

August 18, 1971

Mr. Lawrence D. Low, Director  
Division of Compliance  
U.S. Atomic Energy Commission  
Washington, D.C. 20545

Dear Mr. Low:

Thank you for your letter dated May 25, 1971. The AEC investigation of the matters I brought to the Commission's attention has been in progress for approximately three and one-half months now. What is the present status of this investigation? If I can be of any further assistance please feel free to call on me.

Sincerely,

*Robert J. Rowen Jr.*

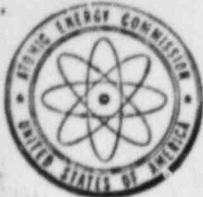
Robert J. Rowen, Jr.

Robert J. Rowen, Jr.  
2504 "O" Street  
Eureka, Ca. 95501



Mr. Lawrence D. Low, Director  
Division of Compliance  
U.S. Atomic Energy Commission  
Washington, D.C. 20545

VIA AIR MAIL



UNITED STATES  
ATOMIC ENERGY COMMISSION  
DIVISION OF COMPLIANCE  
REGION V  
2111 BANCROFT WAY  
BERKELEY, CALIFORNIA 94704

TELEPHONE 841-8121  
EXT. 933

June 1, 1970

Memo to File

TELEPHONE CALL FROM JAY CARROLL - PG&E

On May 27, 1970, I received a telephone call from Jay Carroll, PG&E San Francisco offices. He said he wanted to give me some information on a personnel problem that had developed at the Humboldt reactor. The following is the substance of the information Mr. Carroll related to me.

He said there were two Control Technicians at the reactor who were giving the company problems. He said both were full time employees but were also part time students at College of the Redwoods near Eureka. Both are in their late 20's and are the "activist" type both at work and on the campus.

The current problem is with one of these employees named Forrest Williams. This employee has been suspended four times for periods of 1 to 5 days each in the last four months. The reason for the suspensions was insubordination, which Carroll said involved the employee's refusal to expose himself to radiation in his employment. The employee's position seemed to be that PG&E was not doing everything practicable to keep his exposure to a minimum. In answer to my questions Mr. Carroll said the work in question was a sampling operation which involved a dose of about 10 mrem per sample and 3 samples per week were required. Mr. Carroll said the Control Technicians did receive the highest exposure of anyone in the plant, and received about 4 rem per year total dose. Mr. Carroll said many things had been done over the years to lower exposures, and added that the complaining employee had no suggestions for lowering exposure.

Following the last suspension of Mr. Williams (back to work on Monday May 18 77) he refused to work in the Chemistry Lab on the basis that he had a seed wart removed from one finger during the previous week, and the area was not yet completely healed. After examination of the finger by the PG&E Health Physicist, Williams was assigned to other work for the week.

Sometime during this period Williams and the other Control Technician (named Rowan) read prepared statements to the employees at the reactor during a regular safety meeting. These statements included questions

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EXHIBIT A

like "Does PG&E recognize that ionizing radiation is one of the most effective carcinogens known?" and also included the accusation that PG&E management had deliberately set the alarm points higher on the hand and foot counters during the last reactor outage. This supposedly was done to avoid detection of contamination and subsequent embarrassment of management and to speed up the flow of personnel in and out of the radiation area. Carroll said the alarm points had not been changed.

After a week on another assignment, Williams was again assigned to work in the Chemistry Lab. Again he refused because of the wart removal. The finger area was examined by the PG&E Health Physicist, and pronounced acceptable for radiation area work. However, PG&E offered to place an impervious protection over the area if Williams wished. This would be in addition to the two pair of gloves which would normally be required for the work. Williams still refused to work. He was taken to a physician in Eureka whose opinion was that the area would have healed sufficiently within 24 to 48 hours after the wart removal to preclude absorption of radioactive material through the site. The examination by the physician was about 1 1/2 weeks after removal of the wart. Williams still refused to accept the assignment and was fired.

Off the record, Carroll told me that PG&E security has made an investigation of these two individuals. Reportedly, both are active in the SDS movement and other militant groups at College of the Redwood, and one had been heard to threaten to burn the college down. In answer to my question, Carroll said they did not consider either of the men to be a direct threat to the safety of the plant.

After this lengthy background discussion, Carroll said he had two basic reasons for calling. First, he said PG&E upper management had been informed of the circumstances of the firing and the security investigation. He said they had asked the question "Is PG&E doing everything practicable to reduce radiation exposure?" With this in mind Carroll asked me, if in my experience, I felt their handling of the situation was in agreement with standard accepted practice.

I told Carroll that procedures and practices varied, but that in many facilities it was accepted practice to cover minor cuts and abrasions with impervious dressings and proceed with normal radiation work assignments. Therefore, I told him that in my opinion they handled the matter of the removed wart in a conservative manner. I told him I could not comment on the matter of lowest practicable exposure, since this usually involves a management decision and expenditure of money. I told him that the AEC was just beginning to get involved in this concept with the new amendment to part 20, which I believed applied to exposure of radiation workers as well as to release of effluents. I said that in the past, however, we had no problems at their plant with what we considered excessive exposures or noncompliance in the radiation exposure of personnel. (Note: There was one overexposure situation at this plant a few years ago involving a temporary employee).



Carroll said the second reason he called was that there was a good possibility that Williams would place a complaint with the AEC, and He (Carroll) thought we should have some of the background if this occurred. I told Mr. Carroll that if this happened the AEC would probably conduct an independent investigation. Mr. Carroll said PG&E would welcome such an investigation.

As an interesting sidelight, Carroll said their contract with the union prohibited employees from complaining to the AEC. I told him I thought that was in conflict with our regulations which required posting of Form AEC-3 and encouraged radiation workers to come to the AEC if they had problems or complaints.

Carroll said they expected only a token objection from the union over the firing because these two individuals were unpopular with other employees and with union officials.

I thanked Mr. Carroll for the information, and told him it would be helpful if we received a complaint from the employee or the union. Mr. Carroll said he was going to write a memo to file recording our conversation.

*Herbert E. Book*

Herbert E. Book  
Senior Radiation Specialist

CO:V:HEB

cc: R. H. Engelken, CO:HQ

July 9, 1970

Humboldt Reactor File

PG&E HUMBOLDT REACTOR - HAND AND FOOT COUNTER ALARM POINT SETTINGS

On July 7, 1970, I received a telephone call from Mr. Ed Weeks at the PG&E Humboldt Reactor. He wanted to discuss their practices regarding the alarm point settings on the hand and foot counter at the reactor. He said the background on the hand and foot counter was affected by direct radiation from the effluent plume, and showed considerable variation with slight variations in wind direction. They have been attempting to maintain the alarm point at 20 to 100 cpm over background by changing the alarm point twice per shift in an attempt to "follow" the changing background, which varies between 300 and 500 cpm, according to Weeks. This effort had resulted in many spurious alarms and has been a burden on the instrument technicians, especially on the night shifts.

Weeks asked if the AEC had any requirements on this matter, and also questioned me concerning the general practices at other installations. He said they were considering setting the alarm point on their machine at about 500 cpm or about 30 cpm over normal high background. This would prevent the spurious alarms, but would also reduce sensitivity during periods of low background. Mr. Weeks said they had previously operated in this manner with no problems. He said the hand and foot counter was a final check when exiting from the contaminated area, and was preceded by two check stations where contamination surveys by portable instruments were required. He also said that during the period when they operated at the higher alarm setting, no problems of contamination spread to the clean areas had occurred.

I told Mr. Weeks that the AEC had no specific requirements concerning the setting of alarm points on hand and foot counters. I went on to say that this was generally left up to the individual licensee, and practices varied from plant to plant. I told him we were more interested in overall control accomplished by the program than in specific hand and foot counter alarm settings, and if their experience indicated no problem with the proposed setting, I could see no problem with it.

I also mentioned that the number of 100 cpm over background was commonly used, but in general it was a conservative limit. That number was adopted because it represented the lower detection level of most portable GII-type instruments. I mentioned that contamination of that

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EXHIBIT B

level is more a nuisance and employee relations problem than a real hazard, and described the AEC unconditional release limits as an illustration of levels which were considered to be of little consequence. I also pointed out that spurious alarms were very undesirable, because they might cause employees to ignore a genuine alarm. In summary, I told Mr. Weeks that I could see no problem as a result of his proposed settings.

Original Signed by  
H. E. Book

CO:V:HEB

Herbert E. Book  
Senior Radiation Specialist



Director  
Division of Licensing and Regulation  
USAEC  
Washington 25, D.C. 20545

Dear Sir:

During the course of my employment with the Pacific Gas and Electric Company, and while I was employed as a Nuclear Control Technician, I experienced the inadequacies of the law and procedures pertaining to the control and regulation of nuclear power plants.

It is this matter I desire to bring to your attention. And at the same time, this letter may be considered the initial groundwork of my going on public record concerning these inadequacies.

To begin please allow me to quote from the followings:

Decision of the Referee  
California Unemployment Insurance Appeals Board  
Case Number SF - 1319

Robert J. Rowen, Jr. vs Pacific Gas and Electric Company

STATEMENTS OF FACTS

....."A preponderance of evidence indicate that during the last year or two of the claimant's employment he was involved in many disputes with higher management over his reports of safety violations. The following are cited as examples:

1. The routine work permit under which a group of employees were working in the summer of 1967 permitted exposure of only five to 50 mr's but frequently the exposure was in the area of 2500 mr's.
2. A supervisor ordered a technician to take smears of material to be shipped from the nuclear plant at the top and bottom of the containers but not in the center. This would have the effect of minimizing the radiation count. After the supervisor had been informed the count exceeded the level permitted for such shipments, he asked the claimant to sign a previously prepared shipping document which indicated the radiation level was within tolerable limits. When the claimant refused, he (the supervisor) corrected the shipping

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Date 5/6/71

Time 3:55 DR. 3364

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document to show the correct figure and then ordered the shipment processed, contrary to the governmental regulation involved. The claimant accurately reported the entire incident in the daily log he was required to keep as part of his duty. He was severely reprimanded by Mr. Weeks for having done so on the ground this was not a "proper" use of the log, pointing out that the Atomic Energy Commission inspectors had access to the log.

3. On one occasion VIP's were to be conducted through part of the facility where they might be exposed to radiation, and the plans of the claimant's supervisor did not call for monitoring these persons as they left the danger area to determine the rate of exposure, if any. At the claimant's insistence this was corrected.

4. Men were permitted to work over the open core of a nuclear reactor without wearing safety harness to prevent their falling down into the core.

5. A short time prior to the claimant's discharge, he asked Mr. Weeks for permission to speak to the Atomic Energy Commission inspector concerning the violation noted immediately above, and other conditions the claimant believed unsafe. He was refused permission to make his report to the inspector.

