (Commonwealth Edison)  
James Thomas (Duke Power)  
William Metevia (Yankee Atomic)  
Dennis Ostrom (Southern California Edison)  
Donald Moore (Southern Company Services)

EPRI Program Manager: Robert Kassawara (EPRI)  
Technical Coordinator: William Schmidt (MPR)  
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Articles, photographs, and other contributions are welcome for future issues.  
SQUG reserves the right to edit contributions.

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**SQUG VIDEOTAPE COURSE  
IN PREPARATION (PG. 3)**