

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

DD-84-20

OFFICE OF NUCLEAR REACTOR REGULATION
Harold R. Denton, Director

In the Matter of)
PACIFIC GAS & ELECTRIC COMPANY) Docket No. 50-275
(Diablo Canyon Nuclear Power Plant,) (10 CFR 2.206)
Unit 1))

DIRECTOR'S DECISION UNDER 10 CFR 2.206

By petition pursuant to 10 CFR 2.206 dated February 2, 1984, Thomas Devine of the Government Accountability Project (GAP) on behalf of the San Luis Obispo Mothers for Peace requested that the Nuclear Regulatory Commission defer any decision on whether to grant a low-power operating license to the Diablo Canyon Nuclear Power Plant, Unit 1 until a number of specified actions were taken. ^{1/} Notice of receipt of the petition was published in the Federal Register on March 13, 1984 (49 FR 9517).

Petitions Regarding Low-Power Operation

The actions requested by GAP in its February petition included:

1. Completion of "a comprehensive, third party reinspection program of all safety-related construction in the plant, with full authority by the independent organization to identify and impose corrective action on any nonconforming condition..."

^{1/} GAP's Petition was filed before the Commission. It was referred to the NRC Staff for action, as were all subsequently filed Petitions; supplemental documents dated March 1, March 23, April 12, May 3, June 21, June 22, July 11, July 16 and July 23, 1984. These petitions are addressed herein.

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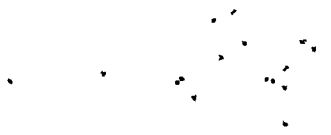


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- 2) "An independent audit of design quality assurance, including the reliability of conclusions from remedial design verification programs imposed since 1981 such as the seismic design review";
- 3) development of a full record on Pacific Gas & Electric Company's character and competence to operate the Diablo Canyon plant, including
 - a) a management audit by an independent organization,
 - b) a full investigation and report by the NRC Office of Investigations to determine the causes of construction and design QA violations at Diablo Canyon, including questions of harassment, subordination of safety to cost concerns, destruction of records and deliberate violations of the Act;
- 4) a full program of public participation for selection and oversight of the independent organizations and creation of a public oversight committee with authority to obtain all requested information and to conduct legislative-style public oversight hearings.

In support of its request, GAP identified some 170 alleged violations of "legal requirements and relevant specifications", based upon the affidavits and supporting exhibits of six present or former employees at the Diablo Canyon site. The alleged violations involved breakdowns in both construction quality assurance and design quality assurance (QA).



In the construction area, a number of issues concerning the adequacy of welding were raised. These included problems with (1) qualifications of welders, welding procedures and welding inspectors; (2) control of welding equipment; (3) maintenance of welding material; (4) weld inspection program; and (5) weld repairs. Additional constructional problems were alleged in the areas of nondestructive examinations, hydrostatic tests of piping, vendor QA, generic breakdowns in material control, construction procedures and training for quality control (QC) inspectors, suspect inspection acceptance criteria, breakdowns in the system for disclosure of QA violations and in the organizational freedom of QC inspectors, harassment and retaliation of QC personnel. In the area of design QA the petitioner described alleged violations in the areas of results from the seismic design review and design control. Allegations were also raised concerning design flaws in the residual heat removal system (RHR) of the emergency core cooling system (ECCS).

Finally, GAP asserted that even if specific safety hazards were not created or specific regulations violated, the factual pattern which they have described demonstrates that PG&E does not have the necessary character and competence to operate a nuclear power plant and that the allegations must be resolved prior to any low-power operating decision because they concern issues which could be grounds for denying the license.

