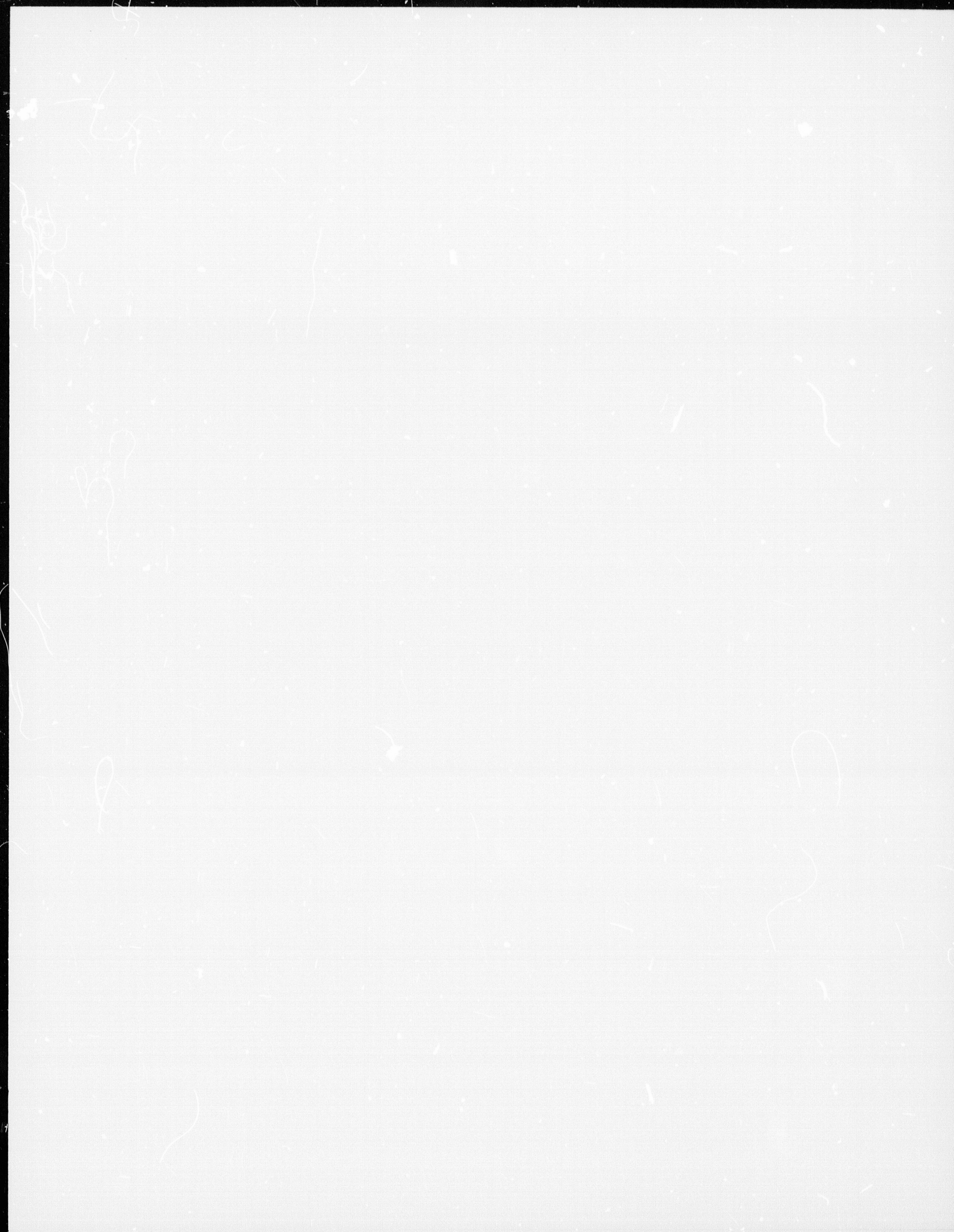


MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A



**AUTOMATION INDUSTRIES, INC.**  
**VITRO LABORATORIES DIVISION**  
14000 GEORGIA AVE  
SILVER SPRING MARYLAND 20910  
301 871-7200



## IN THE MATTER OF S &amp; E CONTRACTORS, INC.

UNDER CONTRACT NO. AT(30-3)790

*Issued May 13, 1964*

## DECISION

In this contract appeal proceeding brought by S & E Contractors, Inc., the Manager of the Schenectady Naval Reactors Office, as contracting officer, was granted leave by our order of November 14, 1963, 2 AEC 738, to appeal from an order of a hearing examiner with respect to four designated issues only (10 CFR § 2.440).

The controversy concerns a fixed price contract dated August 4, 1961, under which S & E agreed to construct a test plant building and a reinforced concrete basin within the building intended for testing in connection with the nuclear submarine reactor program, and to construct certain related facilities.

