

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE NUCLEAR REGULATORY COMMISSION

| | | |
|------------------------------|---|--------------------|
| In the matter of |) | |
| |) | |
| PACIFIC GAS AND ELECTRIC |) | Docket Nos. 50-275 |
| COMPANY |) | 50-323 |
| |) | |
| (Diablo Canyon Nuclear Power |) | |
| Plant, Units 1 and 2) |) | |

AFFIDAVIT OF TIMOTHY J. O'NEILL

| | | |
|---------------------------|---|----|
| State of California |) | |
| |) | |
| County of San Luis Obispo |) | ss |
| City of San Luis Obispo |) | |

The above being duly sworn deposes and says:

My name is Timothy J. O'Neill. I am providing this statement to describe the actions of the NRC Region V (hereafter referred to as RV) staff in regard to investigating my concerns of quality-related deficiencies at Diablo Canyon. I will also present new information material to issues that I have raised, which has only recently become available. It is my firm belief that the RV staff did not investigate my concerns in a competent and objective manner. As a result, the RV staff concluded in almost every instance that my allegations were unsubstantiated, however I believe this was the implicit goal of the Diablo Canyon Allegation Management Policy (DCAMP).

I. MATERIAL LICENSING ISSUE RESOLVED BY THE NRC
ON THE BASIS OF FALSE STATEMENTS AND OMISSIONS

The issue of improperly welded ASTM A-307 material as welded studs was considered material before the Atomic Safety Licensing Appeals Board (ASLAB)¹ in denying a motion to reopen the record on construction quality assurance. I identified this discrepancy to the RV staff in January, 1984. New information recently obtained places the conclusions by the RV staff and the Commission on this issue in serious doubt, and shows a blatant disregard for factual information available within the NRC at the time of the licensing vote.

1. On January 13, 1984, I identified widespread use of ASTM A-307 material in welded applications without a qualified welding procedure. This is a significant breakdown in both design and construction quality assurance, and was reported to both the licensee and the NRC RV staff by a discrepancy (nonconformance) report.² My report was censored by the Pullman QA department to omit all reference to ASTM A-307 material.³

¹ See ALAB-775, dated June 28, 1984, at Footnote 21.

² Refers to original draft discrepancy report submitted as Exhibit 2 to Petition under 10 CFR 2.206, dated July 27, 1984, and ammended July 29, 1984.

³ Attached as Exhibit 3 to Petition under 10 CFR 2.206 referenced in (2) above. This is the official report submitted to the licensee as Discrepancy Report 5739.

2. Use of ASTM A-307 material in welded applications cannot be considered conservative engineering practice, as the quality assurance requirements normally associated with the manufacturing of bolts for flanged joints are wholly inadequate to ensure weldability for critical installations. Welding of this material must be in accordance with the ASME Boiler and Pressure Vessel (B&PV) Code, Section IX.⁴ Section IX requires chemistry controls not found in the A-307 specification to ensure weldability. There was no procedure qualified to weld this material, and as recent new information indicates, serious doubts as to the adequacy of the quality assurance program of a vendor identified in my report. The quality of these installations is not assured, it is indeterminate.

3. I provided my report to the staff at the same time as it was submitted to the Pullman QA department for two reasons; this was a serious, plant-wide deficiency and I felt the on-site QA system would not consider this a problem, although it clearly violated the ASME Section IX requirements for weldable materials. I cautioned the staff to watch the process of how the deficiency would be accepted, which in fact, was attempted by the licensee.

⁴ To weld this material with welding procedures previously qualified, additional chemical requirements in the form of stock traceability to a certified chemistry or certified material test report (CMTR) showing that the material conforms to one of the ASTM specifications listed in ASME Section IX, Part QW 422.1 as a P-1 material, is required.

4. Within a week of submitting my report, NRC RV staff inspector Dennis Kirsch was questioning Pullman's QA manager over this discrepancy. Instead of observing from a distance, Kirsch plainly violated my confidentiality by the fact that he was asking questions about the problem. At this point, Pullman became significantly more hostile to me as an employee.

5. In a meeting with QA manager Harold Karner on January 18, 1984, I was told by Karner that "all A-307 material was produced from A-36 steel", although Karner had no objective evidence to prove this statement. I explained the technical requirements for weldability of carbon steel, specifically carbon content control and material traceability, to refute the assertion that weldable grade material is universally used to produce bolts. There is no assurance that weldable grade bolts were supplied at Diablo Canyon, and used extensively in safety-related pipe supports.

6. In the above referenced meeting, Karner produced a chart from ASME B&PV, Section III ⁵ which listed ASTM A-307 as a P-1 material. I replied that the section was not applicable, as it concerned bolting stress allowances for design. For weldability, Section IX is the controlling document and does not recognize A-307 as a weldable (P-1) material. Karner refused to include A-307 in the official report, which is in reality falsification of a document by omission.

⁵ ASME B&PV Code, Section III, Table 1-13.3, entitled "Yield Strength Values for Bolting Materials", Winter Addenda, 1978.

7. The use of ASTM A-307, A-325, A-194-B7, and other materials as well in welded applications clearly indicate a pervasive breakdown of quality assurance in regard to welded studs. Also, there was no design review by PG&E for weldability of the materials, as the ASME Code clearly prohibits welding of these specifications with the procedures qualified and in use at Diablo Canyon.

8. For PG&E to admit that a breakdown in quality assurance of this magnitude existed, it would have to be corrected prior to licensing the plant. At this time, PG&E was requesting an operating license for Unit 1. New information only recently made available indicates a serious breakdown in the quality assurance program of a supplier of ASTM A-307 bolts referenced in my original report.

9. Exhibit 1 is the June 29, 1984, NRC Information Notice 84-52 entitled, "Inadequate Material Procurement Controls on the Part of Licensees and Vendors". The information contained in this report infers significant deficiencies in the quality assurance program of Cardinal Industrial Products, a supplier referenced in my original report on this issue. This information was also available to the RV staff throughout the licensing process, but was not mentioned as being applicable to Diablo Canyon. The fact that the NRC cited Cardinal for poor quality assurance can not lend any credence to the idea that A-307 bolts were produced from weldable stock material.

10. Exhibit 1 references NRC Vendor Inspection Report No. 99900840/83-01, which concerned the specifics of the NRC inspection of Cardinal. In a February, 1984 cover letter, the Chief of the NRC Vendor Program Branch (VPB), Division of Quality Assurance, Safeguards, and Inspection Programs tells Cardinal:

"... Serious deficiencies existed in implementation of quality assurance relative to manufacturing and supply of materials to the nuclear industry."

and "...The nature of the inspection findings is such, particularly with respect to the use of stock materials for nuclear orders and certification without assuring performance of required examinations and tests, that it raises concerns in regard to the propriety of your actions and both the credibility and adequacy of the quality assurance function..."

11. As a result of the NRC audit, PG&E's own auditors coincidentally found the same deficiencies in Cardinal's past quality assurance program approximately six months after the NRC released Information Notice 84-52, and nearly a year after the release of VPB Inspection Report 99900840/83-01. These findings were conveniently ignored until well after any licensing impact, and are detailed in a PG&E letter dated December 20, 1984, which is included as Exhibit 2.

12. In classic style, PG&E describes a serious breakdown in quality assurance, yet then offers only superficial corrective action. It has been my experience that this type of response to deficiencies is PG&E's idea of correcting

the problem. PG&E's letter, identified as Exhibit 2 states, inter alia, that:

"...audit 84408S of Cardinal Industrial Products, Las Vegas, Nevada, December 6-7, 1984, identified significant deficiencies in (Cardinal's) past quality assurance program. We are providing this notification prior to the formal audit report because the findings may have an adverse impact on material supplied by Cardinal."

and from Page 2:

"...the quality of the fastener materials (PG&E) has received on the purchase orders listed above is indeterminate at this time."

and "...after a few more corrective actions are verified, (Cardinal) could be reinstated as a qualified supplier..."

13. From the above statements, PG&E has inferred that the current program at Cardinal is not quite acceptable, yet the discrepant materials are the product of the prior quality program at Cardinal which wasn't identified by PG&E until late 1984. This admission raises questions as to the adequacy of the vendor audits performed by PG&E and their subcontractor, Pullman, which should have found these conditions prior to late 1984.

14. The letter included as Exhibit 2 instructs PG&E site personnel to locate and identify materials supplied by Cardinal for "revalidation testing". The context of this letter, and subsequent site actions, indicate that the material will be accepted as-is on the basis of evaluation of field samples. As procurement controls on the stock used to produce these materials is suspect, "revalidation" could simply mean fal-

sification of material test reports. If safety-related materials cannot be supported with certifications to the source supplier, the material must be replaced with material that can meet this requirement. In the case of welded ASTM A-307 studs, all installations of this type should be replaced with certified, weldable material of P-1 chemical composition or verified as to chemistry limits.

15. Although PG&E site personnel are instructed by PG&E corporate quality assurance personnel to identify all Cardinal material, the instructions relayed to the subcontractor Pullman have changed. Exhibit 3 is the letter describing the deficiency to Pullman. Instead of identifying all Cardinal material and placing it on hold, Pullman is directed to place only the material on order or in storage on hold, and this is only a temporary hold. In this manner, the material installed in the plant, which presumably came from the past quality program in question, is excluded from any evaluation or corrective action.