"Witnesses for the employer testified that the above and other alleged safety violations reported by the claimant were of a minor nature and did not involve real hazard to workers or the community. Mr. Weeks confirmed the danger involved in working over an open "core" without safety harness but indicated the company was working on the problem, and, in addition, some of the workers believed the harness itself would be a safety hazard."

Later in the Referee's Decision he stated the following:

"In the opinion of the referee the principal cause of the claimant's discharge was his extreme safety consciousness. His efforts in this direction were to some extent a reproof of the more sanguinary attitude of certain of his supervisors. His attempts to bring these matters to the attention of the Atomic Energy Commission and to the attention of fellow employees were also greatly resented."

In conclusion the Referee stated the following:

"The referee concludes the claimant was discharged for reasons other than misconduct connected with his most recent work, within the meaning of sections 1256 and 1030 of the code."

It is noteworthy that the Pacific Gas and Electric Company had its San Francisco attorney representing the company's interest in this matter and that the company had the right to appeal this decision and elected not to do so.

My purpose for presenting these particular facts is to focus your attention on the following problems: (1) I was ordered not to log, for the AEC's inspection, information concerning violations of radiation protection procedures; (2) I was refused permission to talk about these violations with the AEC Compliance Inspector who was in the plant on a routine inspection; (3) Plant management advised me that it was inadvisable for me to go to the AEC about violations concerning radiation protection safety and at the same time management stated that I was placing myself in "serious jeopardy" if I elected to do so; and (4) On or about May 21, 1970, Mr. Burt Jones and Mr. Robert Taylor, both of whom are agents of the Pacific Gas and Electric Company made arrangements with Police Chief Emahiser of the Eureka Police Department to falsify a police record in which the company designed accusatory statements charging four of its seven nuclear control technicians of being members of a group who was participating in, or had the propensity to participate in, various unlawful acts directed at damaging and disrupting the Company's property and services.

In the matter of an arbitration between I.B.E.W., Local 1245, and the Pacific Gas and Electric Company involving arbitration case number 35 dated April 2, 1971, the Arbitrator stated the following in his decision under the section entitled Reasons for Discharge:

"The Company raised the issue that there was a common plan and design on the part of Williams (a nuclear control technician) and Robert Rowen and others who continually raised questions concerning the adequacy and efficacy of the Company's safety program."

In a letter sent to the California Department of Human Resources Development by the Pacific Gas and Electric Company, the following statement was made:

"As a Control Technician, Mr. Rowen was required to carry out specific assignments following well defined procedures, in which he had been instructed, under the supervision of an engineer who is an expert in the field of radiation safety. It was not the claimant's responsibility to check on the safety procedures of the Company. He did on numerous occasions make allegations and protest that the Company's actions were unsafe and did not meet Federal requirements. However, he was never able to show how the "unsafe" Company actions failed to meet Federal requirements. The operation of the Humboldt Bay Power Plant, where the claimant was employed, has been inspected by the Atomic Energy Commission at least three to four times a year since the nuclear unit went into operation in 1963, and as a result of these thorough inspections, the Commission has been favorably impressed with our radiation safety program."

It is generally true that the Company looks good on paper as to how well the Humboldt Bay Power Plant operates. It is safe, efficient, and economical or so it seems. I worked in that plant for six years and during the period witnessed events which never became known to the AEC or the public. I also had occasion to meet people from other nuclear facilities and learned from them their philosophies and how their facilities operated.

In the main the responsibility of radiation protection is left to the charge of private industrial management, who I am convinced, is more concerned with the efficient and profitable operation of their plants. In this respect, many plants are not as safe as they are required to be by law. The AEC Compliance Inspectors usually give more than adequate notice before their arriving on the plant's property for its inspection. As part of my job duties, and on many occasions, I would clear up a situation which would clearly result in a citation only because an AEC inspector was coming to inspect the plant. Employees were given directions, usually implicitly but sometimes explicitly, not to talk with AEC inspectors. Notwithstanding the aforementioned, even if employees were given the opportunity to talk with AEC inspectors, the majority of them would fear the reprisals taken later by management. And for these very reasons, employees will not write to the AEC about problems they may be concerned. How efficient and economical a nuclear power plant seems to be on paper is also a question.

For on many occasions I witnessed large sums of labor and materials charged through the accounting process to the conventional fossil fuel plants. However, this is not the main point of this letter.

BR Returning to the problem of control and regulation of nuclear power plants, and in particular the Humboldt Bay Power Plant, I believe an investigation is instore. I believe further that if an investigation of the Humboldt Bay Power Plant was initiated, certain irregularities would be revealed throughout the entire nuclear industry.

You may ask why I have not come forth before now with this information. The answer is simple. I am no longer under the influences and pressure of coercion and threats, and it has become my conviction that these problems which I have briefly mentioned and many more be made publicly known.

The Pacific Gas and Electric Company may undoubtedly accuse me of being a disgruntled ex-employee; however, be that as it may, I feel confident that as I lay out the facts they will withstand the tests of truth.

If you are interested in the information I have and desire to make an inquiry into the nature of these more serious problem, please feel free to contact me. Hopefully, I have been able to present to you rather briefly the severity of the Company's actions earlier mentioned, and more to your particular interest I assume, the underlying reasons why the Pacific Gas and Electric Company chose to exercise these actions.

Sincerely,

*Robert J. Rowen Jr.*  
Robert J. Rowen, Jr.

2504 "O" Street

Eureka, California 95504





DISTRICT ATTORNEY  
**COUNTY OF HUMBOLDT**

EUREKA, CALIFORNIA 95501 PHONE (707) 445-7411

May 17, 1971

United States Atomic Energy Commission  
2111 Bancroft Way  
Berkeley, California

Attention: Richard W. Smith, Director  
Region V, Division of Compliance

Gentlemen:

This will confirm our meeting of May 5, 1971, in the Office of the Atomic Energy Commission, Berkeley, California. Present at that initial gathering were Richard W. Smith, George Spencer, Herbert E. Book, and the undersigned.

In accord with arrangements made during the discussion in Berkeley, May 5, 1971, I met with Herbert E. Book and Investigator John J. Ward in my office on May 11, 1971. At that time arrangements were made to make complainant Robert Rowan available to your investigators.

I have been advised that subsequent to my conversation of May 5, 1971, you have received a separate complaint on safety precautions at the Humboldt Bay Nuclear Plant, Pacific Gas and Electric Company, upon which you have initiated a complete investigation.

Finally, I am advised you will advise this Office on the completion of your investigation and a discussion of findings will result.

Thank you for your very prompt response to my inquiry and recited complaint. If in any fashion this Office can aid you in your determination please call upon me.

Very truly yours,

*William F. Ferrocchio, Jr.*  
WILLIAM F. FERROCCHIO, JR.  
DISTRICT ATTORNEY

Dupe 8205180596  
WFFjr:jj



I, Robert J. Rowen, Jr., make the following free and voluntary statement to John J. Ward, who has identified himself to me as a representative of the U.S. Atomic Energy Commission. I have been told that I do not have to make a statement, and that any statement I do make may be used in a court of law. No threats or promises have been made to induce me to give this statement, and I have been advised of my right to consult an attorney.

During the time that I was employed by Pacific Gas and Electric Company (PG&E) at the Humboldt Reactor as a nuclear Control Technician, I observed the following:

1. On August 8, 1969, a spent fuel shipping cask was cleared for shipment from the PG&E Humboldt Reactor when it was known by PG&E management to be still contaminated over the limits permitted by the Department of Transportation Regulation 49 CFR 173.397.
2. On August 12, 1969, the stray chamber radiation monitors at three off-site sampling stations in line with the radiation gaseous waste discharge stack went off scale (more than 10mr). I personally read the stray chamber dosimeters and recorded the incident in the Radiation Protection Log book, 62598-71A, dated August 13, 1969. Also my request to review the film pack results was refused by PG&E management.
3. Sometime prior to February 18, 1970, several sections of contaminated 14-inch-diameter piping was cut out of the suppression chamber. This pipe was later sold to the G & R Metals Company of Eureka, apparently without having been properly surveyed. When this matter was brought to their attention, PG&E management refused to produce the special radiation survey forms and the unconditional release papers relating to the pipe, and PG&E management also refused to go to the G & R Company to survey the pipe, after one piece was found to be contaminated.
4. My employment terminated on June 5, 1970. On or about June 15, July 1, and August 1, 1970, I repeatedly asked company management to furnish me a report on my exposure to radiation during my employment. I later received this report from the company. It was dated September 20, 1970.

THE AFOREMENTIONED DOES NOT LIMIT, EITHER BY EXPRESSION OR THROUGH IMPLICATION, THE NATURE OF MY COMPLAINT TO THE U.S. ATOMIC ENERGY COMMISSION -- THAT ITEMS (1-4) CONTAINED HEREIN HAVE BEEN DETERMINED MATERIAL SOLELY BY THE U.S. ATOMIC ENERGY COMMISSION. I have read this statement. It is the truth to the best of my knowledge and belief.

JANICE L. BILLINGSLEY  
NOTARY PUBLIC  
HUMBOLDT COUNTY, CALIFORNIA

My commission expires April 1, 1972

Signed

*Robert J. Rowen Jr.*  
Eureka, California, May 28, 1971.

PG&E Co., Radiation Work Procedure

Plant: Humboldt Bay Power

Areas: Hot Laboratory

Valid from 1/1/68 to Revoked

Description of Work

Working with radioactive samples and sources during performance of routine or non-routine duties in the hot laboratory.

Monitoring Requirements

1. Continuous by R.P.
2. By individual doing work.
3. Others.

Maximum Radiation Conditions for Work

<u>Location</u>	<u>Mrem/hr</u>	<u>CPS/sq. ft.</u>	<u>uc/cc</u>
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(No entries appeared here. JJW)

Special Instructions

1. Gloves shall be worn when working with radioactive samples.
2. Finger film shall be worn when working with radioactive material having a dose rate  $> 50$  mrad/hr.
3. All samples being transported to the counting room from the hot lab will be sealed in plastic and/or placed in a sealed container or in a special carrier which will then be checked on the outside for smearable contamination. The outside of the container or carrier must meet unconditional release standards for smearable contamination before leaving the hot lab. The sample will then be transported to the counting room as a clean item.
4. Remote handling tools shall be used when taking and handling reactor water samples with an uncorrected dose rate of greater than 1 R/hr.

Dale Nix, Plant. Supt., signed by Gail S. Allan, Rad. Prot. Eng., PG&E Co.

Dupe 8205180599

## Radiation Work Procedure

RWP No. 14, Rev. 5  
Water Samples

### Description of Work

Operate and inspect equipment including the taking of samples, radiation surveys, and personnel entering building for observation only.