Bids were opened on June 20, 1961, and were firm for 60 days. The site was then being excavated by Nelson Bros., Inc., under a separate contract. Because of unexpected difficulties experienced by Nelson, including silt formations and cavernous voids of volcanic origin, Nelson's work was delayed beyond its scheduled completion date of June 26, 1961.

The work to be performed by S & E was to be completed 180 days after the issuance of a notice to proceed. The difficulties encountered by Nelson resulted in delay in the execution of the S & E contract. A memorandum of understanding was ultimately executed by S & E and the contracting officer, dated August 2, 1961, and in fact executed essentially simultaneously with the award of the contract by telegraphic notice on August 4, 1961, and the execution of the written contract. The contract was signed on that date by the contracting officer and forwarded to S & E for signature. The memorandum of understanding, after having been signed by S & E, was signed by the contracting officer on August 7, 1961. The memorandum of understanding provided:

"S & E Contractors, Inc. agree that, should they be awarded the contract for the work described above and should the release granting the contractor unlimited access to the basin foundation be issued by the Contracting Officer on or before September 10, 1961, no change in completion time or contract price will result from either the award of this contract at any time within 60 days of June 20, 1961, or from the issuance of partial notice to proceed and possible joint occupancy prior to September 10, 1961, with the understanding that S & E Contractors, Inc. will be allowed to proceed with all work in the major portion of the westerly half of the building. This memorandum of Understanding does not and cannot effect the terms, General Provisions, General Conditions, Special Conditions, or Technical Provisions of the contract.

"It is further understood that S & E Contractors, Inc. will receive telegraphic notice of award 4 August 1961, and telegraphic notice to proceed August 10th, 1961."

A partial notice to proceed was issued by the contracting officer on August 10, when most but not all of the westerly half of the excavated basin was accessible. Nelson was still engaged at that time in laying lean concrete in the bottom of the basin, a necessary prerequisite for S & E's concrete work. Nelson continued to perform grouting in the westerly half of the basin until on or shortly before September 10, 1961, when the entire basin was cleared and the contracting officer issued to S & E an unconditional notice to proceed.

The original contract price of the work to be performed by S & E was \$1,272,000. A series of change orders resulted in upward adjustments of the contract price to \$1,364,794.70, and extension of the agreed date of completion from February 6, 1961, to March 23, 1962. The principal modification was Change Order No. 2, issued on October 3, 1961, providing for substantial alteration of the concrete work.

A number of difficulties arose between the contracting officer and S & E. On December 7, 1961, asserting that S & E was behind schedule, the contracting officer issued an order directing it to provide increased manpower and to work additional shifts, and there was a dispute over the nature and effect of that order. There were disputes concerning the availability of steam for curing concrete and allowances for certain strikes which delayed the work; a controversy over the incidence of the cost of removing and replacing certain back-fill which froze in place and had to be removed; a dispute over the allowance of an extension of time and increased costs because of the effects of severe winter weather in delaying the work; and another concerning the installation of felt dampers in certain ventilating units.

Construction was completed on June 29, 1962, 325 days after the partial notice to proceed had been given on August 10, 1961.

Three decisions of the contracting officer denied a number of claims of S & E for equitable adjustment of time and price. S & E filed three notices of appeal, which were consolidated by an order of the hearing examiner. We confine our discussion largely to the subjects involved in the issues designated in our order of November 14, 1963, permitting the contracting officer to appeal.

The hearing examiner held that as the result of "negligent" site selection by the Government, Nelson had encountered the subsurface conditions which delayed it and in turn prevented S & E from having access to the westerly half of the basin on August 10, 1961, as agreed in the memorandum of understanding. He found that full access was not available until September 10; that the term for completion of the contract must be measured from that date; and that S & E is entitled to a time extension and a price revision as an equitable adjustment under the "suspension of work" clause of the contract.

He also found that under a provision of the contract which required S & E to install Trane Torrivent ventilating units "or approved equal", and under which S & E had installed Trane Torrivent units, S & E was entitled to an equitable adjustment for the cost of installing felting on the damper blades of the units in spite of a specification

which, as the contracting officer asserted, required the installation of felting. The hearing examiner found that the specification requiring felting was ambiguous and was to be read against the Government, and that the specification should be read as requiring felting only if the units installed were "approved equal" rather than the Trane Torri-vent units.

His decision directed equitable adjustments on a number of different grounds, including the suspension of S & E's work at the outset, the modifications effected by Change Order No. 2, the failure to furnish steam to S & E, the acceleration order of December 7, 1961, the removal and replacement of backfill, and the felting of the ventilator dampers. He found that the delays attributable to these factors were so intertwined that it was best to remit the parties to a final settlement in detail or to a final decision by the contracting officer. He concluded by ordering the immediate payment of certain unpaid balances.

The contracting officer filed a petition for review of the hearing examiner's decision. Our memorandum and order of September 16, 1963, 2 AEC 720, denied a number of dilatory motions made by S & E against the petition for review. We reserved for further consideration the question whether and to what extent review should be granted on the contracting officer's petition.