16. Although PG&E is ultimately responsible to report conditions to the NRC, PG&E directs Pullman to use their in-house discrepancy reporting system to identify the indeterminate Cardinal fasteners. Pullman identified this on Discrepancy Report (DR) 9173, which is included as Exhibit 4. This report was evaluated by Pullman not to be reportable under the requirements of 10 CFR 21, although it could describe widespread use of indeterminate material throughout both Unit 1 and 2.

17. Discrepancy Report 9173 is written against material that is on order or in storage, and only for Unit 2. This type of "corrective action" is a smoke screen, designed to confuse site personnel as to the actual discrepancy. Notice that DR 9173 hardly defines the deficiency, but is more concerned with allowing the discrepant material back into the field for use. All of the activities associated with identifying the discrepant material are to be completed in one day, December 21, 1984. This is an example of the unrealistic deadlines imposed by an incompetent management, which clouds the real issue. To identify all installations of Cardinal material would be a formidable task, considering the volume of records that would require review.

18. From the example above, PG&E is allowed to evade the requirement to report this condition to the NRC under 10 CFR 21. This is accomplished by telling Pullman to evaluate the condition for reportability. Pullman finds the condition non-reportable (in every case), PG&E agrees, and the NRC finds that "the licensee met their reporting requirements in a responsible manner". This is the method of reporting and correcting deficiencies at Diablo Canyon.

19. Exhibit 5 contains additional purchase orders from Cardinal, as did the draft discrepancy report I submitted on January, 13, 1984, as Cardinal was a supplier of the A-307 bolts referenced in that report.

20. A recently-released Region V Inspection report, dated February 5, 1985, contains some glaring false statements regarding the issue of welded ASTM A-307 material. In Report Nos. 84-42 and 84-31, Inspector Dennis Kirsch states, "The staff satisfied itself that A-307 was a material which was properly approved for ASME or AWS usage and the use of welding procedure 7/8." This statement is false, as neither AWS or ASME recognize the use of this material without first qualifying a welding procedure using this material. A further aspect of this is that conservative engineering groups would require more quality assurance of materials than is required for A-307 in welded applications.

21. Dennis Kirsch uses the same flimsy excuse that Harold Karner attempted to use more than a year ago by referring to ASME Section III, Table I-13.3. The P numbers listed in this table are for information only, and one must reference ASME Section IX for weldable materials.

22. The fact of this matter is that ASME Code Interpretation NI-84-041, which is to be published in the next addenda to the Code, specifically cites Section IX as the controlling document as an answer to the very question posed in this case. The P-numbers listed in Table I-13.3 cannot be used to determine weldability. This is exactly what I told Harold Karner more than a year ago, to refute his contention that because Table I-13.3 listed A-307 as a P-1 material, it in fact was.

23. Kirsch further states in his February 5, 1985 report that he "examined certified material test reports (CMTR) for the welded A-307 at Diablo Canyon. As this was the first time a CMTR had been mentioned, I called Kirsch on February 15, 1985 to gain more information. In this conversation, Kirsch stated he had not seen the CMTR's until late 1984. In light of the fact that the manufacturer would not normally be required to have CMTR's for this material, and that the manufacturer was Cardinal Bolt, and that almost a year elapsed since the issue was raised, serious questions arise as to the validity of these reports.

24. When asked to cite purchase orders reviewed, Kirsch stated he "had not written anything down", and that he "could't remember which ones he looked at". He did state that "several Purchase orders could not be matched to a CMTR". Although this would seem to substantiate my concerns, this was ignored by the staff. Due to the findings of the NRC VPB, there is little objective evidence to believe that Cardinal would have above-board QA for their non-certified items, yet would be in so much trouble over their supposedly certified materials.

25. Kirsch could not confirm that the CMTR's he reviewed indicated that the material used to manufacture A-307 bolts was purchased as a P-1 material in accordance with Section IX of the ASME Code. This is the only acceptable conclusion to the acceptability of this material.

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26. Kirsch also refused to provide me with the CMTR's so I could review these myself, stating it was "not germane to the issue that I see these". As he admitted that these records weren't "resurrected" from Cardinal until late 1984, I cannot accept Inspector Kirsch's conclusions without some objective evidence to support any of his claims. Had these records been available in early 1984 when I identified this concern, this issue could have been put to bed long ago, in a responsible, forthright manner on the record.

27. Had a proper investigation been conducted, Kirsch would have been asking Cardinal for this information approximately one week after I reported it to the NRC, rather than "tipping his hand" to the utility and letting them in on the fact that the information had been supplied to the NRC.

28. In a February, 1984, interview with RV inspector Gonzalo Hernandez, I was told by Hernandez that, "NRC metallurgists had determined that A-307 material was acceptable, but that A-325 was not." As Region V would not examine a CMTR until it was "resurrected" almost ten months later, I wonder what Hernandez was citing as evidence that no problem existed. The metallurgists referred to in this conversation were most probably PG&E's. Further attempts throughout March, April, and May to obtain any objective evidence for this conclusion proved futile.

29. NRC Region V staff stated falsely in testimony⁶ before the Commission that the use of ASTM A-307 material in welded applications was authorized by a Code Case to the ASME B&PV Code. In fact, no current Code Case is applicable to this material in welded applications.

30. The fact that the NRC Region V staff's position on this matter parroted the original excuse that Pullman and PG&E offered proves the staff's willingness to accept licensee responses to allegations at face value, with no critical review of the information presented. In this case, the use of ASTM A-307 material is clearly unacceptable without some objective evidence that this material, as supplied to Diablo Canyon, meets the requirements for weldable chemical composition. Had this information, if it existed at the time, been made available, this would not have become the issue it now appears to be.

⁶ Transcript of "Discussion and Vote on Full Power Operations for Diablo Canyon", dated August 2, 1984, testimony of Bishop, page 53, specifically stating that ASME Code Case N-71 authorized ASTM A-307 as a P-1 material.

II. FAILURE OF THE DIABLO CANYON ALLEGATION
MANAGEMENT PROGRAM (DCAMP).

The DCAMP system, described in SSER 22 for handling and resolution of allegations submitted to the NRC, failed to operate in an objective manner as described in SSER 22. A key provision which was not followed was feedback from allegers to confirm the staff's understanding of allegations. Instead, the RV staff pursued allegations based largely on PG&E responses, and essentially put the burden of proof on the allexer to substantiate the concern without access to the documentation necessary to do so. Furthermore, the staff refused to hold timely follow-up interviews by offering the excuse that it was not "practicable" due to the sheer volume of allegations. In regard to my allegations, DCAMP was a failure for the following reasons:

31. The RV staff accepted licensee false statements, which then became the basis for the staff's conclusions that the allegations were unsubstantiated. This resulted in more allegations, based on the staff's inability to address the initial allegations in a responsible manner.

32. The RV staff ignored relevant NRC rules and regulations when these had an adverse impact on licensing the plant. These include Appendix B to 10 CFR 50, various NUREG and Regulatory Guide standards, national Codes and standards, and relevant information generated within other

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branches of the NRC.

33. By refusing to hold timely follow-up interviews, the staff was able to mischaracterize allegations, and stall for time while the licensing hearings proceeded. Many allegations appeared with the staff's position identical to the licensee, which required additional affidavits to clarify issues which, more appropriately, could have been clarified at a follow-up interview.

34. The staff freely divulged the content of our confidential conversations concerning harassment and intimidation to the very management individuals who, I believe, were orchestrating the process in an attempt to get me off the Diablo Canyon site. By PG&E's own admission at the time, the delays caused by allegations were costing upwards of \$16 million per week. The types of deficiencies I was finding as an inspector were serious enough as to have licensing impact. As licensing drew near, and particularly after the June ASLAB hearings, the harassment I was getting became markedly more severe. Exhibit 6 is a decision by the California Unemployment Appeals Board, Case No. VN 24357, concerning Pullman's appeal of my unemployment insurance claim. This report states, inter alia,

"The Department determined that the claimant had quit his job because of unsafe working conditions which were brought to the employer's attention but insufficient action was taken to correct this matter".

and "...the claimant had voluntarily quit because of hazardous working conditions after informing the employer that a need for corrective action need be taken. The claimant met his reporting responsibility to the employer by making the employer aware of his concern. The Department determined that insufficient action was taken to correct the problem by the employer. The Department determination and ruling and the presumption was not rebutted by the employer."

35. NRC investigations did not make an effort to protect the confidentiality of the allegeders. The effect of the investigations was to alert the licensee and subcontractor who the "problem" individuals were who were providing information to the NRC. These individuals, myself included, were then targeted for harassment.

36. The RV staff refused to allow allegeders to participate in the decision-making process. The attitude was that once a concern was voiced, no further involvement was necessary. This would be acceptable if the staff were actually investigating these concerns, however the staff and PG&E acted in concert to arrive at the conclusion that the vast majority of allegations were unsubstantiated. I believe had the facts been examined, this would not have been the case.

37. Once PG&E established the Quality Hotline in March, 1984, the staff refused to accept new allegations. I was wary of dealing with the Hotline, but did make several allegations that the NRC refused to listen to available to the Hotline. These concerned concrete drilling practices,

harassment over discrepancy reporting priority, and material storage problems that the subcontractor refused to deal with. The Hotline, as I suspected, was a vehicle for PG&E management to stall issues past any licensing deadline, while management ultimately succeeded in making my life on site so miserable that I had no choice but resign.

38. The bottom line is that the conduct of the staff investigations in regard to my allegations leaves me with little confidence that they were conducted in an objective, competent manner. In this regard, it is not surprising that the staff conclusions parroted PG&E in almost every instance.