### Special Hazards

1. "B" locked or alarmed doors are "High Rad" areas during operation or shut down.
2. Variable rad levels due to power level changes and reactor water conditions.
3. Temporary "High Rad" or contamination areas.

### Monitoring Requirements

#### Maximum Radiation Conditions for Work

(No entries appeared here. JJW)

### Special Instructions

Check CAM for abnormal rise when entering and periodically check CAM while in the building. Do not enter "B" lock or alarmed door without notice to console operator. Notify S. F. and monitor any spills. Do not walk in spills.

Dupe of  
8305180601



## Radiation Work Procedure

RWP No. 12, Rev. 5  
Air Sampling

Areas: Air ejector, pipe tunnel, pipe gallery and condenser

Valid from 1/1/68 to revoked.

### Description of Work

Operate and inspect equipment including the taking of samples, radiation surveys, etc.

- Special Hazards:
1. High energy beta radiation.
  2. Neutron exposure in pipe gallery (near reactor) during operation.

### Monitoring Requirements

1. Continuous by R. P.
2. By individual doing work.
3. Others

### Representative Rad. Conditions for Work

Pipe tunnel at head level	550 mrem/hr
Air ejector south shield wall	1000 mrem/hr
Air ejector inside shield wall	avg. 11,000
Air ejector inside shield wall	avg. 40,000 to 80,000 variable
Pipe gallery	

### General Instructions

Permission to enter  
Hand and foot count

### Special Instructions

Notify console operator before entering.  
Note airborne concentration.

EXHIBIT F-3

Dupe

Cask Release, Wednesday, 8/7/69

At 0800 Wednesday morning, Mr. Rowen was asked to take some smears on the cask that had been washed during the night. The smears that he took were wet and required drying. The activity on the smears varied from 3,000 to 30,000 cpm/100 cm<sup>2</sup> so I decided to wash the cask with alcohol. Mechanical Maintenance furnished three men and Rad Protection furnished one (Rowen). At the men's request, the refueling building RR doors were opened to give additional ventilation. Before lunch, additional smears were taken. These were dry and when counted showed some reduction in activity (I cannot be sure they were taken in the same spots as the morning, however).

A second alcohol scrub was ordered for right after lunch. The refueling building doors were opened for ventilation again. The smears this time indicated no improvement, and possibly an increase in activity, so I decided to wash the cask with a strong solution of DC13 (half H<sub>2</sub>O, half DC13). Rowen asked about the doors at this time. I told him that we couldn't open them and that the DC13 wasn't toxic and the additional ventilation wasn't necessary. He stated that he had read somewhere on Tuesday that it was, but he also said that it was not stated as toxic on the can. We generally discussed the ventilation system and I told him that it was being worked on.

The cask was washed with the DC13 and dried with rags. I took a series of smears at top and mid-cask as they were drying the cask. Several were 3,000 - 4,000 cpm, while one was below 1,000 cpm. I told Rowen to go down and get smears top and bottom on the four sides for final release. He did so with no complaint. In the meantime I checked the IPC in the counting room which read lower than the one in the control room. I had the new samples counted in the counting room IPC. I told Rowen that I would buy an average number. He averaged out the numbers and came up with 2600 cpm/100 cm<sup>2</sup> (corrected for counter efficiency).

I had brought up the shipping papers for the cask. They had previously been typed out for < 2200 cpm/100 cm<sup>2</sup>. I asked Rowen to sign them. He ignored my request at first, but did not say anything. When I asked again, he said it was 2600 not 2200 so I said "Well, change it to 2600 and then sign it." He did so. He did not refuse. I did not lose my temper, but there could have been impatience in my voice and tone. In my judgement, this average number was okay even though 400 cpm above the DOT regulation.

I also asked Rowen if he wanted to stay over past 1630 hours to finally check the cask and he said no because he wanted to go to the Union meeting. The only person willing to stay over was Bill Evans.

The final survey of the cask showed less than 50 cpm on any smear pads by GM. The area smeared was greater than 100 cm<sup>2</sup>. One place any activity was picked up was in the crack of the lid, 20,000 cpm. This area has never been checked before to my knowledge. Next time I'll tape this crack.

G. E. Allen  
8/7/69

EXHIBIT G.

Humboldt Bay Power Plant

Memorandum

Subject: RADIOACTIVE CONTAMINATION ON THE SECTION OF 14 INCH  
DIAMETER PIPE IN THE COLD MACHINE SHOP

During the course of making a routine "C" survey on February 18, 1970, CT R. Rowen discovered that a section of 14 inch pipe indicated 300 cpm above a background of 300 cpm using a portable G-M instrument. This section of pipe was to be used in fabricating a shield for use in Unit No. 3. This pipe was one of two pieces remaining on site, the other 18 pieces having been sold to G and R Metal as scrap. This piping had originally been in service in the suppression chamber, and had been cut out during modification work. It had subsequently been cut up into approximately 3-1/2 foot lengths and was surveyed and moved outside the Unit No. 3 controlled area fence. One criteria for releasing material unconditionally from Unit No. 3 is that the direct survey indicates less than 100 cpm beta gamma, and less than 500 dpm alpha. This particular piece of pipe indicated 300 cpm beta-gamma when Rowen inspected it on February 18, 1970. The activity was on the inside wall of the pipe and was not smearable. The contamination appeared to be spread over an area of approximately 50 to 100 square inches. Some metal was filed off and counted on the multichannel analyzer; the results indicated that all of the activity was due to Co-60. No count-rate above background on the outside of the pipe was detectable.

For the purpose of the following calculations, the following assumptions were made:

1. The counting efficiency for the portable G-M was about 1%.
2. The G-M is sensitive to approximately 16 in<sup>2</sup> area.
3. The count rate of 300 cpm was uniform throughout the interior of the pipe.  
(In reality, the contaminated area was approximately 50 - 100 square inches.)

The dimensions of the pipe are 14" ID x 1/4" wall x 38" length.

1. Inside area,  $A = \pi DL = (3.14)(14)(38) = 1630 \text{ in}^2 = 1.05 \times 10^4 \text{ cm}^2$
2. Weight =  $(SG)(V) = \frac{(7.7)(62.4)(3.14)(3.17)(1.21^2 - 1.17^2)}{4} = 107 \text{ lbs.} = 4.86 \times 10^4 \text{ grams}$
3. Total activity =  $\frac{(1630)(300 \text{ cpm})(100 \text{ dpm})}{16 \text{ cpm}} \approx 3 \times 10^6 \text{ dpm}$
4. Specific activity =  $\frac{(3)(10^6)}{(4.86)(10^4)(2.22)(10^6)} = 2.8 \times 10^{-5} \text{ uCi/gm}$
5. Area spec. activity =  $\frac{(3)(10^6)}{(2.22)(10^6)(1.05)(10^4)} = 1.3 \times 10^{-4} \text{ uCi/cm}^2$

The total activity of  $\frac{(3)(10^6)}{(2.22)(10^6)} = 1.35 \text{ uCi}$



Memorandum - Page 2

1.35 uCi is conservative to the extent of about a factor of  $\frac{1630}{100} \approx 15$ ,

since the calculations were based on a G-M reading of 300 cpm throughout the interior of the pipe. Therefore, the total activity is nearer 0.09 uCi. The following table summarizes the activity expressed in various ways and the appropriate reference for Co-60.

<u>Ref. Para.</u>	<u>Activity Limit</u>	<u>Observed Activity</u>
49 CFR 173.389e	$2 \times 10^{-3}$ uCi/gm	$2.8 \times 10^{-5}$ uCi/gm
49 CFR 173.392.d.IV.	$1 \times 10^{-3}$ uCi/cm <sup>2</sup>	$1.3 \times 10^{-4}$ uCi/cm <sup>2</sup>
17 SGDPH 30237 Sch. C (sec. 30180)	$5 \times 10^{-4}$ uCi/gm	$2.8 \times 10^{-5}$ uCi/gm
10 CFR 20 App. C (see 10 CFR 20.203 f.3.1.)	1 uCi	0.09 uCi
10 CFR 30.70	$5 \times 10^{-4}$ uCi/gm	$2.8 \times 10^{-5}$ uCi/gm

In summary, the total and specific activity (expressed as uCi/gm and uCi/cm<sup>2</sup>) of this pipe is sufficiently low to be exempted from the provisions of either general or specific licensing requirements. The amount of Co-60 contamination on this section of pipe constitutes no hazard to either plant personnel or the general public; the same argument holds for the remaining pieces of pipe transferred to G and R Metals Company (Eureka). All of this pipe was surveyed prior to being released from the Unit No. 3 controlled area, and according to established procedures, would not have been released if the direct survey had indicated more than 100 cpm. Apparently, the small but perceptible count-rate above background on this particular piece of pipe was missed during the routine survey.

J. V. Boots

JVB:nm 3/12/70



MEMORANDUM

8/29/66

SUBJECT: Control Technician Log Book

Effective January 3, 1966 the C.T. Log Book will be kept as a record of all important events\* that occur during the day in Rad. Protection and Chemistry. It will be the duty of the R<sub>2</sub> man to maintain this log and sign the completed sheet each day.

Gail E. Allen

J. V. Boots

GEA:cr

\* "All important events" is defined as:

1. Unusual happenings such as Control Room contaminated, large spill, etc.
2. Unusual air sample data or chemistry data.
3. Brief rundown of day's activity.
4. Personnel contaminated.
5. Personnel clothing retained because of contamination.
6. Any violation of established standards.
7. Any other thing felt important by the C.T. in this area.