By our order of November 14, 1963, 2 AEC 738, we granted the contracting officer's petition for review to the extent of the following issues, while denying it in all other respects:

"a. Alleged arithmetical error in the summation of delays attributable to unusually severe weather and failure of the Government to furnish steam for curing concrete, on the basis of the hearing examiner's specific findings of such delays before and after December 7, 1961;

"b. The propriety of the hearing examiner's decision that an equitable adjustment of costs and of the 180 day period of performance specified in the contract is to be allowed on account of delay from August 10, 1961, to September 10, 1961, in making the site available to S & E Contractors, Inc.;

"c. The propriety of the hearing examiner's conclusion that under the terms of the contract, the contractor was not required to install felting on the blades of the dampers of the ventilating units installed, and that the contractor is entitled to additional compensation for the installation of such felting;

"d. The propriety of the hearing examiner's admission in evidence of a telegram from Trane Manufacturing Co. to S & E Contractors, Inc., dated June 6, 1962, dealing with the necessity and desirability of installing felting on the blades of the ventilating units."

There followed a succession of interlocutory motions, pleadings, supplemental pleadings, and responses, culminating in our order of February 11, 1964, 2 AEC 773. We denied the contracting officer's petition for reconsideration of our order of November 14, 1963, and a related motion for a stay; denied S & E's motion to strike a supplemental brief filed by the contracting officer; denied as moot S & E's motion for an extension of time to respond to that brief, because it had already responded; and extended the contracting officer's time to file his exceptions and a supporting brief (10 CFR § 2.762(f)).

The contracting officer has filed the following exceptions:

"(1) The Hearing Examiner erred in holding and ruling (Decision pages 34-35) that the contract work was suspended from August 10, 1961 to September 10, 1961; that the Contractor is entitled to a contract time extension of 31 days because of such suspension; and that the Contractor is entitled to a contract price adjustment because of 'costs entailed by the delay'.

"(2) The Hearing Examiner erred in holding and ruling (Decision page 71) that the Contractor is entitled to additional compensation for the installation of felting in accordance with Paragraph 5, TP-151 of the contract specifications.

"(3) The Hearing Examiner erred in admitting in evidence as part of Appellant's Exhibit D a telegram dated June 6, 1962 from Trane Manufacturing Company to S & E Contractors, Inc., which purports to express the opinion of the manufacturer with respect to the necessity and desirability of installing felting on the blades of the ventilating equipment furnished by it."

The contracting officer waived the right to file exceptions with respect to the first issue specified in our order of November 14, 1963, on the ground that the interests of the Government would not be served by seeking a modification limited to arithmetical errors in the computation of delays attributable to unusually severe weather and failure to furnish steam. We thus confine ourselves to the issues presented by his exceptions.

The hearing examiner found that the Government was "negligent" in the selection of the site for this facility, which is located at the National Reactor Test Station near Idaho Falls, Idaho. He based this finding on the fact that only a limited amount of subsurface boring was performed before Nelson began its excavation, and that there was some reliance on comparatively favorable experience with excavation at a nearby location. There was no adequate factual basis for the finding that the Government was negligent in choosing the site. The evidence did not purport to reflect all the considerations on which it was decided that the facility should be located at this place. Whether or not the site was well or poorly chosen is immaterial because, as the examiner himself recognized, there is no question in this case of any equitable adjustment for changed subsurface conditions.

The hearing examiner found that the major portion of the westerly half of the basin was not available for "all" work by S & E when the partial notice to proceed was issued on August 10, 1961, and that at no time between August 10 and September 10 was the major portion of the basin available for "all" of its work. It is clear that for some time after August 10, Nelson was still engaged in pouring lean concrete fill in the basin to bring it up to grade, a process which must be completed before S & E commenced work in the westerly half of the basin as scheduled, and that until early in September Nelson was continuing to do grouting work in the westerly half of the basin. Nelson did not in fact complete its work in the southwest corner until on or about September 10. But the hearing examiner found also that "as subsequent events establish," any delay in the work during August and September was unreasonable.

The suspension of work clause, which is Clause 32 of the General Provisions, provides:

"32. SUSPENSION OF WORK FOR THE CONVENIENCE OF THE GOVERNMENT

"The Contracting Officer may by written order direct the Contractor to suspend all or any part of the work for such period of time as may be determined by the Contracting Officer to be necessary or desirable for the convenience of the Government. If such suspension unreasonably delays the progress of the work and causes additional expense or loss to the Contractor in the performance of the work, not due to the fault or negligence of the Contractor, an equitable adjustment in the contract price and time for

performance shall be made in accordance with the agreement of the parties, and the contract shall be modified in writing accordingly; . . . Provided further, that any claim by the Contractor for an adjustment hereunder must be asserted within 30 days from the date such suspension is ordered. . . ."