I have read the preceding 17 page affidavit, and the information outlined herein is true and accurate to the best of my knowledge.

Dated: February 22, 1985

Timothy J. O'Neill

Timothy J. O'Neill

Subscribed and sworn before me this 22nd day of February, 1985

Lisa R. Wenter



UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

JUNE 29, 1984

IE INFORMATION NOTICE NO. 84-52: INADEQUATE MATERIAL PROCUREMENT CONTROLS ON
THE PART OF LICENSEES AND VENDORSAddressees:

All nuclear power reactor facilities holding an operating license (OL) or construction permit (CP).

Purpose:

This information notice is provided to inform licensees of deficient procurement controls and quality assurance (QA) practices on the part of suppliers of nuclear materials and to call attention to possible generic problems in procurement activities of licensees. No specific action is required in response to this information notice, but it is expected that recipients will review the information presented for applicability to their facilities.

Discussion:

The Vendor Program Branch (VPB) of the NRC inspects vendors, material manufacturers, and material suppliers of licensees. One purpose of these inspections is to verify that vendors and suppliers of safety-related materials to licensees are complying with the requirements of 10 CFR 21 and Appendix B to 10 CFR 50. These inspections have revealed a large number of quality-related deficiencies on the part of nuclear suppliers such as:

- a. Improper certification of stock materials as being fabricated and/or upgraded in accordance with ASME Code requirements.
- b. Inadequate inspection of materials received.
- c. Failure to ensure satisfactory performance of required mechanical testing and nondestructive examination.
- d. Inadequate and/or incomplete survey and audit records.
- e. Breakdown of procurement controls with respect to the requirements of 10 CFR 21, Appendix B to 10 CFR 50, and the ASME Code.

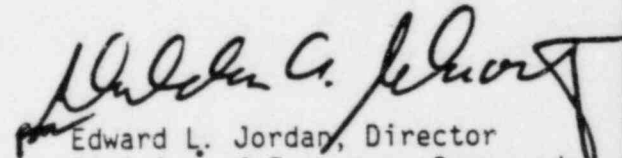
Table 1 lists vendors and recent VPB inspection reports where specific discrepancies have been identified regarding implementation of the vendors' quality assurance programs. These reports are published quarterly by the NRC in the "Licensee Contractor and Vendor Inspection Status Report," NUREG-0040. Copies of this document (the White Book) may be obtained at a nominal cost

from the National Technical Information Service, Springfield, VA 22161. Correspondence with contractors and vendors relative to the inspection data contained in NUREG-0040 is placed in the NRC Public Document Room, 1212 H St., N.W., Washington, DC 20555.

Deficiencies also have been identified with respect to licensee procurement and associated QA activities. The licensee is responsible for the quality of purchased nuclear materials and for procurement control of its vendors and suppliers of safety-related material. Deficiencies of this type include:

- a. Inadequate specification of code requirements on purchase orders and other documents.
- b. Failure to develop and monitor an approved vendor list
- c. Inadequate inspection of materials and components when received.
- d. Inadequate survey and auditing of vendor QA programs.
- e. Failure to perform adequate internal audits of the procurement process
- f. Inadequate training of personnel who procure nuclear materials under requirements of 10 CFR 21, Appendix B to 10 CFR 50, and the ASME Code
- g. Insufficient management attention to procurement activities.

No written response to this notice is required. If you have any questions regarding this matter, please contact the Regional Administrator of the appropriate NRC regional office or this office.


Edward L. Jordan, Director
Division of Emergency Preparedness
and Engineering Response
Office of Inspection and Enforcement

Technical Contacts: N. J. Miegel, IE
(301) 492-7557

E. W. Merschoff, IE
(301) 492-4572

Attachments:

1. Table 1
2. List of Recently Issued IE Information Notices

LIST OF RECENTLY ISSUED
IE INFORMATION NOTICES

| Information Notice No. | Subject | Date of Issue | Issued to |
|------------------------|--|---------------|---|
| 84-51 | Independent Verification | 06/26/84 | All power reactor facilities holding an OL or CP |
| 84-50 | Clarification of Scope of Quality Assurance Programs Pursuant to 10 CFR 50 Appendix B | 06/21/84 | All power reactor facilities holding an OL or CP |
| 84-49 | Intergranular Stress Corrosion Cracking Leading to Steam Generator Tube Failure | 06/18/84 | All power reactor facilities holding an OL or CP |
| 84-48 | Failures of Rockwell International Globe Valves | 06/18/84 | All power reactor facilities holding an OL or CP |
| 84-47 | Environmental Qualification Tests of Electrical Terminal Blocks | 06/15/84 | All power reactor facilities holding an OL or CP. |
| 84-46 | Circuit Breaker Position Verification | 06/13/84 | All power reactor facilities holding an OL or CP. |
| 84-45 | Reversed Differential Pressure Instrument Sensing Lines | 06/11/84 | All power reactor facilities holding an OL or CP |
| 84-44 | Environmental Qualification Testing of Rockbestos Cables | 06/08/84 | All power reactor facilities holding an OL or CP |
| 84-43 | Storage and Handling of Ophthalmic Beta Radiation Applicators | 06/07/84 | All medical licensees |
| 84-42 | Equipment Availability for Conditions During Outages Not Covered by Technical Specifications | 06/05/84 | All power reactor facilities holding an OL or CP |

OL = Operating License
CP = Construction Permit

TABLE 1

DEFICIENT PRACTICES IDENTIFIED IN RECENT VPB INSPECTIONS

| ISSUES | VENDOR | INSPECTION REPORT |
|---|---|---|
| Program for certifying auditors non-existent and/or use of auditors who had not been certified per documented quality assurance (QA) procedures | Taylor Forge (G&W Mfg. Co.) Lone Star Screw Co. | 99900783/82-01 99900781/84-01 |
| Use of suppliers not on an approved vendors list and/or failure to perform vendor audits as required by documented QA procedures | Ametek - Texas Flange Div. Tube-Line Corp Capitol Pipe & Steel Products Co. West Jersey Manufacturing Co. Louis P. Canuso, Inc. Cardinal Industrial Products Corp. Diversified Threaded Products Co. Lone Star Screw Co. | 99900884/83-01 * 99900015/83-01 99900816/83-01 99900818/83-01 99900840/83-01 99900823/83-01 99900781/84-01 |
| Nondestructive examination (NDE) discrepancies | | |
| a. failure to perform NDE in accordance with or as required by the ASME Code and/or the customer | Tube-Line Corp. West Jersey Manufacturing Co. G&W Taylor Forge Stainless Div. Cardinal Industrial Products Corp. | * 99900816/83-01 99900347/83-01 99900840/83-01 |
| b. failure to document the identity of persons performing visual examinations | Taylor Forge (G&W Mfg. Co.) | 99900783/82-01 |
| c. failure to have complete and/or current certification records for NDE personnel | Coffer Corp. Ametek - Texas Flange Div. Tube-Line Corp. Taylor Forge (G&W Mfg. Co.) | 99900822/83-01 99900884/83-01 * 99900783/82-01 |

| ISSUES | VENDOR | INSPECTION REPORT |
|---|---|---|
| | Cardinal Industrial Products Corp. | 99900840/83-01 |
| | Lone Star Screw Co. | 99900781/84-01 |
| | Diversified Threaded Products Co. | 99900823/83-01 |
| d. commercial NDE performed in lieu of required ASME Code NDE | Tube-Line Corp. | * |
| e. failure to have NDE records, reports, and/or material certification | Capitol Pipe & Steel Products Co. Tube-Line Corp. | 99900015/83-01 * |
| f. use of NDE procedures that are either not approved in accordance with documented QA procedures or do not meet ASME Code requirements | Capitol Pipe & Steel Products Co. Coffer Corp. Tube-Line Corp. | 99900015/83-01 99900822/83-01 |
| Heat treatment discrepancies | | |
| a. failure to perform heat treatments as required by the ASME Code and/or documented QA procedures | Ametek - Texas Flange Div. Tube-Line Corp. Lone Star Screw Co. | 99900884/83-01 * 99900781/84-01 |
| b. no evidence to support heat treatment data stated on CMTRS | Ametek - Texas Flange Div. Coffer Corp. G&W Taylor Forge Stainless Div. Capitol Pipe & Steel Products Co. West Jersey Manufacturing Co. Tube-Line Corp. Cardinal Industrial Products Corp. Lone Star Screw Co. | 99900884/83-01 99900822/83-01 99900347/83-01 99900015/83-01 99900816/83-01 * 99900840/83-01 99900781/84-01 |

| ISSUES | VENDOR | INSPECTION REPORT |
|---|------------------------------------|-------------------|
| c. failure to pass on heat treatment requirements to heat treatment vendors | Cardinal Industrial Products Corp. | 99900840/83-01 |
| d. failure to document heat treatment required by the customer, invoked codes, standards and/or specifications | Cardinal Industrial Products Corp. | 99900840/83-01 |
| Failure to perform and/or document receiving inspections | Taylor Forge (G&W Mfg. Co.) | 99900783/82-01 |
| Failure to pass on requirement that material be manufactured in accordance with a QA program meeting ASME Code requirements | Tube-Line Corp. | * |
| | Cardinal Industrial Products Corp. | 99900840/83-01 |
| | Lone Star Screw Co. | 99900781/84-01 |
| Failure to specify on purchase orders (POs) that 10 CFR 21 was applicable | Diversified Threaded Products Co. | 99900823/83-01 |
| | Cardinal Industrial Products Corp. | 99900840/83-01 |
| | Lone Star Screw Co. | 99900781/84-01 |
| Failure of the QA department to review and/or approve POs | Coffer Corp. | 99900822/84-01 |
| | Coffer Corp. | 99900822/83-01 |
| | Cardinal Industrial Products Corp. | 99900840/83-01 |
| Failure of QA to review and/or approve drawings and/or manufacturing shop travelers | Diversified Threaded Products Co. | 99900823/83-01 |
| | Coffer Corp. | 99900822/83-01 |