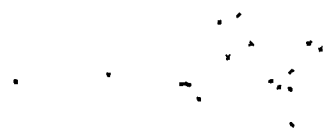
GAP filed supplements to its petition, with additional allegations and supporting affidavits on March 1, 1984, March 23, 1984 and April 12,



1984. GAP was joined in its March 1, 1984 supplemental petition by six other organizations. 2/ This petition submitted five additional affidavits and interviews with nine present and former plant workers. Additional, specific remedial actions were requested of the NRC based on this information. GAP requested that the reinspection of plant safety-related construction be preceded by a comprehensive review of all potential quality-related documentation, an expansion of the sample program in the seismic design review to cover 100% of relevant, safety-related installations and implementation of definitive corrective action to eliminate a design flaw in the RHR pumps at Diablo Canyon. The March 12, 1984 supplement provided twelve additional affidavits in support of previous allegations made in the February 2 and March 1 petitions.

On April 12, 1984, GAP filed a petition pursuant to 10 CFR 2.206 before the Commission alleging that the record before it for a decision on a low power license was inaccurate and requesting (1) provision for the Joint Intervenors to brief the Commission along with the NRC staff; (2) assumption of responsibility by the Commission to conduct further fact-finding and oversee ongoing corrective action; (3) direction to the NRC staff to provide transcripts of "whistleblower" interviews to the Atomic Safety & Licensing Appeal Board, and (4) initiation of an

2/ Christic Institute, Critical Mass, Environmental Action, Friends of the Earth, Fund for Constitutional Government, Greenpeace Pacific Southwest and Nuclear Information and Resource Services. Their participation is limited to the March 1, 1984 petition.



investigation by the Office of Inspector and Auditor into certain actions by the NRC staff. 3/

NRC Staff Evaluation of Allegations re: Diablo Canyon

During the course of the independent design reverification program at Diablo Canyon from 1982 through early 1984, the Commission began to receive allegations from a variety of sources concerning the design, construction and operation of the facility and the licensee's management of these activities. As a result of the growing number of allegations the Commission directed the staff on October 28, 1983 to pursue all allegations and concerns to resolution and requested a status report on the investigation, inspection and evaluation efforts prior to its decision regarding authorization of criticality and low power testing. In order to assure an adequate and coordinated response to all allegations received concerning the facility, the staff developed the Diablo Canyon Allegation Management Program (DCAMP), set forth in a document dated November 23, 1983.

Briefly, DCAMP provides for a systematic examination and analysis of allegations and expressions of concern pertaining to design, construction, operation and management of safety-related structures, systems and components at the Diablo Canyon plant. It provides for procedures to maintain