The memorandum of understanding dated August 2, 1961, amounted to an agreement by the contracting officer to make the site available under partial occupancy not later than August 10, 1961, by issuing a partial notice to proceed, and to allow S & E to perform "all work in the westerly half of the basin from the time of issuance of the notice to proceed until September 10. The agreement did of course contemplate joint occupancy with Nelson until that firm's work was completed, but we find that the contracting officer warranted by the memorandum of understanding that the conditions of joint occupancy would be such that the work of S & E would not be impeded. The case is thus essentially governed by the reasoning of *T. C. Bateson Construction Co.*, ASBCA No. 5985, 60-2 BCA 2767, and S & E is entitled to an equitable adjustment of time and costs by reason of any unreasonable delays resulting from Nelson's occupancy of the site.

The record does not support the assumption that, but for the delays in the availability of the site, S & E would have been ready to commence construction at full speed on August 10 when the limited notice to proceed was issued and to work continually at full speed thereafter. The testimony of Boone, S & E's assistant project manager, and DeWitt, its vice-president, are persuasive that the process of mobilizing its men and materials was not complete on August 10 but was still continuing. Some of its supervisory personnel did not arrive at the site until days later, and its materials and equipment were in the process of gradual accumulation. There was evidence that mobilization for similar work in this area would require from one to four weeks before the first concrete was poured.

The extent of the constructive suspension of work depends on the extent to which S & E was actually and unreasonably delayed by the unavailability of the site. *John A. Johnson & Sons, Inc.*, ASBCA No. 4403, 59-1 BCA § 2088; *Altman-Wolfe Associates*, ASBCA No. 8315, 1963 BCA § 390; *Plant Supervision Corp.*, ASBCA No. 6335, 61-1 BCA § 2940. Since the extent of actual delay by Nelson's occupancy is the controlling factor in determining the amount of any equitable adjustment, an appropriate initial period should be allowed for mobilization of men and materials by S & E, due consideration should be given to the state of readiness of S & E to proceed with the work, and the adjustment should be confined to the extent of Nelson's actual interference with S & E's work. Allowance should be made for such work as S & E was able to perform during that period without permitting it to take advantage of any lack of diligence on its own part which might have had a causal effect in delaying its progress.

In any event, in finding that the entire period between August 10 and September 10 amounted to an "unreasonable" delay which gave rise to a constructive suspension of work for that entire period, the hearing examiner seems to have based the finding of unreasonableness on "subsequent events", apparently including such factors as the unusually severe winter weather which later afflicted the project and which he found was unforeseeable. The unreasonableness of any delay

can be ascertained only on the basis of the facts apparent at the time.

In a case involving joint occupancy as this one does, the determination of a proper allowance for initial mobilization and of the extent of interference resulting from the joint occupancy necessarily presents difficulties. The record before us does not furnish an adequate basis for our quantitative determination of those factors. The decision of the hearing examiner has remanded the case to the contracting officer for final settlement or decision on the basis of the principles laid down in the hearing examiner's decision. *Cf. Matter of S & E Contractors, Inc.*, order of November 14, 1963, 2 AEC 738. The settlement or decision should go forward on the basis of those principles as we have modified them by our order of November 14, 1963, and by this decision.

The contracting officer argues that S & E has waived its claim for an equitable adjustment on account of the initial delay failing to assert its claim within 30 days "from the date such suspension is ordered", as GP-32 requires in the case of a suspension order. Whether or not this limitation should be applied under a constructive suspension order when none has actually been issued need not be decided, since the contracting officer has waived that defense by dealing with the claim on the merits. *Grier-Lowrance Construction Company, Inc. v. United States*, 98 Ct. Cl., 434; *Consolidated Engineering Co., Inc.*, 98 Ct. Cl. 256.

The second and third exceptions filed by the contracting officer concern the hearing examiner's award to S & E of an equitable adjustment of \$793.74 in the contract price as the cost of installing felting on the dampers of ventilating units. He found that the specifications did not require the felting, and that S & E is entitled to an adjustment for the cost of installing it when the contracting officer insisted that it do so. The pertinent provisions of the contract are:

"TP-147

. . . Heating and ventilating units shall be Trane Torrivent, or approved equal."

"TP-151

. . . All blade edges shall be felted for quiet operation. Outside air dampers and double mixing dampers shall be felted on all edges for tight closure and frames shall be tightly caulked into ductwork to prevent by-pass leakage."

S & E elected to install Trane Torrivent units, which are not equipped with felted dampers. After they were installed, the contracting officer required that felting be added.