| ISSUES | VENDOR | INSPECTION REPORT |
|---|--|---|
| Failure to review suppliers' CMTRs and/or acceptance of CMTRs which were not in compliance with PO or material specification requirements | Capitol Pipe & Steel Products Co. Coffer Corp. L. P. Canuso, Inc. Cardinal Industrial Products Corp. Diversified Threaded Products Co. | 99900815/83-01 99900822/83-01 99900818/83-01 99900840/83-01 99900823/83-01 |
| Procedures not available at work stations | Coffer Corp. | 99900822/83-01 |
| Failure to control ASME Section III flanges from being mixed in with commercial flanges | Coffer Corp. | 99900822/83-01 |
| Failure to establish measures to ensure that welding is controlled and accomplished in accordance with the applicable codes | Tube-Line Corp. Cardinal Industrial Products Corp. | * 99900840/83-01 |
| Incorrect attestations of material meeting ASME Code requirements | Tube-Line Corp. Ametek - Texas Flange Div. Cardinal Industrial Products Corp. Lone Star Screw Co. | * 99900884/83-01 99900840/83-01 99900781/84-01 |
| Use of stock materials without properly certifying the material per procedures in the ASME Code, standards, and/or specifications | Ametek - Texas Flange Div. Capitol Pipe & Steel Products Co. Tube-Line Corp. Cardinal Industrial Products Corp. Lone Star Screw Co. Diversified Threaded Products Co. | 99900884/83-01 99900015/83-01 * 99900840/83-01 99900781/84-01 99900823/83-01 |
| Failure to perform testing required by the customer, invoked codes, standards, and/or specifications | Cardinal Industrial Products Corp. Lone Star Screw Co. Diversified Threaded Products Co. | 99900840/83-01 99900781/84-01 99900823/83-01 |

| ISSUES | VENDOR | INSPECTION REPORT |
|--|------------------------------------|-------------------|
| Failure to provide original CMTRs as required by NCA-3800 in the ASME Code resulting in transmittal of incorrect and/or inaccurate material data | Cardinal Industrial Products Corp. | 99900840/83-01 |

*Information regarding Tube-Line is contained in NRC IE Bulletin 83-06, dated July 22, 1983. This document was mailed to licensees in July 1983 and is available in the Public Document Room.

EXHIBIT 2

JRM RECEIVED GMP
 RRL SUPERINTENDENT'S RAM
 JVK OFFICE RVM

DEC 20 1984

STATION (CON) DEPARTMENT FUB
 GM _____ SPEC. _____

PG&E

FOR INTRA-COMPANY USES

From Division of
 (NA) Division
 To Division or Department
 FILE NO
 RE LETTER OF
 SUBJECT

MANAGER, QUALITY ASSURANCE
 GENERAL CONSTRUCTION
 305.1

Prompt Notification of Actions Resulting
 from Supplier Audit of Cardinal Industrial Products

December 20, 1984

MR. J. R. MANNING:

ATTENTION: MR. R. LIEBER

Quality Assurance Implementation Audit 844088 of Cardinal Industrial Products, Las Vegas, Nevada, December 6-7, 1984, identified significant deficiencies in their past quality assurance program. We are providing this notification prior to the issuance of the formal audit report because the findings may have an adverse impact on material supplied by Cardinal. Cardinal has provided fastener materials for the Diablo Canyon Power Plant on the following purchase orders:

- P.O. 594705 - N.P.O.
- P.O. 577706 - N.P.O.
- P.O. 521791 - N.P.O.
- P.O. 593976 - N.P.O.
- P.O. 4R67175 - G.C.
- P.O. 4R66170 - G.C.
- P.O. 057152 (Foley) - G.C.

The audit identified seven deficiencies in Cardinal's quality program, of which the following three deficiencies were found to be significant:

1. The auditors determined that Cardinal did not have sufficient documented evidence to support the qualifications of their suppliers of certified materials and processes for the fastener material furnished to PGandE.
2. The auditors identified certifications for the heat treating of materials shipped to PGandE that did not contain the heat number of the subject material.
3. The auditors identified materials shipped to PGandE that had not received required tensile strength tests.

Mr. J. R. Manning

- 2 -

December 20, 1984

These deficiencies were identical or similar to the nonconformances identified by the NRC in their recent inspection of Cardinal Industrial Products, and our audit determined that these deficiencies directly related to the materials supplied to Diablo Canyon. As a result, the quality of the fastener materials we have received from Cardinal on the purchase orders listed above is indeterminate at this time.

Cardinal has instituted a revalidation program through third party testing as a result of the NRC Inspection, and they have agreed to include the materials supplied to PGandE as a part of that revalidation program. Cardinal still has many samples of the same materials sent to PGandE in their warehouse stock that can be used in the third party tests, but PGandE may be requested to locate and return a sample of some items to Cardinal for testing.

We expect to obtain the revalidation results from Cardinal by February 1985. Meanwhile, we recommend that the items supplied by Cardinal be located and tagged in accordance with the applicable requirements of your departmental procedures. We request that you research your records and notify Mr. D. S. Aaron on extension 3020/3490 if there have been other purchases from Cardinal.

At Cardinal's request, we also conducted a qualification audit of Cardinal's ASME NQA-3890 quality assurance program to determine if we could reinstate them on our Qualified Suppliers List for future orders. We found that Cardinal had taken significant steps in recent months to improve their quality program and that after a few more corrective actions are verified, they could be reinstated as a qualified supplier under Standard Specification 3890.

S. M. Spidmore

S. M. SPIDMORE

DeLain(3020,3490):wpv

cc: R. A. Hobgood
E. S. Bain
R. Herrera

EXHIBIT 3

PACIFIC GAS AND ELECTRIC COMPANY

PGE +

DIABLO CANYON PROJECT • GENERAL CONSTRUCTION
P O BOX 117 • AVILA BEACH, CALIFORNIA 93424 • (805) 595-2324

December 21, 1984

Mr. P. Stieger
Pullman Power Products
P.O. Box 367
Diablo Canyon Project
Avila Beach, CA 93424

SUBJECT: Purchase and Control of
Cardinal Fasteners

Dear Mr. Stieger:

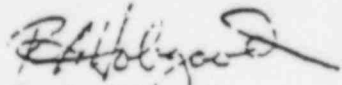
The PGandE Quality Assurance Department has identified deficiencies in Cardinal Bolt's quality assurance program which may affect materials supplied to Diablo Canyon (see attached letter dated 12/20/84). As a result, all fasteners in Class One storage supplied by Cardinal Bolt, including those supplied through a third party, must be immediately identified utilizing Pullman's discrepancy reporting systems. This will also apply to fasteners purchased prior to this date which have not yet been received.

The PGandE Quality Assurance Department has requested that all Pullman purchases placed with Cardinal be identified by P.O. number and heat numbers to support any research necessary to trace fasteners for possible qualification testing by an independent laboratory.

Pullman is authorized to release these materials for installation, provided a system is established that will identify each fastener by size, material type, purchase order, heat and/or lot number, and installed location. In addition, fasteners from each heat or lot shall be retained by Pullman for qualification testing conducted by others.



R. R. Lieber
Field Construction Manager



R. A. Hobgood
G. C. Quality Control Supervisor

RRL/RAHobgood:klh

DCC

23174

EXHIBIT 4

ORIGINAL



Pullman Power Products

D.R. No. 7173
Iso. No. NA
Unit No. II
Code No. 01-10-G-P
Hold Tag X (yes) (no)

10 CFR-21
(SI) or (US NOT)
ATTACHED

DISCREPANCY REPORT

CUSTOMER: Pacific Gas & Electric SPEC. NO.: 8711 DATE: 12/21/84
PROJECT: Diablo Canyon JOB NO.: 7177 INSPECTOR: Kimmel/King

DISCREPANT ITEM: CARDINAL INDUSTRIAL PRODUCTS CORP - VENDOR SUPPLIED MATERIAL

EXPLANATION OF DISCREPANCY:

Per PG&E direction, all material in Pullman warehouse which was manufactured by Cardinal Industrial Products Corporation is being placed on Hold.

This request is in part a result of the following:

1. I.E. Information Notice 84-52.
2. Removal of Cardinal Industrial Products Corporation from PG&E's Qualified Suppliers List.

Additional information will be included with this DR when available.

RECOMMENDED DISPOSITION:

INDICATE APPROVAL BY CIRCLING THE APPROPRIATE "RECOMMENDED DISPOSITION"

1)

Research the material currently in the Pullman warehouse and storage areas to determine:

- A. What was manufactured and supplied by Cardinal Industrial Products Corporation.
- B. What was manufactured by Cardinal Industrial Products Corporation but supplied by another vendor.

(Example: Purchase Order with A & G who in turn bought material manufactured by Cardinal.)