READ, DATE, AND INITIAL

J. E. K. [initials]

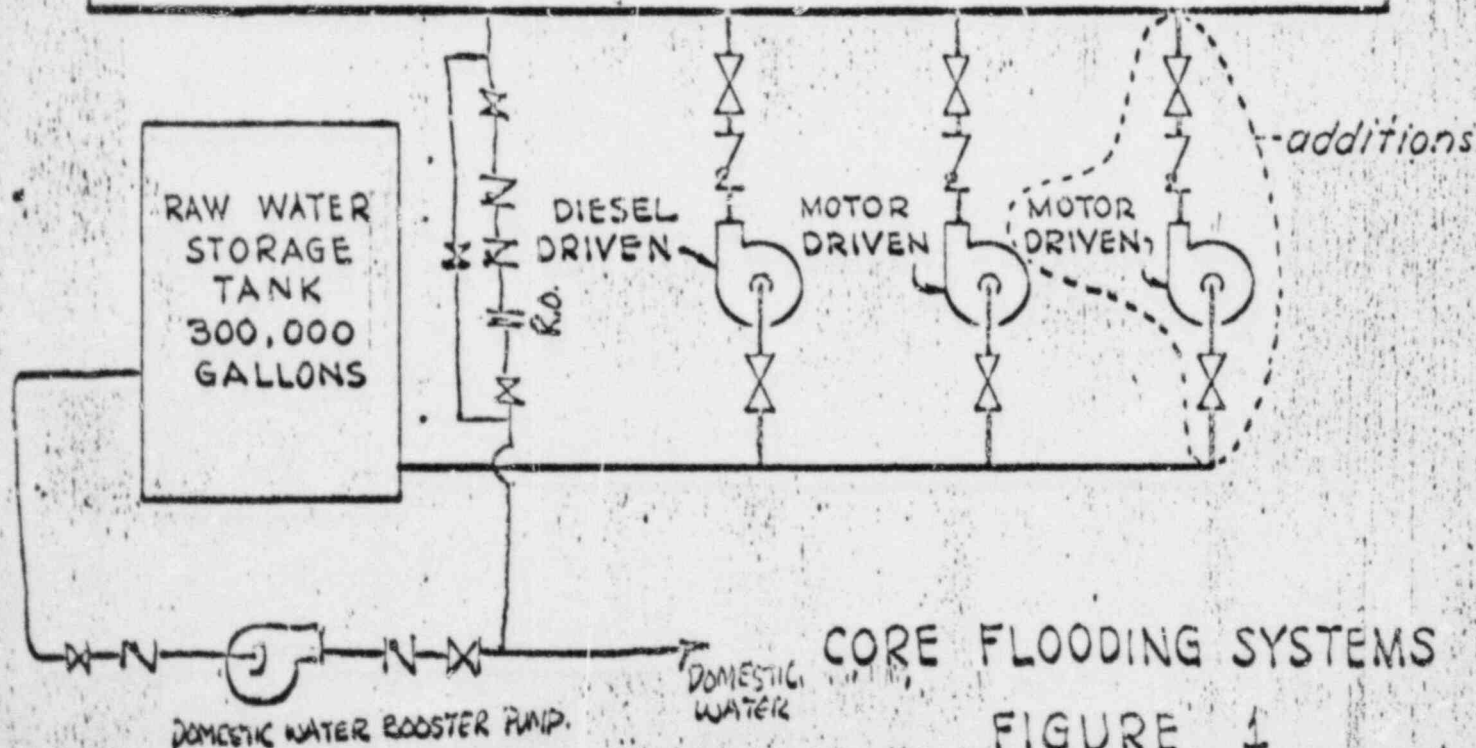
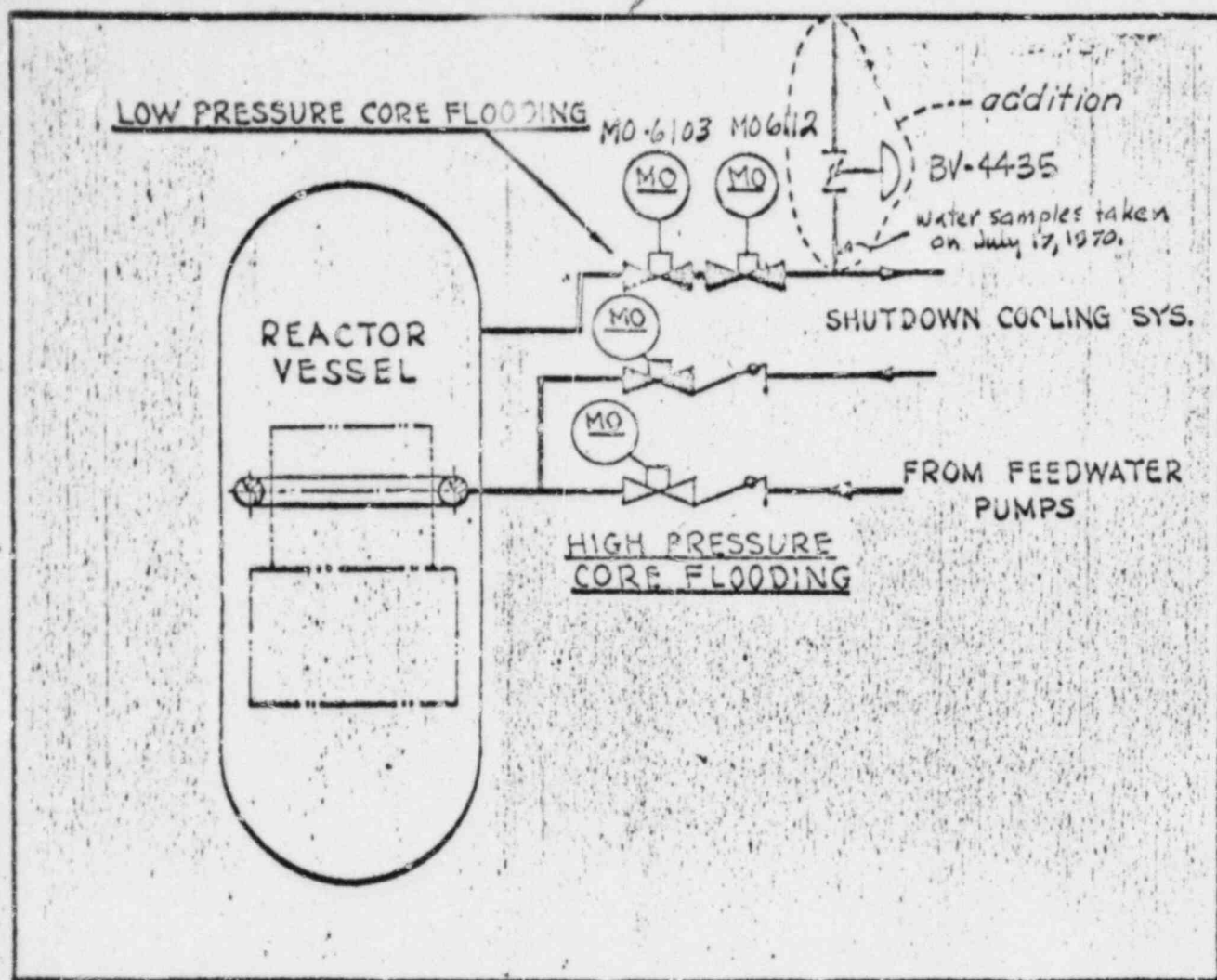
R. S. [initials]

H.J.D. [initials]

M.S. [initials]

D.W. DW 8-30-66

EXHIBIT I



CORE FLOODING SYSTEMS

FIGURE 1

EXHIBIT J

DECISION OF THE REFEREE

SAN FRANCISCO REFEREE OFFICE

In the Matter of:

Robert J. Rowen, Jr.  
2504 O Street  
Eureka, California 95501

Case Number: SF-1319

Date Appeal to Referee Filed:  
July 13, 1970

Claimant -Appellant

SSA No.: 552-52-9526

Pacific Gas & Electric Company  
245 Market Street, Room 923  
San Francisco, California 94106

Employer

Account No. 002-2199

Time and Place of Hearing:

- (1) October 1, 1970  
Eureka, California
- (2) December 9, 1970  
Eureka, California

Parties Present:

- (1) Claimant  
Employer
- (2) Claimant  
Employer

STATEMENT OF FACTS

The claimant appealed from a Department determination which held him ineligible or disqualified him for unemployment insurance benefits as follows:

1. Beginning May 31, 1970 and continuing until he should earn \$325 on the ground he voluntarily left his most recent work.
2. For one week beginning June 14, 1970 on the ground he was not able to work each regular day that week, and
3. For an indefinite period beginning June 21, 1970 on the ground he was attending school during regular hours and was not available for work.

No evidence was presented concerning the second and third claim in the determination.

The ruling to the employer held its reserve account would not be subject to benefit charges.

095-05310

DATE MAILED: February 2, 1971

EXHIBIT K

Dipe 7, 8305180604



The claimant was employed by the above named employer for approximately six years. For some time prior to his discharge he worked as a Nuclear Control Technician. He last worked June 1, 1970, thereafter, he was suspended for several days until June 5, 1970 at which time he was discharged.

The claimant was discharged for a combination of reasons. For some time his job performance and particularly his attitude toward his supervisors were considered unsatisfactory. His attendance record was also below the company standard, although all absences were either for illness or time off granted him by supervision for various personal reasons. His discharge was precipitated by incidents which occurred on May 29, 1970. On that date the claimant placed a soap box for contributions in a work area with the following sign:

"Let's all contribute to Forrest Williams for  
the bold stand he made for all of us."

Forrest Williams had been employed as a Nuclear Technician until his discharge, approximately one month earlier. The claimant believed his discharge was occasioned by statements he made at a safety meeting which accused supervision, directly, or in effect, of lack of proper concern for safety, considering the potential hazards to workers and the surrounding community. The claimant had joined in these allegations and/or made similar allegations.

A supervisor, Mr. Weeks, ordered the claimant to take the soap box down. A brief discussion ensued as to whether the claimant was permitted to take up collection for the discharged employee. He was informed he could do so but not in this manner. Mr. Weeks then told the claimant to remove the box at once. The claimant answered:



"Yes, sir", and took it down. Mr. Weeks felt the claimant's intonation was sarcastic.

The claimant then left the area, his last words being "Thank you." The intonation again appeared to Mr. Weeks to be sarcastic.

A short time later Mr. Weeks met the claimant and in an angry manner reprimanded him for the aforementioned sarcasm. He shook his finger in the claimant's face in an offensive manner. The claimant asked him to stop shaking his finger in his face. Mr. Weeks angrily refused, stating that it was his finger and he would shake it anywhere he chose. Later that morning the supervisor apologized to the claimant, who remarked: "Shaking your finger in someone's face in that manner is a good way to get a finger broken."

About mid-day the claimant left work, stating he felt ill.

At about 7:30 that evening, Mr. Weeks received a phone call from a man who identified himself as the claimant and who stated in pertinent part: "If you ever do again what you did this morning, I will break your arm." The caller repeated this statement. Mr. Weeks testified he was upset by the call but did not fear bodily harm as a result.

A preponderance of evidence indicates the claimant had an opportunity to make such call without the knowledge of his wife who testified in an arbitration proceeding that to the best of her knowledge he had not made such call.

The next day the claimant was approached by another supervisor concerning Mr. Weeks' report to him detailing the aforementioned telephone call. The claimant denied having made the call. Mr. Weeks testified he had once or twice spoken to the claimant on the tele-

phone and the voice of the caller was that of the claimant.