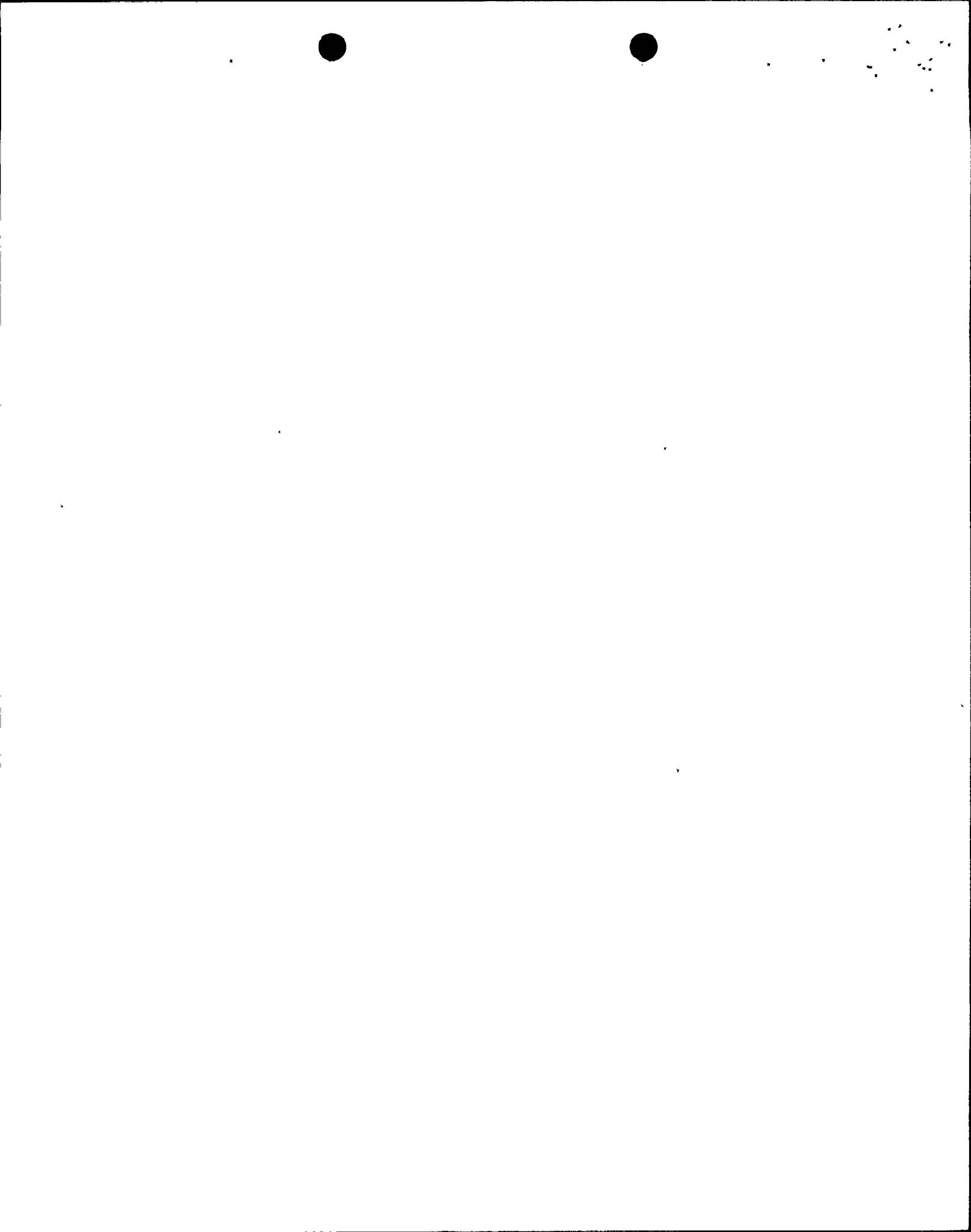
3/ All allegations received in this Petition and subsequent ones which dealt with alleged misconduct by the NRC Staff have been referred to the Office of Inspector and Auditor for handling.



confidentiality where requested, confirmation with the allexer where possible and appropriate and preliminary assessments of allegation significance and programmatic implications prior to Commission consideration of licensing actions. Resolution of allegations may involve site inspections, technical reviews, interviews with site personnel and public technical meetings.

The basic approach for each allegation was to determine if it represented significant new information which suggested that some safety-related structure, system or component necessary for safe operation would not perform its safety function, or whether it identified such weaknesses in licensee's management or quality assurance that plant safety was called into serious question. The Staff applied the following criteria as set forth in SSR 22 for assessing which allegations and concerns required resolution prior to criticality and ascension above 5% power:

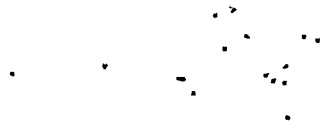
1. Prior to criticality those allegations or concerns must be resolved which offer specific new information, not previously available to the staff, and which appear to involve a discrepancy between design criteria, design, construction or operation of a safety-related component, system, or structure of such magnitude so as to cause the operability to be drawn into question. In addition, sufficient technical information regarding these allegations or concerns is not presently available to the staff, or programs have not been developed or implemented to assure that regulatory concerns related to reactor safety will be resolved prior to criticality.