(Continued - Page 2)

PG&E Q.C.
QUALITY CONTROL

RECEIVED
DATE 12/21/84

Approved By [Signature] Field Q.A. Mgr. Date 12/21/84 Customer [Signature] Date 12/21/84

FINAL DISPOSITION: In Accordance With Above Other (explanation and approval required)
Work Completed Insp: _____ Date: _____

EXPLANATION (IF NECESSARY):

CONTROLLED COPY for Construction

Field Q.A. Manager _____ Date _____ Customer _____ Date _____

STEPS TO PREVENT RECURRENCE Not Applicable

Field Q.A. Manager [Signature]

DISTRIBUTION: Master Q.A. File Auth. Insp. Engineering Dept. Other _____
 Customer Receiving Field Inspector I _____

ATTACH SKETCH IF NECESSARY



10 CFR-21
(ISI or (ISI NOT)
ATTACHED

DISCREPANCY REPORT

G.R. NO. 9173 - Page 2 of 4
ISO. NO. n/a
UNIT NO. II
CODE NO. 01-10-G-P

CUSTOMER: Pacific Gas & Electric SPEC. NO.: 8711 DATE: 12/21/84
PROJECT: Diablo Canyon JOB NO.: 7177 INSPECTOR: Kimmel/King

RECOMMENDED DISPOSITION: (Continued from Page 1)

- 2) Place all material manufactured by Cardinal Industrial Products Corporation on Hold.
- 3) Prepare a list of all Cardinal manufactured items currently in stock. The list shall include as a minimum:
 - A. P.O. number and item number.
 - B. Description of material (type, size, ASTM designation, etc.).
 - C. Location (warehouse/sea trains, row number, bin number, etc., if applicable).
 - D. Quantities.
 - E. Heat numbers or Lot numbers.
- 4) Identify all items currently ordered from Cardinal but not yet received. Items will be placed on Hold upon receipt.
- 5) Segregate and retain a minimum of four (4) items of each size and heat number for possible future testing. If less than four (4) items are currently in stock, retain all items.
- 6) Items placed on Hold may be conditionally released under the following conditions:
 - A. Items are permanently marked with the heat number or an identifying marking traceable to the heat number or P.O. number/item number as applicable. (Permanent marking will be either low stress metal stamping or vibro etching.) *WAC 12/21/84*
 - B. The specific location where the item(s) are to be installed is identified. (Such as area, hanger number, system, iso number, flange connection, etc., as applicable.) A record of these locations shall be retained in a separate file. A copy of this file shall be attached to this DR.
 - C. Items released and installed are subject to removal if subsequent testing or evaluation determines that the material is unacceptable.

OR,



PG&E to disposition.

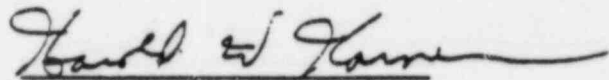
INTEROFFICE CORRESPONDENCE

DR 9173
pg. 3 of 4

DATE DECEMBER 21, 1984
TO P. STIEGER/P. MOKRY/M. SACCOCCIA
FROM H. W. KARNER
SUBJECT MATERIAL SUPPLIED BY CARDINAL INDUSTRIAL PRODUCTS CORPORATION

Per direction from PG&E, all Cardinal supplied material shall be placed on Hold. Please have the manufacturer verified for any bolting material that is requested prior to issue. An inventory and research of our storage areas is being conducted and all Cardinal items are being placed on Hold.

Your assistance in completing this inventory by 12/21/84 will be greatly appreciated. A DR is forthcoming concerning this item.



Harold W. Karner
QA/QC Manager

HWK:sam

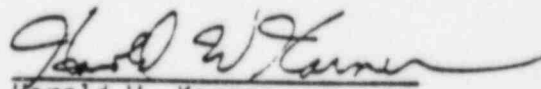
cc: W. Kimmel
C. Neary
R. King
All QA Receiving (days & nights)
Warehouse
Jim Rowley
A. Eck

INTEROFFICE CORRESPONDENCE

DR 9173
pg. 4 of 4

DATE DECEMBER 21, 1984
TO ALL WAREHOUSE QA PERSONNEL
FROM H. W. KARNER
SUBJECT CARDINAL INVENTORY

1. All Cardinal supplied/manufactured items shall be placed on "Hold." (Bolts, nuts, washers, etc.)
2. Class I material shall be the priority items checked.
3. Record ALL pertinent information such as:
 - A. P.O. number.
 - B. Item number.
 - C. Description (bolt, nut, washer, size, ASTM designation).
 - D. Location (warehouse/sea train, row number, bin number, etc.).
 - E. Quantities (if determining the quantity will impede the completion of placing all Cardinal items on Hold by 4:00 p.m. on Friday 12/21/84, then eliminate the physical count to a later time.)
 - F. Heat numbers (record actual heat numbers. If recording heat numbers prevents completion of placing items on Hold by 4:00 p.m. on Friday 12/21/84, then record at a later date.)
4. Place a Hold Tag on the material.
5. Sign and date the form showing the information.
6. After all Cardinal items are on Hold, complete any necessary verification of quantities and heat numbers.


Harold W. Karner
QA/QC Manager

HIK:sam

cc: C. Neary, P. Stieger, P. Mokry

INSTRUCTIONS FOR IMPLEMENTATION OF DISPOSITION OF DR 9173

- I. (a) All items ordered from Cardinal in the warehouse or Area 10 have hold tags applied. Any new items received from Cardinal (or another supplier which uses Cardinal supplied material) shall be hold tagged.
- II. (a) All bolts, nuts, and washers in stock, supplied by other vendors must be checked to determine if the material originated at Cardinal. The "Bolting Material Manufacture Verification" form shall be used.
 - (b) This form shall be filled out for each item as follows:
 - (1) The P.O. # of the item shall be entered.
 - (2) The Item # of the item shall be entered.
 - (3) The description of the item shall be entered.
 - (4) The manufacturer's box shall be checked. If "other", enter the manufacturer's name.
 - (5) If the item is marked "Cardinal" (a "C" or "K") check this box and place a hold tag on the item.
 - (6) If the item bears another manufacturer's stamp, enter the symbol here. This material is acceptable.
 - (7) If the item is not marked, check this box.
 - (8) If marking is not required for the item, check this box.
 - (9) & (10) Will be completed by QA when document reviews are necessary as a result of (7) and (8).
 - (11) The QA receiving inspector completing the form shall sign and date here.
 - (c) It is suggested that, as bins are checked, they be marked to indicate they are completed.
- III. (a) For Cardinal material which will be conditionally released for installation, the following forms will be completed:

(b) The "DR 9173 Cardinal Material Conditional Release" shall be used to provide traceability to where the material is installed. The first time an item is requisitioned, a page will be created for the item. The following information will be entered to identify the item in question:

- (1) A description of the item.
- (2) The ASTM designation.
- (3) The heat and Lot #, if known.
- (4) If the material does not have a manufacturer's heat code stamp, a Pullman code letter will be assigned for stamping (see III (c) below). The code letter is entered here.
- (5) The original quantity received.
- (6) The quantity now on hand.
- (7) The receiving report #.
- (8) The P.O. #.
- (9) The Item #.

Each time the item is issued the following information will be entered:

- (10) The contractor the material is issued to.
- (11) The quantity issued..
- (12) The unit the material will be used in.
- (13) The building the material will be used in.
- (14) The hanger #, rupture restraint #, or Iso # the material is issued to.
- (15) The specific point of usage.

The remainder of the form will be completed upon the receipt of the required test results. A copy of the requisition or G-64 form shall be retained.

(c) All items on hold which are material issued must have traceable heat codes stamped on the item. If there is no manufacturer's heat code on the item, a Pullman code letter will be stamped. The "Cardinal Material - DR 9173" Code Symbol Log will be filled out to show what items have Pullman issued code symbols. The log will be filled out as follows:

- (1) The Pullman code letter will be entered in this column. The codes will go "A" to "Z". "C" and "K" will not be used.
- (2) The P.O. # is entered in this space.
- (3) The Item # is entered in this space.
- (4) Heat/lot lot # is entered, if known.
- (5) Comments may be added, if needed.

When an item is issued a Pullman code letter, the code letter should be marked on the bin card with a highlighter pen.

(d) A separate heat card file will be maintained for all items on hold which are conditionally released. The cards will be duplicates of the regular file cards, except they will indicate the Pullman code letter, if one is issued.