The claimant's job description as prepared by the company is as follows;

"An employee who, without direct supervision, is regularly assigned to and maintains, calibrates and services the individual components and integrated systems of all conventional power plant instruments in the plant, all nuclear instruments, all radiation detection instruments, all counting equipment and accessories; performs contamination and radiation level surveys to assure non-hazardous conditions, maintains records of survey results, instructs shift personnel in proper radiation protection; assists and advises other employees in the decontamination of equipment in the handling, packaging and storing of solid radioactive waste; collects and analyzes samples both radioactive and nonradioactive in accordance with standard procedures and makes to the appropriate supervisor based on such analysis. May be required to assist an engineer in performing plant tests and evaluating data or to assist shift personnel in handling and operating chemical process equipment and waste disposal plants. His background of apprenticeship and experience must be such as to qualify him to perform these duties with skill and efficiency."

A preponderance of evidence indicate that during the last year or two of the claimant's employment he was involved in many disputes with higher management over his reports of safety violations. The following are cited as examples:

1. The routine work permit under which a group of employees were working in the summer of 1967 permitted exposure of only five to 50 MR's but frequently the exposure was in the area of 2500 MR's.
2. A supervisor ordered a technician to take smears of material to be shipped from the nuclear plant at the top and bottom of the containers but not in

the center. This would have the effect of minimizing the radiation count. After the supervisor had been informed the count exceeded the level permitted for such shipments, he asked the claimant to sign a previously prepared shipping document which indicated the radiation level was within tolerable limits. When the claimant refused, he corrected the shipping document to show the correct figure and then ordered the shipment processed, contrary to the governmental regulation involved. The claimant accurately reported the entire incident in the daily log he was required to keep as part of his duty. He was severely reprimanded by Mr. Weeks for having done so on the ground this was not a "proper" use of the log, pointing out that the Atomic Energy Commission inspectors had access to the log.

3. On one occasion VIP's were to be conducted through part of the facility where they might be exposed to radiation, and the plans of the claimant's supervisor did not call for monitoring these persons as they left the danger area to determine the rate of exposure, if any. At the claimant's insistence this was corrected.
4. Men were permitted to work over the open core of



a nuclear reactor without wearing safety harness to prevent their falling down into the core.

5. A short time prior to the claimant's discharge, he asked Mr. Weeks for permission to speak to the Atomic Energy Commission inspector concerning the violation noted immediately above, and other conditions the claimant believed unsafe. He was refused permission to make his report to the inspector.

Witnesses for the employer testified that the above and other alleged safety violations reported by the claimant were of a minor nature and did not involve real hazard to workers or the community. Mr. Weeks confirmed the danger involved in working over an open "core" without safety harness but indicated the company was working on the problem, and, in addition, some of the workers believed the harness itself would be a safety hazard.

#### REASONS FOR DECISION:

In determining whether there has been a voluntary leaving of work or a discharge under section 1256 of the code, the California Unemployment Insurance Appeals Board reasoned in Benefit Decision 6590 that in terminating the employment a discharge occurs where the employer is the moving party and that a voluntary leaving of work occurs where the employee is the moving party.

The claimant's claim for unemployment insurance benefits was filed a few days prior to the conversion of his suspension to discharge; apparently for this reason the Department considered his termination a voluntary leaving. In the opinion of the referee this is



an unduly artificial interpretation of the situation. The referee finds the employer was the moving party in affecting the claimant's termination, and as such, he was discharged.

Section 1256 of the California Unemployment Insurance Code provides that an individual is disqualified for benefits, and sections 1030 and 1032 of the code provide that the employer's reserve account may be relieved of benefit charges, if the claimant has been discharged for misconduct connected with his most recent work.

The California District Court of Appeals in Maywood Glass Co. v. Stewart (1959), 170 Cal. App. 2d 719, 339 P. 2d 947, held that the term "misconduct", as it appears in section 1256 of the code is limited to conduct which shows wilful or wanton disregard of the employer's interest, such as deliberate disregard of the standards of behavior which the employer has a right to expect of his employees or carelessness or negligence of such a degree or recurrence as to show wrongful intent or evil design. On the other hand, the Court continued, mere inefficiency, unsatisfactory conduct, poor performance because of inability or incapacity, isolated instances of ordinary negligence or inadvertence, or good faith errors in judgment or discretion are not "misconduct". The Court also held that the employer has the burden of establishing "misconduct" to protect its reserve account.

In the opinion of the referee the principal cause of the claimant's discharge was his extreme safety consciousness. His efforts in this direction were to some extent a reproof of the more sanguinary attitude of certain of his supervisors. His attempts to bring these matters to the attention of the Atomic Energy Commission and to the attention of fellow employees were also greatly resented.

As to the incidents which occurred on the claimant's last work-day, the referee makes the following findings based upon a preponderance of evidence:

1. Mr. Weeks conceded that the manner of his reprimand of the claimant was improper. In the opinion of the referee it was also extremely provocative.
2. The claimant had opportunity and motive to make the telephone call referred to in the Statement of Facts, above.
3. Mr. Weeks was familiar with the claimant's voice and believed it was he who called. The referee concludes a preponderance of evidence indicates the claimant made this call.

Considering the context out of which the telephone call arose, the contingent wording (the claimant stated what his course of action would be if in the future Mr. Weeks repeated his actions of that morning) plus the fact the supervisor did not interpret the remarks as a present threat of bodily harm, the referee believes the telephone call in question is more accurately described as a warning rather than a threat.

The referee concludes the claimant was discharged for reasons other than misconduct connected with his most recent work, within the meaning of sections 1256 and 1030 of the code.

As no evidence was presented concerning the issues under section 1253(c) of the code, the Department determinations under that section are affirmed.

DECISION:

The determination of the Department is modified. The claimant is not disqualified under section 1256 of the code. The Department determinations under section 1253(c) are affirmed; benefits are denied under that section. The ruling to the employer is reversed. The employer's reserve account is not relieved of benefit charges under section 1032 of the code.

Dated: January 28, 1971

D.F.M. HANLEY, Referee

THIS DECISION IS FINAL UNLESS APPEALED  
OR SET ASIDE WITHIN TEN DAYS.  
SEE ATTACHED NOTICE.



In the Matter of an Arbitration

between

INTERNATIONAL BROTHERHOOD OF ELECTRICAL  
WORKERS, LOCAL UNION NO. 1245,

Complainant,

and

PACIFIC GAS AND ELECTRIC COMPANY,

Respondent,

Involving Arbitration Case No. 36.

San Francisco, California

April 2, 1971

OPINION AND DECISION OF BOARD OF ARBITRATION

SAM KAGEL, Chairman

LAWRENCE N. FOSS, Union Member

J. J. WILDER, Union Member

J. WAYLAND BONBRIGHT, Employer Member

ARTHUR M. KEZER, Employer Member

-o-o-o-o-o-o-o

Arbitration Case No. 36

ISSUE:

"Was the discharge of Robert J. Rowen, Jr. in violation of the Labor Agreement dated September 1, 1952, as last amended?"

Mr. Rowen was employed in April 1962 and discharged on June 5, 1970. He was a Control Technician.



LETTER OF DISCHARGE:

On June 8, 1970, the Company wrote to Rowen, in pertinent part, as follows:

"Specifically, your discharge was occasioned by your latest act of misconduct; namely, your threatening of a supervisor with bodily harm at approximately 1940 hours on May 29, 1970.

"Relative to the reasons for your discharge, weight was given to your past record of misconduct including amongst other things harassment of the Company and its supervisors, insubordination, failure to follow instructions, frequent instances of unsatisfactory job performance, and a poor record of attendance." (Co. Ex. 24.)

Specific Incident of May 29:

On May 29, E. D. Weeks, the Company's Power Plant Engineer, testified that at 7:39 or 7:40 his kitchen telephone rang; that his daughter picked up the phone and stated that it was for Weeks; that Weeks stated that he was on the phone:

"And Bob was on the other end of the line. He said: 'This is Rowen.' And then there was a pause. He said: 'What happened this morning will be handled by due process, but I have got something on my chest. I want to get it off. If you ever do to me this morning or if you ever do to me again what you did this morning, I will break your stupid arm. Do you hear me? I will break your stupid arm.

"And when I heard that I tried to find a piece of paper I could write this down on my wife's desk. This is where the phone is in the kitchen. And the only thing I could come up with was a three-by-five card. And I was trying to hold that down with one hand and write with the other.

"And Bob said: 'What are you doing?'"

"And I said: 'I'm writing down what you are saying.'"

"And he said: 'I will deny this phone call. There are no witnesses. But if you ever do to me again what you did this morning, I will break your stupid arm.'"  
(Tr. p. 226.)

According to Weeks, he had received a call from Rowen in the past; he recognized Rowen's voice; that in the past telephone conversation Rowen identified himself similarly as he did on May 29.

Rowen categorically denied making any telephone call to Weeks whatsoever.

Other Incidents of May 29:

Early in the shift on May 29, Rowen placed a detergent box on the radiation protection board which had a label which read: "Let's all contribute to Forrest for the bold stand he made for us", referring to the Williams situation. The Company ordered that Rowen remove the box, so suggesting that if Rowen wanted to take up a collection for Williams he do so during his lunch hour and breaks. This was suggested by the Assistant Plant Superintendent, Warren Raymond. After Rowen started to question Raymond concerning this, Weeks interrupted and told Rowen that he had to take the box down and would he do so. Raymond and Weeks testified that Rowen did so saying, "yes sir"

in an insolent and derogatory manner. (Tr. pp.196;220.) Rowen states that at this time Weeks was mad. (Tr. p. 244.)

At that point, Weeks began confronting Rowen shaking his finger in Rowen's face. Weeks stated:

"The gist of my remarks to Bob was that I didn't like the way he had responded to my request to take the box down, that I thought he was being insolent and I didn't appreciate it. Especially in front of a lot of other people; that I had gotten several complaints from Supervisors in the past of this type of response from him to orders, and I didn't appreciate that either.

"And then he said: 'Please don't shake your finger in my face.'

"And I was shaking my finger at him. And I continued shaking it. And I told him that in my opinion in the past few days he had been going out of his way to make trouble and that he had better knock it off or else he was going to find trouble...." (Tr.p.221.)

Rowen stated that Weeks' finger shaking ".....

"upset me. I reacted to it. And I told him, I said: 'Mr. Weeks, I'd appreciate it if you would stop shaking your finger in my face.'

"And he stuck his finger right up in front of my nose. And by this time I would say he had lost his control. And he said: 'This is my finger, and I will do with it what I want.' And he shook his finger I'd say six or eight times more and finished what he was saying..." (Tr. p. 245.)

Thereafter, Rowen stated he wanted to see a Shop Steward and a meeting was held between the Steward, Rowen, Weeks and Raymond as an "observer." According to Weeks:

"I indicated that since he was acting very child-ishly...." Rowen stated "He [Weeks] said I was acting like a spoiled little brat, five-year-old, and that if I was going to act that way, then he had every right to treat me that way and that that's the way he treats 'five-year-old brats' are the words he used.

"And I told him I didn't think that was proper.