2. Prior to criticality those allegations or concerns must be resolved which offer definitive new information, not previously available to the staff, and which indicate a potential, significant deficiency in the licensee's management or quality assurance of safety-related activities. In addition, sufficient technical information regarding these allegations or concerns is not presently available to the staff, or programs have not been developed or implemented to assure that regulatory concerns related to reactor safety will be resolved prior to criticality.

3. Prior to exceeding 5% power those allegations or concerns must be resolved which offer specific new information, not previously available to the staff, and which may reasonably be expected to involve sizeable failures of systems that contain radioactivity or of the ECCS systems. In addition, sufficient technical information regarding these allegations or concerns is not presently available to the staff, or programs have not been developed or implemented to assure that regulatory concerns related to reactor safety will be resolved prior to exceeding 5% power.

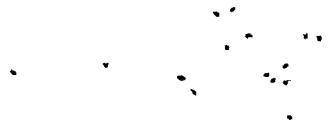
In Supplements 21 and 22 to the Safety Evaluation Report for PG&E's application (copies of which are attached) for an operating license the staff reported on the status of its investigation and evaluation under DCAMP of 103 and 219 allegations respectively it had received as of December 1983 and March 9, 1984, excluding those received under the 2.206 petitions. The Staff concluded that none of these allegations required resolution



prior to a reactor criticality decision, but that 18 allegations relating to eight subject areas needed to be resolved prior to issuance of a full-power license.

At a Commission meeting on March 26, 1984, the staff indicated that it had evaluated each allegation in sufficient detail contained in the February 2, 1984 and March 1, 1984 petitions to determine whether they were identical or similar to allegations already dealt with, whether they represented a slightly different twist on an issue already dealt with or whether they were totally new. Approximately 75% of the issues in the 2.206 petitions were found to have been already addressed by the staff. The remaining items were totally new or contained insufficient information for review. The staff reviewed the totally new issues against the criteria described above to determine whether resolution of the allegation was necessary prior to making a decision on permitting reactor criticality. The staff concluded that none of these items met the criteria for an issue which should be resolved prior to a decision on criticality. This conclusion was confirmed by the staff at the Commission meeting on April 13, 1984 (Tr. 44-45).

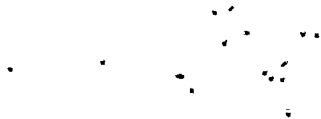
On April 13, 1984, the Commission voted to reinstate the operating license to conduct low-power tests up to 5% of rated power for the Diablo Canyon Unit 1 facility. CLI-84-5, 19 NRC ____ (1984). In that decision the Commission described the DCAMP program and the criteria used to evaluate allegations to determine if final resolution was necessary prior to reinstatement of the license. The Commission concurred in the Staff's



conclusions that none of the allegations received in the 2.206 petitions warranted immediate resolution and directed that evaluation of the allegations under DCAMP should continue both to document reviews completed to that time and to address those matters that need to be resolved prior to licensing at higher power levels.

In addition, the Commission reviewed the specific allegations and actions requested in GAP's April 12, 1984 petition. (slip. op. at 14-15). It noted that GAP's allegations of false statements by the NRC staff and PG&E were based for the most part on its own interpretations of the implications of various allegations and that other allegations were based on differences of opinion with members of the NRC staff. Again, the Commission concluded that nothing in GAP's April 12th submittal required delay in reinstatement of the Diablo Canyon Unit 1 low-power license.

Thus, GAP's request that the specific actions as described above be taken prior to issuance of a low-power license has been denied by the Commission's decision to reinstate the low-power license. The NRC staff concluded and the Commission agreed that evaluation and resolution of the allegations submitted by GAP in accordance with the DCAMP and the screening criteria is an appropriate and sufficient method for determining that the Commission has reasonable assurance that the Diablo Canyon facility can be operated at low power, and ultimately full power, without undue risk to the public health and safety.