74-7038 REV 07-17-78

FIELD REQUISITION - PURCHASE ORDER - RECEIVING REPORT

| | | | | |
|-----------------------|-------------------------|----------------------------|--|--|
| JOB NO. 777 | DATE 12-16-80 | SHEET NO. 1 of 2 | SHIPPING ADDRESS: PULLMAN POWER PRODUCTS C/O Pacific Gas & Electric Company Diablo Canyon Power Plant 7 Miles North of Avila Beach, CA 93424 | REQ.- P.O.- NO. F- 7177-9146 R.R.- |
| DISCOUNT TERMS | | SHIPPING TERMS | | JOB COST CODE: 122 |
| VIA | | | VENDOR: Cardinal 3873 W. Oquendo Las Vegas, Nevada 89118 | SUBCONTRACT NO. |
| | | | | MAIL 4 COPIES OF INVOICES P.O. Box 367 Avila Beach, CA 93424 |

| ITEM (LETTER) | QTY. REQ/D. | DESCRIPTION | UNIT PRICE | TOTAL | DATE REC'D. |
|---|-------------|---|------------|---------------|-------------|
| A | 5 | 3/4" x 4" Bolts With Heavy Hex Nuts | 2 03 | 10 15 | |
| B | 10 | 1" x 4 1/2" Bolts With Heavy Hex Nuts | 4 14 | 41 40 | |
| C | 12 | 1 1/4" x 5 1/2" Bolts With Heavy Hex Nuts | 8 51 | 102 12 | |
| D | 5 | 1 1/2" x 6 1/2" Bolts With Heavy Hex Nuts | 17 20 | 86 00 | |
| E | 5 | 1 3/4" x 7" Bolts With Heavy Hex Nuts. | 26 77 | 133 85 | |
| All Items ASTM A-307 Grade A, UNC Threads | | | | | |
| NOTE: SEE SPECIAL REQUIREMENTS ATTACHED | | | | | |
| TOTAL PRICE | | | | 373 52 | |

EXHIBIT 5

| | | |
|--|--|---|
| NEEDED FOR: Seismic Limiter Clamp Bolt Replacements 365/07 | REMARKS Ship 12-24-80 18307 1-29-81 373.52 <h2 style="text-align:center;">REIMBURSABLE</h2> | RECEIVING DEPARTMENT CARRIER: COMPLETE <input type="checkbox"/> PARTIAL PREPAID: \$ COLLECT: \$ RECEIVED BY: |
| DATE NEEDED: ASAP DATE ORDERED: 12-19-80 DATE PROMISED: 10 Days DWG(S) ATTACHED: | PREPARED BY: D. McGrew APPROVED BY: <i>[Signature]</i> PURCHASED BY: <i>[Signature]</i> | |
| IMPORTANT: THIS ORDER IS SUBJECT TO ALL OF THE TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE HEREOF. | | |

FIELD REQUISITION - PURCHASE ORDER - RECEIVING REPORT

CHANGE "A"

| | | | | |
|-------------------------|------------------------|----------------------------|--|-------------------------------------|
| REQ. NO. 7177 | DATE 1-15-81 | SHEET NO. 1 of 1 | SHIPPING ADDRESS: PULLMAN POWER PRODUCTS C/O Pacific Gas & Electric Company Diablo Canyon Power Plant 7 Miles North of Avila Beach, CA 93424 | REQ. NO. NO. F- 7177-9146 |
| DISCOUNT TERMS | | SHIPPING TERMS | VENDOR: Cardinal 3873 W. Oquendo Las Vegas, Nevada 89118 | JOB COST CODE: 122 |
| VIA | | | MAIL 4 COPIES OF INVOICES TO: P.O. Box 367 Avila Beach, CA 93424 | SUBCONTRACT NO. |

| ITEM (LETTER) | QTY. REQ/D. | DESCRIPTION | UNIT PRICE | TOTAL | DATE REC'D. | QTY REC. |
|--------------------|-------------|--|------------|-------|-------------|----------|
| | | This change of purchase order is written to make the following change. | | | | |
| | | All items to be ASTM A307 GR A or Grade B, UNC Threads. | | | | |
| | | All other requirements to remain the same. | | | | |
| TOTAL PRICE | | | | | | |

NEEDED FOR:

| | | |
|------------------|------------------------------------|---|
| DATE NEEDED: | DATE ORDERED: | DATE PROMISED: |
| DWG(S) ATTACHED: | | |
| PREPARED BY: | APPROVED BY: <i>[Signature]</i> | PURCHASED BY: D. Reiner <i>[Signature]</i> |

IMPORTANT: THIS ORDER IS SUBJECT TO ALL OF THE TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE HEREOF.

ORDER NUMBER MUST APPEAR ON ALL INVOICES, BILLS OF LADING,

REMARKS

RECEIVING DEPARTMENT

CARRIER:

| | |
|-----------------------------------|----------------------------------|
| COMPLETE <input type="checkbox"/> | PARTIAL <input type="checkbox"/> |
| PREPAID: \$ | COLLECT: \$ |

RECEIVED BY:

FIELD REQUISITION - PURCHASE ORDER - RECEIVING REPORT

| | | | | |
|------------------|------------------|---------------------|--|---|
| FORM NO. 7177 | DATE 12-16-80 | SHEET NO. 2 of 2 | SHIPPING ADDRESS: PULLMAN POWER PRODUCTS c/o Pacific Gas & Electric Company Diablo Canyon Power Plant 7 Miles North of Avila Beach, CA 93424 | REQ.- P.O.- NO. F- 7177- 9146 R.R.- |
| DISCOUNT TERMS | | SHIPPING TERMS | VENDOR: Cardinal 3873 W. Oquendo Las Vegas, Nevada 89118 | JOB COST CODE: 122 |
| VIA | | | SUBCONTRACT NO. | |
| | | | MAIL 4 COPIES OF INVOICES TO P. O. Box 367 Avila Beach, CA 93424 | |

| SPECIAL REQUIREMENTS FOR STRUCTURAL BOLTS OR FASTENERS FOR HANGERS: | | | | | |
|---|---|--|--|--|--|
| HB1. | Supplier shall furnish three copies of a Manufacturer's Certificate of Compliance signed by manufacturer indicating that materials furnished are in compliance with this Purchase Order, with specifications, or as listed in suppliers or manufacturers catalog. | | | | |
| HB2. | Certificate of Compliance shall be traceable to our Purchase Order and Item No. | | | | |
| HB3. | All required documentation shall be sent the day of each shipment to PULLMAN POWER PRODUCTS, P.O. Box 367, Avila Beach, CA 93424 Attn: Q.A. Dept. In addition, a copy shall accompany each shipment. | | | | |
| HB4. | Any nonconformance to the requirements of the Purchase Order will be considered just cause for return of materials without cost to buyer. | | | | |
| HB5. | Materials shall be domestically manufactured. | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

| | | |
|------------------|---------------------------------|----------------------------------|
| NEEDED FOR: | | |
| DATE NEEDED: | DATE ORDERED: | DATE PROMISED: |
| DAG(S) ATTACHED: | | |
| PREPARED BY: | APPROVED BY: <i>[Signature]</i> | PURCHASED BY: <i>[Signature]</i> |

REMARKS
SOURCE DOCUMENT REQUIREMENTS
Corp. Appr. Vendor; May Use
Site Appr. Vendor
(All) Hanger CLI, G,E, Sprinkler
Spec M-10
8724 Cardox

| | |
|-----------------------------------|-------------|
| RECEIVING DEPARTMENT: | |
| CARRIER: | |
| COMPLETE <input type="checkbox"/> | PARTIAL |
| PREPAID: \$ | COLLECT: \$ |
| RECEIVED BY: | |

IMPORTANT: THIS ORDER IS SUBJECT TO ALL OF THE TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE HEREOF.

PULLMAN POWER PRODUCTS

JOB # 7177 • AVILA BEACH, CALIFORNIA 93424 • PHONE (805) 595-2356

I N F O R M A T I O N

R E P L Y

QA / PIE AREA VIBRAK
 2 INL CLAMP BOLTS PO 9146
 GRADE ASTM A-307 - B/A
 F-13-81

DATE _____
 GRADE "A" AND "B" BOLTS
 HAVE IDENTICAL "MINIMUM
 STRENGTH CAPACITIES, WHICH
 IS USED FOR DESIGN
 PURPOSES. ALSO, ASME
 SA-307 GR. B BOLTS ARE
 IDENTICAL TO ASTM A-307
 GR. B BOLTS AND THEREFORE
 ARE INTERCHANGEABLE.
 THE ASTM A-307 GR. B
 BOLTS RECEIVED ON P.O. 9146
 FOR CLAMP PURPOSES ARE
 ACCEPTABLE.

BOLTS ORDERED PER PO 9146
 WERE ORDERED A-307 GRADE A,
 PER "PIE CLAMP DRAWING" SEE
 DRAWING # 5. BOLTS WERE RECEIVED
 AS A-307 GRADE B. FURTHER
 REVIEW SHOWED THAT SA-307 GRADE
 B BOLT COULD BE SUBSTITUTED.
 THE SPECIFICATIONS FOR
 SA-307, & A-307 BOLTS. BOTH HAVE
 THE SAME TENSILE STRENGTHS.

WILL IT BE ACCEPTABLE TO USE
 SA-307 GRADE B BOLTS RECEIVED ON
 PO 9146 IN SUBSTITUTION FOR
 SA-307 GRADE B OR A-307 GRADE A
 BOLTS AS ORIG. ORDERED ON PO
 9146

Larry H. Smith

SIGNED *Larry H. Smith*

INSTRUCTIONS TO SENDER:

INSTRUCTIONS TO RECEIVER:

1. YELLOW COPY. 2. SEND WHITE AND PINK COPIES WITH CARBON INTACT.

1. WRITE REPLY. 2. DETACH STUD, KEEP PINK COPY, RETURN WHITE COPY TO SENDER.

| DATE | SHEET NO. | 7177 | 12-16-80 | SHIPPING TERMS | QTY. | ITEM (LETTER) | RECO/D. | DIMENSIONS | ITEMS |
|-----------------|-----------|------|----------|----------------|------|---------------|---------|------------------|------------------|
| | | | | | 5 | A | | 3/4" x 4" Bolts | All Items ASTM A |
| | | | | | 10 | B | | 1" x 4 1/2" Bolt | |
| | | | | | 12 | C | | 1 1/4" x 5 1/2" | |
| | | | | | 5 | D | | 1 1/2" x 6 1/2" | |
| | | | | | 5 | E | | 1 3/4" x 7" Bol | |
| NOTE: SEE SPECI | | | | | | | | | |

ORDER FOR:
 Seismic Limited Clamp Bolt Re

DATE ORDERED: 12-17-80
 ASIP

PAGE(S) ATTACHED:

PREPARED BY: J. McGrew

APPROVED BY: *[Signature]*

IMPORTANT: THIS ORDER IS SUBJECT TO THE CONDITIONS PRINTED ON THE REVERSE.