S & E then obtained from the Trane Company, the manufacturer of the units, a telegram which expressed the opinion that felting was unnecessary and undesirable, that certain adjustments would be required if it were installed, and that operation might be impeded. The telegram was offered in evidence by S & E in support of its contention that the specifications should not be construed to require felting of the Trane Torrivent dampers, although it conceded that felting would be required on any "approved equal". The telegram was admitted in evidence without objection on the part of the contracting officer. The hearing examiner found that the specifications were ambiguous and therefore to be construed against the Government, and that the Trane Torrivent unit met the specifications "as reasonably interpreted" without felting.

TP-151 requires that the dampers be felted. We find the requirement clear and unconditional, and not dependent on the identity of the manufacturer of the unit. The object of the "or approved equal" clause is to specify an item by a brief designation, whether produced by one manufacturer or another, without distinction among them. 13 *Comp. Gen.* 357; 39 *Comp. Gen.* 101. Any expression as to the necessity or desirability of such a provision was immaterial, and the telegram from the Trane Company might well have been excluded on that ground under 10 CFR § 2.743(c). The telegram having been admitted in evidence in view of the contracting officer's failure to object, it was still immaterial and should not have been relied on as a basis of interpretation of the contract. Specifications cannot be permitted to be undermined retroactively by expressions of opinion as to whether or not they were really wise.

The contracting officer argues also that the telegram should have been excluded as hearsay in spite of his failure to object to it. Under our regulation governing the admissibility of evidence, 10 CFR § 2.743, hearsay or other evidence which at common law would be objectionable as violating an exclusionary rule of evidence is nevertheless admissible in an administrative proceeding if it is material. *Matter of Nager Electric Company, Inc.*, 2 AEC 822 (April 23, 1964). Evidence in the form of a letter or telegram is thus not to be excluded on that ground alone. *Federal Trade Commission v. Cement Institute*, 333 U.S. 683; *Chi Sheng Liu v. Holton*, 297 F. 2d 1740 (9th Cir.).

The lengthy proceedings in this case have delayed considerably the ultimate resolution of the questions at issue between the contractor and the contracting officer. We recommend that they pursue diligently the possibility of settlement and that, if settlement should prove impossible, a final decision be rendered promptly by the contracting officer.

WHEREFORE IT IS ORDERED, this 13th day of May 1964, that:

1. The first exception of the contracting officer is granted to the extent set forth in this decision.
2. The second and third exceptions of the contracting officer are granted.
3. So much of the hearing examiner's decision of June 26, 1963, as directs that S & E Contractors, Inc., is entitled to additional compensation for the installation of felting on Trane Torrivent dampers is reversed.
4. The proceeding is remanded to the contracting officer with instructions to proceed to final settlement or decision in accordance with the decision of the hearing examiner dated June 26, 1963, as modified by our order of November 14, 1963, and by this decision.

UNITED STATES ATOMIC ENERGY COMMISSION,

Chairman GLENN T. SEABORG.  
 Commissioner JOHN G. PALFREY.  
 Commissioner JAMES T. RAMEY.  
 Commissioner GERALD F. TAPE.

W. B. McCool, *Secretary.*

DOCKET No. CA-179

IN THE MATTER OF ROBERT E. MCKEE GENERAL  
 CONTRACTOR, INC.

UNDER CONTRACT No. AT(29-2)-1382

Issued May 21, 1964

APPEARANCES:

*James C. Ritchie, Esquire*, on behalf of the Appellant and Reynolds Electrical Engineering Company, Inc., Intervenor.

*Albert E. Wehde, Esquire*, on Behalf of the Contracting Officer.

DECISION

As of May 25, 1962, the Atomic Energy Commission entered into a contract with Robert E. McKee General Contractor, Inc. for the construction of a series of buildings at the Sandia Base near Albuquerque, known as Buildings 9200-9204, for an approximated price of \$1,214,156.65. The contract, denominated AT(29-2)-1382, followed the format of GSA Form 23 (1961 edition) Construction Contract. The general provisions contained the standard disputes clause, which is invoked in this procedure, and likewise the standard clause providing that the contractor would be ". . . responsible for all damages to persons or property that occur as a result of his fault or negligence."<sup>1</sup> The specifications embraced all the electrical work necessary for the installation and in this connection it was provided that a 44 KV line approximately a mile and a half long would be constructed to connect the buildings with the existing power system. SC-07 provided that until this line was constructed the contractor would furnish its own electrical power for construction purposes. After the connecting line was in place and approved, the contractor could use it as a source of power for construction at no charge.