"You see, since the finger shaking incident now this has been about a half an hour and he still hadn't really calmed down. We weren't really getting any place...." (Tr. p. 247.)

Rowen and Raymond left the meeting and thereafter Rowen, who stated that he was upset; asked his first-line Supervisor if he could be spared:

"I'd appreciate the time off in the afternoon from my work to go down and see a Labor Commissioner or an attorney or something to find out just what I could do in a case like this...." (Tr. p. 248.)

The first-line Supervisor talked to Weeks. Weeks stated that Rowen could not be spared after checking with the first-line Supervisor. (Tr.p.223.) Rowen then requested to see Weeks concerning the refusal. Weeks stated he explained to Rowen that there were manning problems and tried to find out what exactly Rowen's dissatisfaction with the Company was. (Tr. p. 224.) Rowen stated that Weeks

"....admitted to me that he was as mad as he had ever been at any employee as long as he could remember, but he still had the right and he was maintaining that he had the right to do that [shake his finger] and that was his prerogative." (Tr.p. 248.)



Finally, Weeks stated that concerning the finger shaking incident "Let's kind of forget about it" (Tr.p. 249); that Rowen said that he was not willing to do so.

Thereafter, before lunch, according to Rowen, his stomach began to bother him"...and this thing was kind of getting to me." At 12:15 or so he informed the Supervisor that he would not be in because he was going to go home sick. That afternoon he took his temperature and found it to be over a hundred and one degrees and he explained to a doctor by telephone that he felt nauseated, had an upset stomach and had a splitting headach. The doctor's advice was that he go to bed, take aspirin, and drink lots of water and to come in the following Monday if he was still sick. (Tr.p.251.) Rowen stated that he then stayed on a couch until he received a call from Williams at about 5 o'clock. His wife came home at 5:30 and he explained the situation to her until 6:45. Since she had not started to make dinner, she suggested to Rowen that they go to the Fresh Freeze to get some hamburgers and milk shakes, to bring them home and eat them. They did so, arriving home about 7:20 P.M. and ate dinner. Rowen continued eating and conversing with his family until about five minutes to eight. On cross-examination Company counsel asked Rowen that

whether by around 5 o'clock his flu symptoms had apparently cleared themselves. Rowen answered "I was feeling bad and all weekend."

"Q. . . You were feeling so bad that you could go out and get hamburgers and consume that type of a meal?

"A. My wife wanted me to take her up there. I didn't even get out of the pickup. She went in and got the order...." (Tr.p. 304.)

Mrs. Rowen testified that she was with her husband between 5:30 and 8:00 and he did not make any phone calls.

"So Bob and I took the two boys, got in the pickup, went to the Fresh Freeze. As I recall, they were busy as they usually are on a Friday evening. We ordered hamburgers, milkshakes, french fries. And he paid for the order, came back, got in the pickup and we went home...." (Tr. p. 313.)

On being questioned by Company counsel she stated:

"We drove up there. He got out of the pickup and went up to the window and ordered it. And he had to stand in line before he could even place his order.

"Q. About how long did he stand in line?

"A. Oh, he was in line (I'd say) a good five or ten minutes before he placed the order, and maybe a few minutes before they called his name to pick up the order and before he paid for it and brought it out to the pickup..." (Tr.p. 320.)

There is nothing to suggest that Weeks did not receive the phone call for he immediately wrote down what he said and

immediately recounted it to his family. In addition, to the context of the phone call, here the caller identified himself as Rowen. Weeks' testimony was that he had received calls from Rowen in the past, that he recognized Rowen's voice, and that the caller used phrases that Rowen had used in the past.

Insofar as Rowen's specific denial is concerned, serious questions were raised concerning his credibility. This is specifically true concerning his testimony as to his illness, and as to his recovery from his symptoms. He volunteered that he did not get out of the car, for example, to purchase the family dinner at the Fresh Freeze while his wife testified that he spent a substantial period of time standing in line to purchase it. The direct facts of the call and the evidence of Rowen's lack of candor leads to the conclusion that Rowen did in fact make the telephone call to Weeks.

Telephone Call as Basis for Discharge:

The Union contends that if Rowen was found to have made the call, that the call was justified because of the finger shaking incident and Weeks' statement that Rowen was acting like a five-year-old; that the call did not carry a threat of present physical harm being contingent only on future conduct by Weeks which Weeks, with prudence, could avoid and was not job-related, being in the form of a strictly personal dispute.



The telephone call was a call from an employee to his Supervisor in which the employee threatened him with physical harm because of what may occur on the job. That the Company is entitled to discipline employees for proven conduct of this kind is clear.

"Real" Reason for Discharge:

As in the Williams case, the Union raises questions concerning the specific basis for Rowen's discharge as being his safety consciousness rather than his actions concerning Weeks on May 29. Specifically, the Union refers to the facts that Rowen brought up matters concerning radiation safety at a meeting on December 12, 1967; that in August 1969 an incident occurred during which Rowen objected that a shipping cask was not within proper radiation tolerances; that in February 1970, Rowen discovered a piece of pipe, the bulk of which had been sold to a scrap company, was radioactively contaminated and Rowen wanted to notify the scrap company; that Rowen raised questions concerning safety harnesses during outages; that Rowen wanted to speak <sup>an</sup> to AEC Inspector because certain measures concerning safety were not followed during outages; that Rowen raised questions at the May 20 safety meeting concerning the fact that ionizing radiation is "the most general carcinogen present today...." that the settings on the hand and foot counter had been deliberately set

too high that employees have brought back contamination into the plant from their homes; that these situations have been discussed over and over again but nothing was ever done concerning them. (Co. Ex.1,2.) Additionally, the Company had been keeping a daily log concerning Rowen's activities for a long period of time.

The above incidents raised by Rowen do not provide a defense to his discharge. The record shows that anyone can make a report to AEC and if Rowen had decided to do so, he would have done so; that the Company had adopted some of Rowen's safety suggestions; that Rowen could have filed a grievance or grievances concerning the subject of safety but apparently did not do so.

The main point is that despite all of his past conscientiousness, as described by the Union, Rowen on May 29 in fact threatened Supervisor Weeks as alleged. The Company did show that Rowen had had a work record and attendance record as alleged in its letter of discharge. Consequently, the record does not support the Union's contention that legitimate concerns for safety voiced by Rowen was the basis for his discharge. Rather, the record does show that Rowen, for whatever reasons, chose to employ threats of violence in terms of his dealings with the Company and his Supervisor rather than use authorized governmental

or grievance procedure to voice his complaints. In doing so, he threatened the physical safety of his Supervisor. And, for such conduct, discharge was proper.

DECISION IN ARBITRATION CASE NO. 36:

The discharge is sustained. The grievance is denied.

\*\*\*\*\*

BOARD OF ARBITRATION:

<u>Sam Kagel</u> Chairman		
<u>John Wilder</u> Union Member	<u>Dissent</u> Concur/Dissent	<u>3-30-71</u> Date
<u>Lawrence N. Leo</u> Union Member	<u>DISSENT</u> Concur/Dissent	<u>3-30-71</u> Date
<u>W. E. Bright</u> Employer Member	<u>Concur</u> Concur/Dissent	<u>3/30/71</u> Date
<u>G. M. Keene</u> Employer Member	<u>Concur</u> Concur/Dissent	<u>3/30/71</u> Date



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In the Matter of an Arbitration

between

INTERNATIONAL BROTHERHOOD OF ELECTRICAL  
WORKERS, LOCAL UNION No. 1245,

Complainant,

and

PACIFIC GAS AND ELECTRIC COMPANY,

Respondent,

Involving Arbitration Case No. 35.  
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OPINION AND DECISION OF BOARD OF ARBITRATION

SAM KAGEL, Chairman

LAWRENCE W. FOSS, Union Member

J. J. WILDER, Union Member

J. WAYLAND DONBRAGHT, Employer Member

ARTHUR M. KEZER, Employer Member

San Francisco, California

April 2, 1971

EXHIBIT M

Dupe **8305180609**

Arbitration Case No. 35

ISSUE:

"Whether the discharge of Forrest E. Williams, Jr. was in violation of the Labor Agreement dated September 1, 1952, as last amended?"

Mr. Williams was employed on October 8, 1962, and discharged on May 25, 1970. He was a Control Technician.

LETTER OF DISCHARGE:

The Company's Division Manager sent the following letter to Williams on May 27, 1970:

"This letter confirms the telephone notification which you received on May 26, 1970, from Mr. R. H. Taylor, Division Personnel Manager, that you were discharged effective 12:00 P.M. that date for insubordination when considered in the light of other acts of misconduct on your part.

"Specifically, your discharge was triggered by your latest act of misconduct, namely your refusal to accept a work assignment to Chemistry from your supervisor in the morning of May 25, 1970.

"On the afternoon of May 15, 1970, while you were on disciplinary layoff without pay for a previous act of insubordination for refusal to perform certain work assignments in Chemistry on May 11, you informed the Company that you agreed to perform these work assignments without qualification. You were, therefore, reinstated on May 16, 1970. On your return to work that date you were not assigned to Chemistry work, at your request, because you reported that you had an open wound resulting from the surgical removal of a growth from the middle finger of your left hand. You were not assigned to Chemistry work during the week of May 18-22.

"On May 25, your wound was inspected by Mr. E.D. Weeks, Power Plant Engineer, who determined that it had sufficiently healed and could be effectively sealed so that you could be assigned to the Chemistry Section of Unit 3. Since you disputed the assignment your wound was subsequently inspected by Messrs. W. A. Raymond, Assistant Plant Superintendent, G. E. Allen, Radiation Protection Engineer, and H. Reynolds, Claims and Safety Department, all of whom opined that the wound could be sealed and that there would be no hazard for you to work in the Chemistry area. You refused to accept their opinion that the wound could be sealed and stated that you would not work in Chemistry because it was not worth the risk and that the risk was not warranted under the circumstances.

"In the presence of two Shop Stewards, R. McKenna and V. Tague, it was explained to you that the assignment was considered safe and why, the reasons for the assignment, and the possible consequences for your action. You continued to refuse the assignment and were suspended from work without pay at \$945, pending review and investigation.

"On May 26, you were called in, with pay for additional investigation from 1200 to 1200, and subsequently notified of the termination of your employment.

"Relative to the reasons for your discharge, as noted above, some weight was given to your past record of misconduct, particularly during the past two weeks. For example, on three previous occasions you were reprimanded in writing, and disciplined for acts of insubordination, noted as follows:

"1. Letter to you from Mr. E. D. Weeks, dated May 8, 1968, re leaving your work area to talk to a shop steward without having requested or received permission from your supervisor to do so.

"2. Letter to you from Mr. E. D. Weeks dated March 9, 1970, re disciplinary lay-off of 9 hours without pay for insubordination.