OUR ORDER NUMBER MUST APPEAR ON ALL CORRESPONDENCE.



PRODUCT ENGINEERING DEPARTMENT

QUALITY ASSURANCE AND DOCUMENTATION REQUIREMENTS

| | Req'd | Approved by Customer | Verified by P.P.P. Q.C. |
|--|-------|----------------------|-------------------------|
| 1. Vendor Quality Assurance Program - ASME Section III | | | |
| 2. Certified Drawings for Approval | | | |
| 3. Qualified Procedures for Approval | | | |
| a. Welding | | | |
| b. Weld Repairs | | | |
| c. Heat Treatment | | | |
| d. Ultrasonic | | | |
| e. Radiograph | | | |
| f. Magnetic Particle | | | |
| g. Liquid Penetrant | | | |
| h. Eddy Current | | | |
| 4. Documentation | | | |
| a. Mill Reports | | | |
| b. Impact Tests | | | |
| c. Ultrasonic | | | |
| d. Radiograph | | | |
| e. Magnetic Particle | | | |
| f. Liquid Penetrant | | | |
| g. Eddy Current Results | | | |
| h. Hydrostatic | | | |
| i. Partial Data Reports ASME Section | | | |
| j. NDT Personnel Qualifications | | | |
| k. Manufacturers C of C | ✓ | | |
| 5. Marking per P.P.P. Standard | | | |

CARDINAL
7177-9146

PREPARED BY *[Signature]*

DATE OF ISSUE 12-29-80
PAGE OF



PULLMAN POWER PRODUCTS
 DIVISION OF THE M. W. WILCOX COMPANY
 A SUBSIDIARY OF WHEELABRATOR-FRYE

FIELD REQUISITION - PURCHASE ORDER - RECEIVING REPORT

| | | | | |
|-----------------|-----------------|---------------------|--|--|
| JOB NO. 7177 | DATE 7/22/81 | SHEET NO. 1 of 2 | SHIPPING ADDRESS: PULLMAN POWER PRODUCTS C/O Pacific Gas & Electric Company Diablo Canyon Power Plant 7 Miles North of Avila Beach, CA 93424 | REQ. - P.O. - NO. F-7177-9894 R.R. - |
| DISCOUNT TERMS | | SHIPPING TERMS | | JOB COST CODE: 122 |
| VIA | | | VENDOR: CARDINAL 3873 W. Oquendo Las Vegas, Nevada 89118 | SUBCONTRACT NO. |
| | | | | MAIL 4 COPIES OF INVOICES TO: P.O. Box 367 Avila Beach, CA 93424 |

| ITEM (LETTER) | QTY. REQ/D. | DESCRIPTION | UNIT PRICE | TOTAL | DATE REC'D. | QTY. REC'D. |
|--|-------------|--|------------|--------|-------------|-------------|
| A | 2 | 2" Ø X 35" Lg. 8UN Stud Bolts T.B.E. 4" A490 | Ea. 157 20 | 314 40 | | |
| B | 4 | 2" Ø Hvy. Hex nuts A194-Gr. 2H | 4 95 | 19 80 | | |
| C | 4 | 2" Ø Washers A325 | 91 | 3 64 | | |
| <p>The bolt shall be tested for notch toughness at + 20°F temperature by Charpy V-Notch impact test using methods of ASTM A370, Type A. One Test (3 specimens) shall be made for each lot of material. The minimum average value for each impact test shall be 30 foot-pounds with no more than one specimen value below 30 foot-pounds; in no case below 25 foot-pounds. Items set forth..... Charpy @ + 20° F.</p> | | | | | | |
| TOTAL PRICE | | | | 337 84 | | |

NEEDED FOR: Unit II Rupture Restraint 2047-2RT

| | | |
|-------------------------|------------------------------------|-------------------------------------|
| DATE NEEDED: ASAP | DATE ORDERED: 7/29/81 | DATE PROMISED: 2-3 weeks |
| DWG(S) ATTACHED: | | |
| PREPARED BY: R. King | APPROVED BY: <i>[Signature]</i> | PURCHASED BY: <i>[Signature]</i> |

IMPORTANT: THIS ORDER IS SUBJECT TO ALL OF THE TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE HEREOF.

REMARKS
REIMBURSABLE

RECEIVING DEPARTMENT

CARRIER:

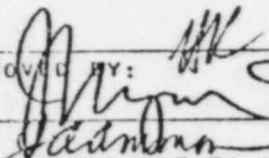
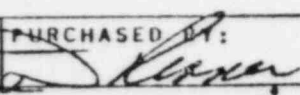
COMPLETE PARTIAL

PREPAID: \$ COLLECT: \$

RECEIVED BY:

FIELD REQUISITION - PURCHASE ORDER - RECEIVING REPORT

| | | | | |
|--|---|----------------------------|--|---|
| JOB NO. 7177 | DATE 7/22/81 | SHEET NO. 2 of 2 | SHIPPING ADDRESS: PULLMAN POWER PRODUCTS c/o Pacific Gas & Electric Company Diablo Canyon Power Plant 7 Miles North of Avila Beach, CA 93424 | REQ. - P.O. - NO. F- 7177-9894 R.R. - |
| DISCOUNT TERMS | | SHIPPING TERMS | | JOB COST CODE: 122 |
| VIA | | | VENDOR: CARDINAL 3873 W. Oquendo Las Vegas, Nevada 89118 | SUBCONTRACT NO. |
| | | | | MAIL 4 COPIES OF INVOICES TO: P. O. Box 367 Avila Beach, CA 93424 |
| SPECIAL REQUIREMENTS FOR BOLTS OR FASTENERS FOR RUPTURE RESTRAINTS | | | | |
| RB2. | Supplier shall furnish three copies of Manufacturer's Test Reports. | | | |
| RB3. | Manufacturers Test Reports shall be traceable to our Purchase Order and Items No. | | | |
| RB4. | All required documentation shall be sent the day of each shipment to PULLMAN POWER PRODUCTS, P.O. Box 367, Avila Beach, CA 93424 Attn: Q.A. Dept. In addition a copy shall accompany each shipment. | | | |
| RB5. | Any nonconformance to the requirements of the Purchase Order will be considered just cause for return of materials without cost to buyer. | | | |
| RB6. | Materials shall be domestically manufactured. | | | |
| RB7. | Lot number shall be entered on containers and Mill Test Reports. The Heat or Heat Code Number shall be marked or tagged on each bundle. | | | |

| | | |
|---|---|---|
| NEEDED FOR: Unit II Rupture Restraint | | |
| DATE NEEDED: ASAP | DATE ORDERED: 7/29/81 | DATE PROMISED: 2-3 weeks |
| DWG(S) ATTACHED: | | |
| PREPARED BY: R. King | APPROVED BY:  | PURCHASED BY:  |
| IMPORTANT: THIS ORDER IS SUBJECT TO ALL OF THE TERMS AND | | |

REMARKS

| | |
|-----------------------------------|----------------------------------|
| RECEIVING DEPARTMENT | |
| CARRIER: | |
| COMPLETE <input type="checkbox"/> | PARTIAL <input type="checkbox"/> |
| PREPAID: 5 | COLLECT: 5 |
| RECEIVED BY: | |



74-70-10 REV 07/1979

FIELD REQUISITION - PURCHASE ORDER - RECEIVING REPORT

| | | | | |
|------------------------|-------------------------|----------------------------|--|---|
| JOB NO. 7177 | DATE 12-31-80 | SHEET NO. 1 of 2 | SHIPPING ADDRESS: PULLMAN POWER PRODUCTS C/O Pacific Gas & Electric Company Diablo Canyon Power Plant 7 Miles North of Avila Beach, CA 93424 | REQ.- P.O.- R.R.- NO. F-7177-9195 |
| DISCOUNT TERMS | | SHIPPING TERMS | VENDOR: Cardinal Bolt 3873 W. Oquendo Las Vegas, Nevada 89118 | JOB COST CODE: SUBCONTRACT NO. |
| VIA | | | MAIL 4 COPIES OF INVOICES TO: P.O. Box 367 Avila Beach, CA 93424 | |

| ITEM (LETTER) | QTY. REQ/D. | DESCRIPTION | UNIT PRICE | TOTAL | DATE REC'D. |
|---|-------------|--|------------|--------------|-------------|
| A | 6 | 1/2" x 6" - 13UNC Bolt ASME-SA193 GR. B7 | 7 63 | 45 78 | |
| B | 6 | 1/2" Type B SS Flat Washer AISI 18-8 | lot 3 00 | 3 00 | |
| NOTE: SEE SPECIAL REQUIREMENTS ATTACHED | | | | | |
| TOTAL PRICE | | | | 48 78 | |

NEEDED FOR: **Rect. Head Vent Restraint (I & II)**

| | | |
|------------------------------------|------------------------------------|-----------------------------------|
| DATE NEEDED: Immediately | DATE ORDERED: 1-20-81 | DATE PROMISED: 1 Week |
| DRG(S) ATTACHED: | | |
| PREPARED BY: R. King | APPROVED BY: <i>[Signature]</i> | PURCHASED BY: D. Renner |

IMPORTANT: THIS ORDER IS SUBJECT TO ALL OF THE TERMS AND CONDITIONS PRINTED ON THE REVERSE SIDE HEREOF.