The notice to proceed went forward on June 11, 1962, and a short time thereafter McKee began the construction. On June 8, 1962, it had entered into a subcontract with the Reynolds Electrical and Engineering Company, Inc. for the electrical work. Sometime in June or July Reynolds constructed the contemplated 44 KV down to a point approximately 400 feet from the place where it was to be tied into the 44 KV source in the existing system. The tie-in was not made at the time because a transformer which was to be placed at the entrance of the 9002 series had not arrived and the higher voltage of the 44 KV was, of course, not suitable for the purposes of the installation nor for use in its construction. The terminus of the line that was constructed in June and July was about 400 feet from a substation called the "Lovelace Substation". This substation was a 3-phase installation

<sup>1</sup> A similar provision was contained in General Conditions 1-4.

scaling down 44 KV on the primary side to 2,400 volts on the secondary side through the use of three transformers each of which was fused. For the purpose of obtaining the necessary power for construction while waiting for the transformer to arrive, McKee asked permission of the Contracting Officer to tie the part of the 44 KV line constructed into the secondary side of the substation by a temporary line. The Contracting Officer gave his consent and sometime in June or July two linesmen of Reynolds installed the temporary tie line. It was a 2-phase line consisting of two aluminum cables with steel cores. The first span stretched about 360 feet from the terminus of the permanent 44 KV line, which had been constructed to a pole which the linesmen had placed 40 feet from the substation. The second span ran from the temporary pole to the substation, where it was connected with the substation buses on the secondary side. The long span of the line was vertical as it left the temporary pole and was strung so that it changed to the parallel when it was attached to the permanent pole.

Through another outlet and circuit which had three phases, the Lovelace Substation supplied 2,400 volts for other installations, including a unique building called "Bldg. 9970" which was about three-quarters of a mile away. This building was a combination of masonry and an inflatable structure composed of some processed nylon material. It was commonly referred to as the "Balloon Building". The inflatable portion of the building was held erect by air blowers which were powered by electrical motors supplied with power from the substation. The building was in daily use for certain scientific experiments. On the evening of February 8, 1963, which was a Friday, it was secured by the scientists in charge and everything was in order and functioning properly, with the balloon part inflated and erect. As a standing operating procedure it was inspected periodically by patrols and everything was as it should be at 6:15 P.M. the evening of February 10, which was a Sunday.

There were high winds in the Sandia area on the night of February 10, with gusts ranging up to 50 m.p.h. At approximately 3:00 A.M. February 11 Mr. Re, a security guard on regular patrol, found the inflatable portion of the building deflated and destroyed beyond repair by the winds. The sergeant of the guard was called and an inspection was made. It was found that there had been a power outage. The motors running the blowers were not in operation. There were two electrical clocks in the building. One had stopped at 9:50 P.M. and the other at 10:10 P.M.

Early in the morning of February 11 the Contracting Officer was called and at about 8:30 A.M. an inspection team was dispatched. They moved first to Bldg. 9970 and then proceeded to the Lovelace Substation, where it was found that two of the primary fuses had been blown. Although the velocity of the wind had subsided, it was still strong. The inspection team observed that the two strands on the long span of the temporary line were swaying in the wind and seemed to be coming very close to each other. It adopted the theory that the cables had been blown together during the night, causing a short circuit. The lines were taken down and examined. It was found that at corresponding points on each line there were damaged areas. These

were examined under a 40-power magnifying glass. The inspection team concluded that the damage to the cables was caused by a short circuit, which, in turn, caused the blowing of the fuses. The Contracting Officer was advised and on the same morning he telephoned McKee and told him that it had been tentatively determined that the power outage which caused the destruction of Bldg. 9970 resulted from negligent construction and maintenance of the temporary line and that they would be held responsible for the loss. The determination in this regard was vigorously contested from the outset. A number of documents and other materials were submitted to the Contracting Officer in support of the contractor's position. After consideration of all the evidence, the Contracting Officer gave his decision on November 14, 1963. It concluded:

"Based upon the above findings, it is my decision that you were liable under Contract AT(29-2)-1382 for any damages to buildings located on Sandia Base caused by your negligence, that the destruction of Building 9970 was caused by your negligence in that the temporary power lines erected by you were not properly constructed nor were they equipped with protective devices as required by the contract. This condition of improperly erecting the lines and failing to equip them with protective devices allowed short circuits to occur in your lines February 10, 1963, which caused two primary fuses in the Lovelace Substation to blow. This resulted in power outages to the air blower motors which supported the inflatable portion of Building 9970 which in turn resulted in the inflatable portion of that building deflating and being destroyed by the elements. The cost of replacing the inflatable portion of Building 9970 was \$9,184.69; and that sum will be withheld from payment to you under Contract AT(29-2)-1382."

An appeal was perfected in due course and a hearing on the merits held in Albuquerque during the week of April 13, 1964.

Of course, it is the general rule that an appellant invoking the disputes procedure in a Government contract case has the burden of proof.<sup>2</sup> However, when the Contracting Officer withholds monies to cover damage to property which is alleged to have been the result of the fault or negligence of the contractor, he has the burden of establishing the fact that the contractor's negligence caused the loss by the preponderance of the evidence.<sup>3</sup> In such a situation the Contracting Officer stands in every respect in the position of the plaintiff in a normal negligence action in court, and the various rules relating to presumptions, weight of evidence, and duty of going forward with the evidence are applicable. It is not enough to prove negligence in the abstract. The evidence must pin down the negligence, if any, on the part of the contractor as the cause of the damage. See Prosser, *Torts*, § 45, *et seq.* (2d ed. 1955). As the case unfolds the burden of going forward with the evidence may shift depending on the inferences to be drawn from the state of the proof at any given time in the proceeding. However, the ultimate burden stays constant, 9 Wigmore, *Evidence* § 2489, *et seq.* (3d ed. 1940); *Sweeney v. Erving*, 228 U.S.