"3. Letter to you from Mr. D. L. Hill dated May 13, 1970 re disciplinary lay-off of 30 hours without pay for insubordination." (Co. Ex. 13.)

**DISCUSSION:**

**Factual Situation:**

As a Control Technician, Williams was involved in the sampling of reactor water and effluents for radiation level testing at the Company's Nuclear Power Plant in Humboldt County, California. On May 11, 1970, Williams refused to perform the collection and processing of effluent samples, reactor water samples, and other waste samples. This refusal occurred on May 11, 1970, at which time he told his immediate supervisor that he "refused to perform these assignments, because in [his] opinion, they were 'unsafe' and that 'this chronic exposure to radiation was unnecessary, and wrong.'"

Company supervision informed him that it considers such jobs to be safe, but Williams refused again to perform the work. Williams was subsequently placed on three days' disciplinary suspension subject to the following provision:

"If by the end of this period you agree to perform subject work assignments without qualification you will be reinstated as of 0800, May 15, 1970, and the period of your suspension will be recorded as disciplinary layoff without pay. If you do not so agree by the end of this period you will be considered as discharged as of 1630, May 15, 1970." (Co. Ex. 11.)

Williams did not file a grievance concerning this suspension and it was not challenged during Williams' discharge case by the Union. (Union Brief p. 3.)

On his return to work on May 18, Williams pointed out that he had a growth removed from the end of his finger which had not yet healed. According to the Company, he could have been assigned to Chemistry on his return to work if normal precautions had been taken but that the Company chose not to assign him to such work because it wanted "to avoid another flair up...." (Tr. p. 60.)

A decision was made that when Williams' wound had healed more completely, he would then be assigned to Chemistry.

On May 23, according to the Company, the wound had had seven days to heal. Additionally, in terms of quarterly exposure to radiation that the Control Technicians had to date, Williams had the least. A decision was made that Williams would perform Chemistry work after his finger was sealed. The method of sealing was to avoid direct contamination by radioactive water through the use of a "finger-cot" cut from a rubber glove sealed with waterproof tape, and a plastic surgeon's glove sealed at the wrist with waterproof tape topped by a rubber glove. (Co. Ex. 8.)

Williams then refused to perform the work in question.

Williams' Testimony:

According to Williams, on May 25, his finger was still bandaged. When examined by the Company, Williams pointed out that the wound was still draining and sore. He squeezed his finger and according to Williams, "a little bulb appeared on it of lymph." (Tr. p. 113.) According to the Company testimony Williams squeezed hard, but nothing came out of the wound.

Williams asked for a couple of more days so that the wound could be completely healed which was refused. (Tr.p.113.)

Doctors' Reports:

The next day Williams reported to a doctor at Company request who found that the wound was practically healed and that in his opinion, although he had no familiarity with radiation and consulted with the radiologist concerning it, the protection contemplated by the Company would be sufficient to provide protection to the wound.

Williams' physician stated that on May 27 he examined the wound, that it was nearly healed, that 5/10th of a millimeter in area was still open which would heal in two days. (Tr.p. 238.)

Williams' Defense:

The Union contends that the Company's ordering Williams to work in Chemistry was in direct violation of the Company's



own safety rules; that as a matter of fact the wound could not be effectively sealed in any event; that the reasons assigned for the discharge of Williams were not as stated in Company Exhibit 13, the Letter of Discharge.

SUMMARY:

Company Safety Rules:

The Company's Radiation Control Standard contains the following:

Standard

"II. Controlled Area Injuries

- "B. Persons having skin breaks shall not be allowed to enter a Controlled Area without the approval of Radiation Protection and/or their immediate supervisor.

Medical

"II. Controlled Area Injuries

- "B. Approval for Persons Having Skin Breaks to Perform Radiation Work:

- "1. The assignment of persons having skin breaks to work in radioactive materials areas should be avoided if possible.
- "2. Each person shall be responsible for notifying his Supervisor of any skin breaks which he may have before performing radiation work. The supervisor shall be responsible for insuring that any skin breaks are adequately protected before permitting the injured person to enter the Controlled Area. 'Skin Breaks' shall include unhealed wounds, open cracks from chapping, and other injuries such as

lacerations, abrasions, punctures, blisters, or burns.

"3. Persons having skin breaks shall perform radiation work only after the specific prior approval of the individual's supervisor and/or Radiation Protection. The individual's supervisor and/or Radiation Protection shall assure that the degree of protection afforded the skin break is adequate in view of the nature of the work to be performed by the injured person.

"4. The approval to perform the Radioactive Inducible Area work is contingent upon the protection afforded the wound remaining in satisfactory condition. The individual is expected to make every effort to maintain the dressing in place during the course of the work and to leave the area immediately if the degree of protection afforded the wound becomes inadequate." (Co. Ex. 9.)

Compliance as to Radiation Control Regulations:

The Union relies on paragraph II B(1) on the basis that the assignment of Williams could have been avoided, in that another Control Technician was available for such work as was admitted by the Company. (Tr. p. 76.)

The Company's reason for the assignment of Williams was that his radiation exposure was less than that of other personnel and the Company felt, that Williams' wound had healed or if it had not, it could be properly protected. The Company regulations do not prohibit persons with skin breaks working in radioactive areas, but they direct that this be avoided if possible and that in the event an employee is to work in such

an area with a skin break, the individual Supervisor or Radiation Protection is to insure that proper radiation protection procedures are followed. In this case, Williams' wound had had seven days to heal, a reasonable determination was made that the wound had healed to the point that either it was no longer a skin break or, if Williams' testimony is credited, it had healed to the point where it could reasonably have been protected from direct contact with contaminated water by a waterproof covering. Accordingly, under the state of the facts presented, the Company by its actions on May 25 directing Williams to work in Chemistry did not violate the provisions of the Safety Regulations.

Adequacy of Protection Methods:

Williams maintains that the protection to be provided was inadequate to protect his finger from radioactive water contamination because the procedures involved require the emerging of his hand in contaminated water. Williams testified that if a small leak occurred in the glove, this might not be known to him because of the normal sweat of his hand. Water could also come in over the top of the glove. (Tr. p. 122.) In the past, he has cut his gloves on the scotch tape dispenser cutter which is used and glassware breaks during the normal working procedure. (Tr. pp. 123-124.)



Williams admitted that he did not cut his glove too often during his work on the job and admitted that if glass breaks, that a skin break could occur because of the broken glass.

The Company stated that the protection that it afforded Williams was the normal protection afforded for skin breaks in the industry, and at the Company's nuclear plant.

Conclusions Concerning Adequacy of Protection:

The risk that Williams was concerned with was contact between his wound and water. The protection offered by the Company consisted of three layers of waterproofing, two which were sealed. Williams admits that he is required to be careful in terms of the work that he performs. Under the circumstances, the protection that the Company afforded Williams seems adequate to have protected him from contact with water. As the Company points out, in the event that the three layers protection were cut, there would also be a probability that an independent cut or break would occur in the skin because of the cause of the cutting of the waterproof protection. Such would be an independent source of contamination which is part of the normal risks inherent in the Control Technician job. Therefore, as a matter of fact, it is found that the protection offered Williams was adequate in view of the nature of the work he was to perform. (See Reg. II B(3), Co. Ex. 9.)

Reasons for Discharge:

The Company raised the issue that there was a common plan and design on the part of Williams and Robert Bowen (see Arbitration Case 36) and others who continually raised questions concerning the adequacy and efficiency of the Company's safety program.

At the Company's safety meeting of May 20, 1970, Williams raised questions concerning the too high setting of the background reading of the hand and foot counter for accurate monitoring of persons leaving the control area as well as questions concerning the maintenance of the high level solid waste storage vault in terms of possibility of spreading undetected contamination. (Co. Ex. 1.) Other matters raised by Williams include that personnel were not receiving instruction in radiation monitoring. (Co. Ex. 2.) According to the Union, these questions were questions which caused embarrassment to the Company and that this was the real reason why Williams was discharged, and that the incident on May 25 provided a convenient way for the Company to rid itself of Williams.

The Company states that Williams' participation in the safety meeting of May 20 received but very minor weight, if any, in the decision to discharge, and the primary reasons for Williams discharge were stated in the Letter of Discharge that was sent to Williams. (Tr. p. 101.)

### Conclusions Concerning Basis for Discharge:

In summary there is no question that the record indicates that Williams and, as will be stated later, Rowan, decided to bring radiation safety questions into the open at safety meetings. In the past, the record shows the Company has adopted safety suggestions of its employees including such questions in the radiation field. What the record does disclose, insofar as Williams is concerned, is that the Company's motivation for discharge was as stated in the Letter of Discharge to Williams and the additional consideration that it desired to check on his good faith statement that he had returned to work after the May 12 suspension without qualification. (Ex.p.107.) Whatever Williams' motivation for his actions on May 11 and May 25, the record does not sustain his claims that the Company was motivated and had acted against him because of the questions raised by him at the May 20 safety meeting.

### Mitigation:

The record does show that Williams raised the question of safety on May 25, and at that time the Company took justifiable action concerning the protection of Williams' skin break. The Company was entitled to order him to work in Chemistry based on the amount of radiation exposure that all of the Control Technicians had had.

However, Williams did make the statement that if a couple of more days had passed he would have unqualifiedly returned to work in Chemistry. As the above shows, Williams was not entitled to ask for those "couple of more days." Nonetheless, the record does show that Williams was employed for eight years, and that except for the incidents occurring in May 1970 and a relatively minor infraction on May 8, 1968, he apparently had a good work record. Williams has been off work since May 1970. Reducing his discharge to a suspension without back pay provides ample and significant discipline for his refusal to perform work on May 23.

DECISION IN ARBITRATION CASE NO. 35:

1. Forrest G. Williams, Jr. will be returned to work Northwich in line with his seniority.
2. He shall receive no back pay.