The NRC staff did conclude that certain issues must be satisfactorily resolved before Diablo Canyon could be permitted to operate above 5% power. One of the issues related to the adequacy of small-bore piping and piping supports which also encompassed some allegations submitted with the GAP petitions.

On April 18, 1984, an Order Modifying License was issued to PG&E requiring completion of specific actions related to piping and supports before the licensee would be permitted to operate above 5% power. 49 FR 18202 (April 27, 1984).

Petitions Regarding Full Power Operation

On May 3, 1984, GAP filed a new petition on behalf of the San Luis Obispo Mothers for Peace requesting the Commission to defer any decision to permit the Diablo Canyon facility to go above 5% power until after "successful completion" of certain specified actions. These actions consist of:

- 1) appointment and implementation by an independent third party of corrective action required by the April 18th Order;
- 2) a comprehensive review of all "Pipe Support Design Tolerance Clarification" Program activities;



- 3) full public participation in selection and oversight of independent organizations to carry out the first 2 items;
- 4) publication of a Construction Assessment Team (CAT) report by non-Region V personnel and people not previously assigned to Diablo Canyon;
- 5) development of a full record on the character and competence of PG&E based on a management audit, reports of the NRC Office of Investigations and records of Department of Labor hearings;
- 6) Board Notification of transcripts of whistleblowers; and
- 7) investigation by the Office of Inspector and Auditor of alleged false statements by the NRC staff.

As the basis for its request GAP adopted by reference all the affidavits submitted in its earlier petitions described above. They asserted that the information had not been "seriously reviewed, let alone resolved." They also based their petition on transcripts of "witness" interviews taken since April 3, 1984, draft reports on Diablo Canyon by NRC inspector Mr. Yin, and six additional affidavits by a GAP representative and four current and former plant employees. In brief, these various documents allege a widespread breakdown in quality assurance for design of large and small bore piping, and that PG&E has demonstrated such a lack

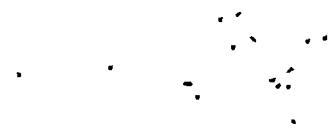


of concern in this area through its practices at the plant and false and misleading statements to the Commission prior to the low-power licensing vote that the Commission should not rely on PG&E review and corrective actions for these problems. GAP also asserted that there is a widespread construction quality assurance breakdown as revealed by Pullman Power Products' (a contractor) guidance documents, safety-related bolting and reactor coolant system welds and piping. Finally, GAP expressed dissatisfaction with the role of NRC staff, particularly that of regional staff, in reviewing alleged deficiencies and corrective actions at the Diablo Canyon facility.

On June 21, 1984, GAP submitted additional allegations based upon 17 additional witness statements in support of the May 3 petition. 4/ These statements alleged a breakdown in the reporting system for QA violations due to a campaign by management to get inspectors to stop using the formal reporting system, and not write up problems on "old work"; ineffective reinspection and corrective actions including those for cracked welds in the Component Cooling Water System (CCW); poor quality materials and inadequate hydrostatic tests of piping.

The statements also include allegations of false statements and records falsification by PG&E, increasing reprisals and harassment onsite as well as inadequate corrective actions, changing plant design through memoranda, inaccurate drawings and undersized weld design. GAP again

4/ Six of the witness statements were provided only to the Office of Investigation which subsequently provided them to the NRC staff.



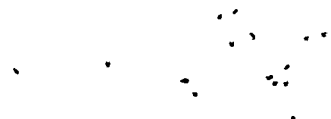
expressed dissatisfaction with the manner in which the NRC staff has been handling its allegations of QA breakdown and "cover-up" by PG&E.

On July 16, 1984, GAP filed an additional petition before the Commission requesting that a number of steps be taken before any commercial licensing decision on the Diablo Canyon plant. The actions requested including providing "sufficient organizational freedom" to NRC inspector Mr. Yin, appointment of an organization other than the Advisory Committee on Reactor Safeguards (ACRS) to review the work by Mr. Yin and other NRC staff, expansion of the NRC internal investigation into false statements by the staff, provision of a forum to resolve the various allegations submitted by GAP, a briefing by the Office of Investigations on PG&E's character and competence and an explanation of why some "6000 licensing commitments" have been postponed for the Diablo Canyon facility. Two additional affidavits, including one by GAP counsel, were submitted with the petition.