<sup>2</sup> See Decision of the Commission in *Nager Electric Company and Keystone Engineering Corporation*, U.S. AEC Docket No. CA-129 (April 23, 1964) and cases cited; *Casket Forge, Inc.*, 61-1 BCA ¶ 2891 and cases cited.

<sup>3</sup> *New England Tank Cleaning Company*, 59-1 BCA ¶ 2180; *American Stevedores, Inc.*, 60-2 BCA ¶ 2686; *Imparato Stevedoring Corporation*, 57-2 BCA ¶ 1427; *cf. Esso Standard Oil Company*, 57-1 BCA ¶ 1277; 58-1 BCA ¶ 1611; *West Coast Steamship Company*, 57-2 BCA ¶ 1417; 59-2 BCA ¶ 2366; *The Louisville and Nashville Railroad Company v. United States*, 39 Ct. Cl. 405 (1904). See *Nager Electric Company*, *op. cit. supra* at 7.

233 (1913). Under the better and orthodox rule contributory negligence and intervening causes are affirmative defenses and must be pleaded and proved by the defendant in a negligence case and by the same token the appellant in a contract appeal involving the clause in question, 9 Wigmore, *Evidence* § 2507, Prosser, *Torts* p. 283. At the outset of the hearing a ruling was made pursuant to § 2.732 of the Commission's rules, placing the main burden of proof on the Contracting Officer.

The trial followed the classic pattern of a negligence case, with the usual ebb and flow in the weight of the evidence as each side went forward with its case. Twenty witnesses were called, 9 on behalf of the Contracting Officer and 11 for the contractor. A number of the witnesses were professional electrical engineers and most were men with years of experience in the operation of electrical power distribution systems as linesmen, supervisors of operations, etc. Every relevant issue was vigorously contested by both sides and there was sharp conflict in the testimony both with respect to the assertion of the facts bearing on the loss of the building and the opinion of the experts relating to the facts.

In the first place the contractor attempted to throw a cloud of doubt on the Contracting Officer's finding that the blowing of the fuses at the substation was the cause of the collapse of the building. The position in this regard is predicated on the puzzling situation found at Bldg. 9970 after the damage was done. The two motors operating the blowers which kept the balloon portion of the building erect were equipped with automatic circuit breakers. On the morning of the 11th, the circuit breaker on one of the motors was tripped. The circuit breaker on the other motor was not tripped and its armature was damaged, evidently from overheating. The blower system at Bldg. 9970 was equipped with a gasoline-powered emergency generator designed to energize the motors in the event of a power outage. It goes into operation automatically when there is an outage. On the morning of February 11 the emergency generator was operating. This set of facts raises an inference with some legal implications. It is indicated that upon the outage the emergency generator failed to perform its function for some reason and, in fact, may have operated in such a way that the motors were put out of operation and, in fact, damaged to some degree. This hypothesis has no bearing if, in fact, the appellant's negligence caused the fuses to blow with the resultant chain of events leading to the destruction of the building. The Government was not under a duty to anticipate the contractor's negligence and guard against it. Under established principles, the alleged negligence would still be the proximate cause of the damage regardless of the failure of the emergency equipment, 38 Am. Jur. *Negligence* p. 871, 65 C.J.S. *Negligence* § 118 note 61; *Northwest Airlines Inc., et al. v. Glenn L. Martin Company*, 227 F. 2d 120 at 127, cert. denied 350 U.S. 937 (1956). The contractor seems to accept the applicable principles of law in this regard and does not press a theory of intervening cause by con-

tributory negligence or otherwise.<sup>4</sup> The contractor does contend that the fact that one of the circuit breakers guarding the motors was tripped and one of the motors was damaged raises an inference that the balloon structure collapsed from some cause other than the power outage. In support of this position Mr. Baxter, a graduate mechanical engineer with extensive professional experience in heating, ventilating and air conditioning, took the stand. He had recently inspected the blowing system in the balloon building. He stated that the blowers used had forward curved blades and that a characteristic of this type blower was that it would tend to overload the motors if resistance was removed. He stated that if the balloon building had collapsed it was "possible" that either the circuit breakers would trip or the motors would be overloaded and damaged. From this evidence the appellant asks that it be deduced that the building was destroyed by wind pressure or was punctured by some flying object carried by the wind prior to the power outage. This is a very tenuous theory. In the first place, it presupposes that the blowing of the fuses at the Lovelace Substation was purely coincidental. The circuits running to the building were fused at several places so that nothing that happened at the building could affect the substation. Mr. Ouverson, the scientist in charge of the building, testified that it was designed to withstand winds of 80 m.p.h. and he had observed it stand winds higher than those of February 10. He stated that he had run the motors without resistance and they did not overload.