\*\*\*\*\*

BOARD OF ARBITRATION:

Sam Hall  
Chairman

[Signature]  
Union Member

Concur/Dissent

9-30-71  
Date

[Signature]  
Union Member

Concur/Dissent

Date

[Signature]  
Employer Member

Dissent  
Concur/Dissent

3/30/71  
Date

[Signature]  
Employer Member

Concur/Dissent

4/1/71  
Date



Activities in Ground Water and Other Samples

1970-1971 to Date

Date	Spent Fuel Pool	Spent Fuel Pool Lines	Caisson	French Drain	Well #1	Well #2	Well #3	Well #4	Well #5	Well #6
January, 1970	$1.15 \times 10^{-4}$	$1.35 \times 10^{-4}$	$3.7 \times 10^{-5}$	$1.7 \times 10^{-5}$	$< 10^{-8}$	$10^{-8}$	$5 \times 10^{-5}$	$4.7 \times 10^{-8}$	$0.55 \times 10^{-7}$	$1.6 \times 10^{-7}$
February, 1970	$1.85 \times 10^{-4}$	$2.3 \times 10^{-5}$	$6.6 \times 10^{-5}$	$1.2 \times 10^{-5}$	$< 10^{-8}$	$< 10^{-8}$	$14 \times 10^{-5}$	$4.4 \times 10^{-8}$	$< 1 \times 10^{-8}$	$7.4 \times 10^{-7}$
April, 1970	$1 \times 10^{-4}$	$1.2 \times 10^{-5}$	$3.3 \times 10^{-5}$	$0.4 \times 10^{-5}$	ND	ND	$5 \times 10^{-5}$	ND	ND	--
June, 1970	--	--	$3.2 \times 10^{-5}$	$0.33 \times 10^{-5}$	$< 10^{-8}$	$< 10^{-8}$	$5 \times 10^{-5}$	$3.2 \times 10^{-7}$	ND	$4.4 \times 10^{-7}$
September, 1970	$1 \times 10^{-4}$	$1 \times 10^{-5}$	$3.4 \times 10^{-5}$	$1.25 \times 10^{-5}$	ND	ND	$2.5 \times 10^{-5}$	ND	--	$2.7 \times 10^{-7}$
January, 1971	$1.35 \times 10^{-2}$	$1.4 \times 10^{-5}$	$1.9 \times 10^{-5}$	$0.36 \times 10^{-5}$	$< 10^{-8}$	$< 10^{-8}$	$1.5 \times 10^{-5}$	$1.35 \times 10^{-7}$	$0.44 \times 10^{-7}$	$2.3 \times 10^{-7}$
February, 1971	$2.4 \times 10^{-2}$	$1.5 \times 10^{-5}$	$1.8 \times 10^{-5}$	$0.41 \times 10^{-5}$	$< 10^{-8}$	$< 10^{-8}$	$1.25 \times 10^{-5}$	$9.5 \times 10^{-8}$	--	$1.3 \times 10^{-7}$
March, 1971	$1.6 \times 10^{-2}$	$1.6 \times 10^{-5}$	$1.4 \times 10^{-5}$	$0.25 \times 10^{-5}$	$10^{-8}$	$< 10^{-8}$	$1.35 \times 10^{-5}$	$1.2 \times 10^{-7}$	$1.2 \times 10^{-7}$	$1.4 \times 10^{-7}$

All Units uCi/cc  $^{60}\text{Co}$ .

ND = Not Detectable.

Air Sample Log Refueling BuildingJune 21, 1970

Date	6/20	6/21	6/21	6/21
Sample location <sup>1/</sup>	+ 12	Not identified	+ 12	Not identified
Sample Number	6-70-60	6-70-61	6-70-62	6-70-63
Sampling Time (from/to)	1623 - 17-3	0053 - 0138	0405 - 0450	822 - 935
Collection time (minutes)	50	45	45	73
Alpha uCi/cc	$4.20 \times 10^{-11}$	$4.38 \times 10^{-11}$	Cut sample 1/4 <sup>2/</sup>	$2.40 \times 10^{-11}$
Beta uCi/cc	$9.01 \times 10^{-8}$	$1.26 \times 10^{-7}$		$5.78 \times 10^{-8}$

Remarks:

Gamma spectrum of 1/2 filter at 0520 peaks at 0.899 and 1.837 Mev identified as <sup>88</sup>Rb

Gamma spectrum counted at 1024 showed only <sup>138</sup>Cs.

<sup>1/</sup> Location identified only as +12 foot elevation - main floor refueling building - location of samples not known. Samples collected by individuals identified only by initials, R. G. and/or Ray or Ron, could have been Ron Grauer or Ray Grundhofer - not interviewed.

<sup>2/</sup> At time of investigation (5/27/71), concentration values for sample number 6-70-62 had not been calculated. Data column indicated that the sample had been cut into quarters for counting. Boot's calculated on 5/27/71 that the value was recorded as  $4.28 \times 10^{-6}$  uCi/cc Beta (4 times  $1.07 \times 10^{-6}$  uCi/cc Beta based on 1/4 sample).

Copy of Air Sample Log Refueling Building

Sampled by/Computed by	E. R.	R. G.	Ron	E.
Inspector's note regarding above.	Believed to be Auxiliary Operator Ross	Believed to be Ron Grauer	Believed to be Ron Grauer	Not identified
Sample Number	6-70-60	6-70-61	6-70-62	6-70-63
Total Time (Minutes)	50	45	45	73
Average floor (CFM)	1.5	1.5	1.5	1.5
Location	+ 12		+ 12	
Inspector's note regarding above.		Not identified, Weeks believes +12		Not identified, possibly -6

Collection Time	1623 - 1713		0053 - 0138		0405		0822 - 0935	
Counting	Alpha	Beta	Alpha	Beta	Alpha	Beta	Alpha	Beta
Date/time	6-20/1724	1722	6-21/0149	0147	6-21/0501	0450	6-21/0946	0944
Time (Minutes)	2	2	2	2	2	2	2	2
Total Counts	132	340, 390	124	427, 417	--	3, 624, 448	110	318, 964
Gross CPM	66	170, 195	62	213, 703	--	--	55	159, 482
Bkg., CPM	0	88	0	88	0	88	0	88
Net-CPM	66	170, 107	62	213, 615			55	159, 394
Beta-Alpha (Beta only)	X	170, 041	X	213, 553	X		X	
Counter eff.	0.5	0.6	0.5	0.6	0.5	0.6	0.5	0.6
Conc. uCi/cc	$4.20 \times 10^{-11}$	$9.01 \times 10^{-8}$	$4.38 \times 10^{-11}$	$1.26 \times 10^{-7}$	Cut sample 1/4 for analysis. (Calculated by J. Boots, 5/27/71 - $1.07 \times 10^{-6} \times 4 = 4.28 \times 10^{-6}$ uCi/cc at 0450)		$2.40 \times 10^{-11}$	$5.78 \times 10^{-8}$

Decay Counts (1-min. Counts)

t 1/2	~56 min.		~ 51 min.			~ 30 min.	
Date/time	6-20		6-21/0157		6-21/0507	6-21/0956	
Total counts		149, 973		188, 129	(2 mins.)	1, 163, 582	107, 980
Date/time	6-20		6-21		6-21/0519	6-21/1007	
Total counts		136, 670		165, 827			72, 264

Air Sample Log Excerpts - Refueling Building (+ 12) During Pump Maintenance

Sample Number	6-70-84	6-70-85	6-70-86	6-70-87
Date	6/28/70	6/29/70	6/29/70	6/30/70
Time	1628 - 1717	0041 - 0126	1726 - 1811	0019 - 0105
Alpha uCi/cc	$7.78 \times 10^{-12}$	$8.48 \times 10^{-12}$	$2.12 \times 10^{-11}$	$2.76 \times 10^{-11}$
Beta uCi/cc	$3.42 \times 10^{-9}$	$7.43 \times 10^{-9}$	$8.70 \times 10^{-9}$	$1.14 \times 10^{-8}$
t 1/2 min.	37	29	29	29
Sampled by	JM	ER	JM	ER

No routine halogen samples.

Examination of air sample log - July, 1970, all (+ 12) Refueling Building with none for Hot shop or (-66 ) to 7/3/70.



# WHOLE BODY COUNTING

Individual	Function During Seal Failure or Maintenance	<u>June 8-10, 1970</u>							
		<u><sup>60</sup>Co</u>		<u><sup>65</sup>Zn</u>		<u><sup>54</sup>Mn</u>		<u><sup>137</sup>Cs</u>	
		nCi	% MPBB	nCi	% MPBB	nCi	% MPBB	nCi	% MPBB
N. Pena, Senior Control Operator	In area when seal failed - entered steam cloud	16.612	1.510	8.593	0.014	15.929	0.442	8.802	0.029
J. Shiffer, Nuclear Engineer	Entered steam cloud with Pena	ND	--	12.157	0.020	ND	--	5.757	0.019
R. Grauer, Auxiliary Operator	Entered steam cloud with Pena	8.615	0.783	3.353	0.006	6.832	0.190	1.415	0.005
R. W. Grundhofer, Control Operator on Shift	Probably stayed at control console	17.294	1.572	2.618	0.004	17.695	0.492	7.709	0.026
D. M. Voss, Shift Foreman		14.033	1.276	6.113	0.010	12.230	0.340	7.785	0.026
Don Backens, Mechanical Foreman	Supervisor on reactor cleanup pump maintenance	12.248	1.113	ND	--	7.218	0.2	3.748	0.012

## December 3-7, 1970

R. Grauer, Auxiliary Operator	8.855	0.805	3.568	0.099	1.385	0.055
N. C. Pena, Senior Control Operator	17.672	1.607	10.276	0.285	2.274	0.008
J. D. Shiffer, Nuclear Engineer	ND		ND		5.625	0.09
R. R. Skidmore, Control Technician	18.899	1.718	10.210	0.284	3.235	0.011
D. M. Voss, Shift Foreman	23.965	2.179	15.620	0.434	5.976	0.020

All results in nCi and % Maximum Permissible Body Burdens.

ND = Not Detected.

Traveling maintenance crew personnel were not at the plant, and were not counted.

Bioassay data were used in lieu of whole-body counts.

For on many occasions I witnessed large sums of labor and materials charged through the accounting process to the conventional fossil fuel plants. However, this is not the main point of this letter.

Returning to the problem of control and regulation of unclear power plants, and in particular the Humboldt Bay Power Plant, I believe an investigation is instore. I believe further that if an investigation of the Humboldt Bay Power Plant was initiated, certain irregularities would be revealed throughout the entire nuclear industry.

You may ask why I have not come forth before now with this information. The answer is simple. I am no longer under the influences and pressure of coercion and threats, and it has become my conviction that these problems which I have briefly mentioned and many more be made publicly known.

The Pacific Gas and Electric Company may undoubtedly accuse me of being a disgruntled ex-employee; however, be that as it may, I feel confident that as I lay out the facts they will withstand the tests of truth.

If you are interested in the information I have and desire to make an inquiry into the nature of these more serious problem, please feel free to contact me. Hopefully, I have been able to present to you rather briefly the severity of the Company's actions earlier mentioned, and more to your particular interest I assume, the undrlying reasons why the Pacific Gas and Electric Company chose to exercise these actions.

Sincerely,

*Robert J. Rowen Jr.*

Robert J Rowen, Jr

2504 "O" Street

Eureka, California 95504

SKETCH - CLEAN UP PUMP - REACTOR  
EQUIPMENT DRAIN TANK (REDT),  
SCRAM DUMP TANK (SDT) &  
ASSOCIATED VALVING