Discussion

The NRC Staff has continued to examine all allegations concerning the Diablo Canyon facility received from GAP in its 2.206 petitions (and from elsewhere). All allegations are assessed against the screening criteria described above to determine which allegations required resolution prior to full-power operation.

As stated in Supplement 26 to the Safety Evaluation Report, as of July 8, 1984, 1404 allegations have been received although many are duplicates or

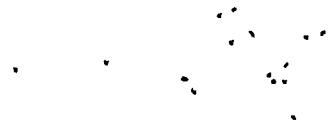


variations on previous allegations. For tracking purposes each allegation received has been assigned a number. To date, 581 of all allegations are resolved and documented. Additionally, approximately 300 have been resolved and are in the process of being documented. The remaining allegations are as yet unresolved.

The allegations have been and continue to be resolved by methods appropriate for the individual allegation. Certain allegations have been assigned for resolution by NRC's Region V office, others to the Office of Nuclear Reactor Regulation. 5/ Following appropriate screening by the staff a number of allegations have been submitted to the licensee for evaluation. The licensee has been required to provide the results of their evaluations and identify any necessary corrective actions to the Staff in writing. The subsequent Staff evaluation of an allegation then also considers the licensee's response and action. As of July 1, 1984, 177 allegations have been handled in this manner. While 31 require additional staff or licensee action, none indicate a problem, individually or collectively, sufficient to preclude power ascension or full-power authorization.

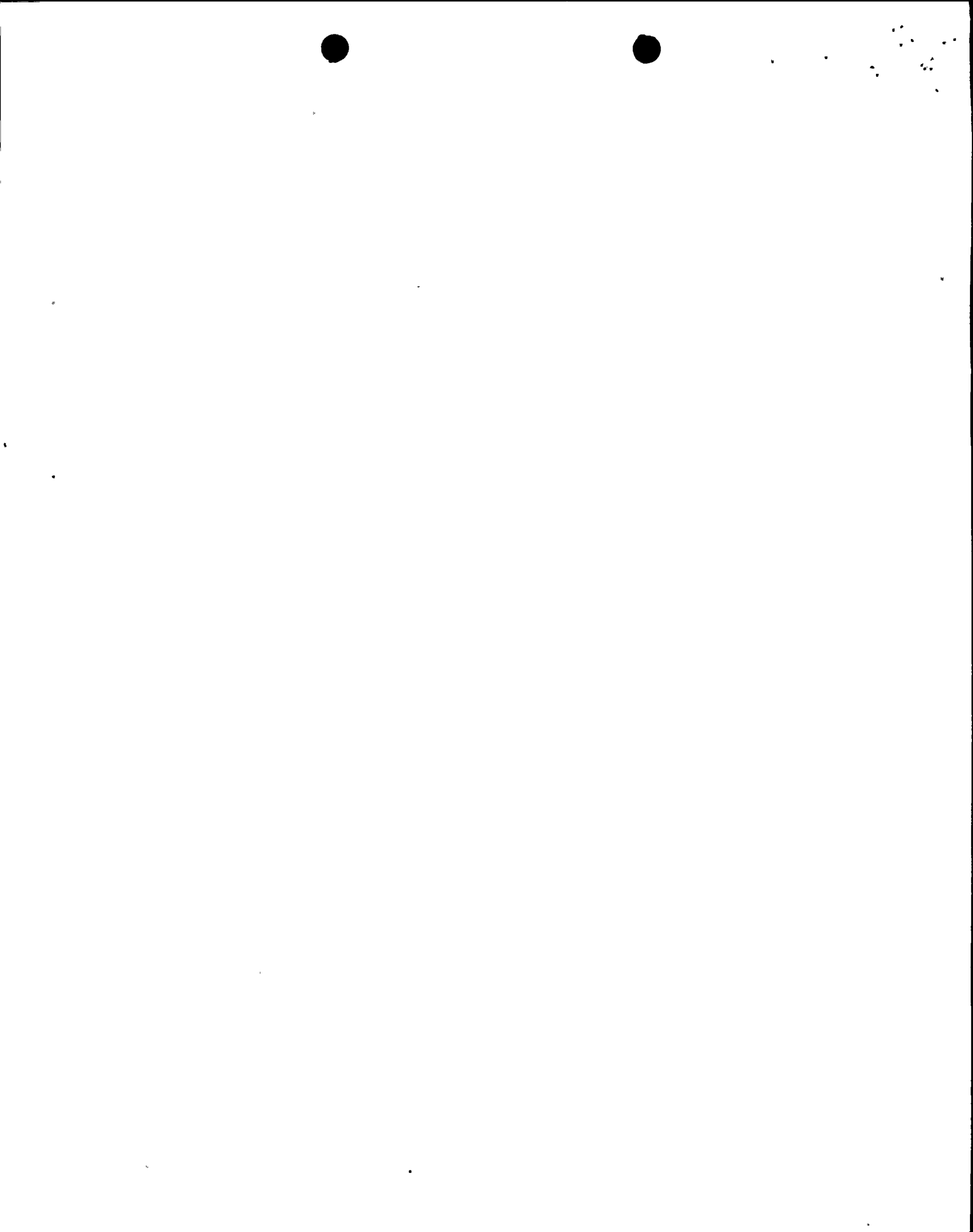
All allegations received from GAP have been evaluated against the screening criteria. SER Supplement No. 26 (which is attached) presents the