REMARKS

18532 | **3-12-81** | **50.06**
19107 | **6-24-81** | **45.78**
 " | " | "

REIMBURSABLE

RECEIVING DEPARTMENT

CARRIER:

COMPLETE PARTIAL

PREPAID: **5** COLLECT: **5**

RECEIVED BY:

FIELD REQUISITION - PURCHASE ORDER - RECEIVING REPORT

| | | | | |
|---|---|----------------------------|---|---|
| JOB NO. 7177 | DATE 12-31-80 | SHEET NO. 2 of 2 | SHIPPING ADDRESS: PULLMAN POWER PRODUCTS c/o Pacific Gas & Electric Company Diablo Canyon Power Plant 7 Miles North of Avila Beach, CA 93424 | REQ. - P.O. - NO. F- 7177- 9195 R.R. - |
| DISCOUNT TERMS | | SHIPPING TERMS | VENDOR: Cardinal Bolt 3873 W. Oquendo Las Vegas, Nevada 89118 | JOB COST CODE: SUBCONTRACT NO. |
| | | | | MAIL 4 COPIES OF INVOICES TO: P. O. Box 367 Avila Beach, CA 93424 |
| SPECIAL REQUIREMENTS FOR STRUCTURAL BOLTS OR FASTENERS FOR HANGERS: | | | | |
| HB1. | Supplier shall furnish three copies of a Manufacturer's Certificate of Compliance signed by manufacturer indicating that materials furnished are in compliance with this Purchase Order, with specifications, or as listed in suppliers or manufacturers catalog. | | | |
| HB2. | Certificate of Compliance shall be traceable to our Purchase Order and Item No. | | | |
| HB3. | All required documentation shall be sent the day of each shipment to PULLMAN POWER PRODUCTS, P.O. Box 367, Avila Beach, CA 93424 Attn: Q.A. Dept. In addition, a copy shall accompany each shipment. | | | |
| HB4. | Any nonconformance to the requirements of the Purchase Order will be considered just cause for return of materials without cost to buyer. | | | |
| HB5. | Materials shall be domestically manufactured. | | | |

| | | |
|------------------|-----------------------------|----------------|
| NEEDED FOR: | | |
| DATE NEEDED: | DATE ORDERED: | DATE PROMISED: |
| DAG(S) ATTACHED: | | |
| PREPARED BY: | APPROVED BY: <i>J. Myer</i> | PURCHASED BY: |

REMARKS
SOURCE DOCUMENT REQUIREMENTS
 Corp. Appr. Vendor; May Use
 Site Appr. Vendor
 (All) Hanger CLI, G,E, Sprinkler
 Spec M-10
 8724 Cardox

| | |
|-----------------------------------|-------------|
| RECEIVING DEPARTMENT | |
| CARRIER: | |
| COMPLETE <input type="checkbox"/> | PARTIAL |
| PREPAID: \$ | COLLECT: \$ |
| RECEIVED BY: | |

IMPORTANT: THIS ORDER IS SUBJECT TO ALL OF THE TERMS AND CONDITIONS ON THE REVERSE SIDE HEREOF.

REIMBURSABLE

Pulmon Power Products

PRODUCT ENGINEERING DEPARTMENT

QUALITY ASSURANCE AND DOCUMENTATION REQUIREMENTS

| | Req'd | Approved by Customer | Verified by P.P.P. Q.C. |
|--|-------|-------------------------|----------------------------|
| 1. Vendor Quality Assurance Program - ASME Section III | | | |
| 2. Certified Drawings for Approval | | | |
| 3. Qualified Procedures for Approval | | | |
| a. Welding | | | |
| b. Weld Repairs | | | |
| c. Heat Treatment | | | |
| d. Ultrasonic | | | |
| e. Radiograph | | | |
| f. Magnetic Particle | | | |
| g. Liquid Penetrant | | | |
| h. Eddy Current | | | |
| | | | |
| | | | |
| 4. Documentation | | | |
| a. Mill Reports | | | |
| b. Impact Tests | | | |
| c. Ultrasonic | | | |
| d. Radiograph | | | |
| e. Magnetic Particle | | | |
| f. Liquid Penetrant | | | |
| g. Eddy Current Results | | | |
| h. Hydrostatic | | | |
| i. Partial Data Reports ASME Section | | | |
| j. NDT Personnel Qualifications | | | |
| k. Manufacturers C of C | ✓ | | |
| 5. Marking per P.P.P. Standard | | | |

CARDINAL Bolt
7177-9195

EXHIBIT 6

CALIFORNIA UNEMPLOYMENT INSURANCE APPEALS BOARD

Decision of the Administrative Law Judge

OFFICE OF APPEALS PHONE
Van Nuys (818) 901-5119

DATE MAILED: NOV 26 1984

CASE NO. VN-24357

In the Matter of:

DATE APPEAL FILED:
September 6, 1984

Timothy O'Neill
(Claimant)
P.O. Box 930
Arroyo Grande, CA 93420

DATE AND PLACE OF HEARING:
(1) October 4, 1984
(2) November 7, 1984
San Luis Obispo, California

SSA NO.: 564-15-0937
LO#-BYE: 071-08054
ER ACCT: 296-2987

PARTIES PRESENT:
(1) Claimant
Employer
(2) Claimant

Pullman Power Products
(Employer-Appellant)
P.O. Box 367
Avila Beach, CA 93424

STATEMENT OF FACTS

The employer appealed a Department determination and ruling which held that the claimant was not disqualified from benefits and the employer's reserve account was subject to charges on the ground that the claimant had voluntarily quit his most recent work with good cause.

The claimant worked for approximately one year as a quality control inspector at a final rate of \$21 an hour and last worked on July 24, 1984 when he quit his job.

The Department determined that the claimant had voluntarily quit his job because of unsafe working conditions which were brought to the employer's attention but insufficient action was taken to correct the matter.

At the time of the first hearing the claimant and employer appeared. The claimant had a substantial number of documents which he wished to have admitted into the record as exhibits. Since the records were substantial there was insufficient time for the employer to review those documents and only very brief testimony was taken after which the hearing went into recess for further scheduling.

On October 26, 1984 the Van Nuys Office of Appeals mailed a hearing notice to the claimant and employer to notify them of the hearing to take place on Wednesday, November 7, 1984 at 8:30 a.m. in San Luis Obispo. The documents from the claimant and employer have not been submitted prior to the hearing. Therefore on November 2, 1984 a notice was sent to claimant and employer to produce documents for the hearing no later than 9:00 a.m. on November 6, 1984. The purpose of the notice was to afford

discovery to the parties of all documents to be introduced by the other party prior to the day of the hearing. Delivery of documents was made by the claimant. No delivery of documents or notice of intent to do so was received from the employer.

On the day of the hearing, November 7, 1984, the claimant appeared with counsel. The employer did not appear. The record was opened for the purpose of marking the documents made available to the parties prior to the hearing of October 4, 1984 and the documents which the claimant submitted on November 6, 1984. No testimony was taken and the record was closed and the matter being submitted for a decision.

REASONS FOR DECISION

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 left his most recent work voluntarily without good cause.

The California Unemployment Insurance Appeals Board held in Precedent Decision P-B-27 that there is good cause for the voluntary leaving of work where the facts disclose a real, substantial, and compelling reason of such nature as would cause a reasonable person genuinely desirous of retaining employment to take similar action.

In Precedent Decision P-B-262, the Appeals Board held that under Evidence Code 664 it is presumed that the department had reached its determination only after a careful investigation of the facts and that its official duty in determining the claimant's eligibility for benefits had been properly performed. It concluded that the employer had not met the burden of overcoming this presumption of regularity.

In Precedent Decision P-B-298, the claimant was a truck driver. He had mechanical difficulties with the truck assigned to him and had made several complaints to his superior without avail.

The Appeals Board held that the claimant had taken all reasonable steps to remedy the situation and therefore had good cause for leaving work.

In Precedent Decision P-B-126 the Appeals Board held that good cause for leaving work may be found where the conditions of employment are so onerous as to constitute a threat to the physical or mental well-being of an employee or where the actions of the supervisor are particularly harsh and oppressive.

In the present case the Department determined that the claimant had voluntarily quit because of hazardous conditions after informing the employer that a need for corrective action need be taken. The claimant met his reporting responsibility to the employer by making the employer aware of his concern. The Department determined that insufficient action was taken to correct the problem by the employer. The Department determination and ruling and the presumption was not rebutted by the employer.

The employer did not inform the trier of fact that he did not intend to appear at this second hearing. Reasons for the employer's failure to appear are unknown however adequate notice was given to the employer both in the notice of hearing and the notice to produce documents. Under these circumstances it is concluded that the claimant voluntarily quit his most recent work for circumstances that constitute good cause within the meaning of section 1256 of the code.

DECISION

The determination and ruling of the Department are affirmed. Benefits are payable provided the claimant is otherwise eligible. The employer's reserve account is subject to charges.

Leonora M. Stopol _{MS}

LEONORA M. STOPOL,
Administrative Law Judge

FOR APPEAL OR REOPENING RIGHTS,
SEE ATTACHED NOTICE.

1b

VN-24357