5/ The Office of Investigations has inquiries pending on a number of allegations involving, among other things, potential false statements and personnel matters. Twenty-two of 121 allegations before OI are resolved. In the Staff's view, those remaining did not require resolution prior to full-power operation.



resolution of those allegations which the staff has determined in accordance with the screening criteria must be resolved prior to power ascension and full-power operation.

These allegations relate to the following subject areas: 1) operational limit for CCW system; 2) replacement of welded high strength bolts; 3) as-built drawings for operations; 4) completion of systems interaction program and modifications; 5) evaluation of coating concerns; 6) piping and supports and related design issues; 7) RHR low flow alarm; and 8) bolted connections. The issues concerning piping and piping supports were the subject of a special NRC Peer Review Group. The review in the spring of 1984 resulted in seven license conditions requiring certain actions before operation above 5% power. The Review Group has examined the licensee's actions regarding the license conditions by means of system walkdowns and onsite inspections, audits and meetings with the licensee. A draft report by the Review Group was issued on July 13th which found that these issues should not prevent operation of Diablo Canyon, Unit 1 at full power. The final report, after consideration of comments by NRC Inspector Mr. Yin and the ACRS, has been issued as SSER 25. A copy is attached. The various allegations received from GAP as part of its 2.206 petitions and in meetings and interviews on this subject have been specifically reviewed to determine if the staff's evaluation efforts have adequately considered the concerns expressed. The Staff has concluded that none of the allegations require any further evaluation prior to full-power operation of Unit 1.



GAP's July 16th petition described a number of steps which it believes the Commission should take before any licensing decision on the Diablo Canyon plant. As indicated above, the staff has concluded that no substantive issues remain unresolved which would preclude the requisite safety findings for issuance of a full power license for Diablo Canyon Unit 1 at this time. The Diablo Canyon Review Group has concluded that the seven license conditions to be met before full power operation, which arose out of Mr. Yin's concerns, have been satisfied. The ACRS in its letter to the Commission dated July 16, 1984 has concurred in these Staff findings. (A copy of the letter is included in SSER 25.) With respect to GAP's request for a public forum to address material disputes of fact, it has been clearly established that the holding of hearings in response to the filing of a 2.206 request is not required. Porter County Chapter of the Izaak Walton League v. NRC, 606 F. 2d 1363 (D.C. Cir 1979); People of the State of Illinois v. NRC, 591 F.2d 12 (7th Cir. 1979). In any event, as explained above and in the Staff's SSERS, we have concluded that there are no substantial safety issues remaining that would justify the initiation of a proceeding that would provide an opportunity for a hearing.

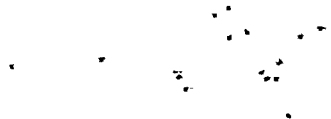
With respect to GAP's request for a staff report regarding "postponement for approximately a year of PG&E compliance with some 6000 licensing commitments" the staff concludes that GAP has not provided any adequate basis for such a request. The matter of "6000 licensing commitments" was discussed at an NRC meeting with the licensee on July 2, 1984. A



transcript of the meeting was issued on July 11, 1984, as Board Notification 84-128. At the meeting the licensee informed the staff that a computerized quality commitments management data base is being developed for internal use to track those commitments that are to be met throughout the life of the plant. At the time of the meeting the licensee had identified approximately 6000 such quality commitments. As explained further on pages 104-106 of the meeting transcript and based on further discussions by the staff with the licensee, the data base will be routinely checked to assure that commitments are being met on their prescribed schedule. The data base will be updated to include new commitments.

It is the staff's understanding that the two specific examples cited in GAP exhibit 2 are not included in this commitment list because they did not exist at the time of the meeting, because they are specific commitments to be met only once at a specific time and because they are not directly quality program related.

As indicated on page 105 of the transcript, the staff has concluded that the licensee's commitments are to be met at the times specified for such commitments and that no extensions of such commitment dates will be given without proper justification. The NRC has not waived at any time the requirements for any Diablo Canyon commitment, quality related or other, without proper bases.

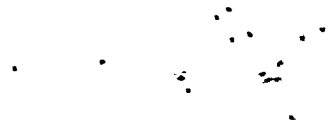


Finally, Exhibit 2 at page 6 implies that the 6000 line items in the program necessitate repairs. While some of these items relate to specific systems, structures and components, many of them relate to administrative and personnel matters such as training and qualification, reporting, exercises and tests as set forth in the Technical Specifications. The need for repairs resulting from the 6000 line items is expected to be rare.

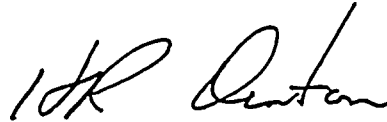
In summary, the "6000 license commitments" is not a list of open items but rather a tracking system for license commitments to be met throughout the life of the plant. As stated in recent SSERs, in particular SSER 27, the staff has evaluated those license commitments that must be met prior to issuance of a full power license amendment and has concluded they have been met.

Conclusion

The petitioner bases its request for relief on numerous allegations of inadequate quality assurance in design and construction; construction defects and harassment and intimidation of QA/QC personnel. As discussed above, the NRC has established a program to screen and to evaluate, to the safety significance and to resolve these allegations and has since 1983 spent thousands of hours under that program investigating, inspecting and evaluating the concerns raised. In the Staff's view no issues remain unresolved which indicate problems of such a magnitude, either individually or collectively, that preclude authorization for power ascension testing and full-power operation. Therefore, petitioners request for specific



actions to be taken prior to a decision on full-power operation of the Diablo Canyon Unit 1 facility is denied. A copy of the decision will be filed with the Secretary for the Commission's review in accordance with 10 CFR 2.206(c).



Harold R. Denton, Director
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland
this 20th day of August 1984

Attachments:
Supplemental Safety Evaluation
Report Nos. 21, 22, 25 & 26