Probably the most plausible explanation of the state of the equipment in the building on the morning of February 11 was given by Mr. Harris. He has had long years of service with the Public Service Company of New Mexico as Assistant Line Superintendent and his duties entailed the investigations of power outages. He testified that he investigated approximately one thousand outages a year. From the evidence it was his opinion that the two fuses did not blow simultaneously. The motors were 3-phase motors. When the first fuse blew they were supplied by 2-phase current. All agree that this would overload the motors. When the second fuse blew either by a second trauma or exhaustion, the outage was complete activating the emergency generators. Some of the experts dispute this theory but it seems to be the most plausible explanation of the condition found at the building.

In the end it seems clear that the preponderance of the evidence establishes the fact that the blowing of the fuses caused the destruction of the building. It is so found. The question then resolves itself: Did negligence of the appellant cause the fuses to blow?

There were no eye witnesses to the events on the night of February 10. No one took the stand who saw an arc of flame running along a line or a bolt of lightning or other phenomenon which could have caused the fuses to blow. All the evidence is circumstantial

<sup>4</sup> In this connection it should be noted that the Contracting Officer's deduction was limited to the cost of replacing the balloon building. It did not embrace the cost of repairing the motors of other equipment.

and arose primarily from the postmortem on the morning of February 11. It is apparent from the evidence that the contracting officer's procedures were orderly and fair. The Commission's installations at the Sandia Base are under the general supervision of the Sandia Corporation. It appears that the first men on the scene at the substation were Mr. Knott, the supervisor of the Electrical Plant Engineering Division of Sandia and a team of Sandia linemen headed by Mr. McGinnis. There may have been others. This group evidently arrived between 7 and 8 o'clock. As previously stated Mr. Knott observed that the cables in the long span were swinging in the wind in such a way that he felt that they could have touched and caused a short circuit. See Attachment A.<sup>5</sup> He directed the linemen to disconnect the temporary line from the station. This was done and then Mr. McGinnis and his team temporarily repaired the two blown fuses. All left for a short time. Next on the scene were Mr. Danieli and Mr. Priest, the two linemen from Reynolds who had originally put up the temporary line. By a strange quirk of fate they had been directed on the preceding Friday to take the line down on Monday the 11th due to the progress of McKee's construction. Before starting on this mission they had learned of the outage. They arrived at approximately 8:30. No one else was there. They saw that the temporary line had been disconnected from the fuses and walked around the transformer and observed the fuses. They then proceeded to cut the lines down from Pole B and roll the cables up toward Pole A. See Attachment A. While they were in the process of doing this, Mr. Knott returned with Mr. Harris. There may have been others. The cables were unrolled and with a strand in each hand, Mr. Harris walked backwards between Pole A and Pole B. About a third of the way down he discovered the two damaged areas at parallel points on the cables. As stated, these were examined under a magnifying glass and Mr. Knott and Mr. Harris determined that there had been a short circuit. The other circuits running into the substation and the substation itself were inspected for evidence of some other cause of the fuses blowing. None were found and it was concluded that a short circuit on the temporary line was the cause. The Contracting Officer was called and he in turn called Mr. Thornton, the local manager of McKee and explained the situation and advised him to get in touch with his insurance company. Mr. Thornton called Mr. Gardner, the District Manager of Reynolds at Albuquerque. At about 11 o'clock Mr. Gardner arrived with an insurance representative. Mr. Zemke of Reynolds was present. Mr. Gardner made an inspection, including a viewing of the substation and noted the fuses which had been repaired. Two rags were tied around the cables at the damaged area. Mr. Gardner and Mr. Zemke examined the damage without the aid of a magnifying glass. A photographer arrived and the damaged

<sup>5</sup> Attachment A is a composite of two exhibits. One chart was prepared by the engineers of Reynolds showing the phasing of the station. This chart was supplemented by an exhibit which was taken from a drawing on the blackboard by Mr. Knott showing the general situation of the substation and the various circuits.

parts of the cables were photographed. This was the postmortem. The cables which belonged to Reynolds were later rolled up and stored in its yard.

At the hearing the photographs of the cables which were taken on February 11 were put in evidence and much of the testimony was expert testimony interpreting the photographs. It is well-known that aluminum cables are soft and can be scarred or abraded in many ways. When the cables were cut from Pole B they were dragged through a rocky arroyo and rough terrain before Mr. Danieli and Mr. Priest started rolling them up. The appellant's experts were of the opinion that the damage shown on the photographs did not result from a short circuit which would cause slag from the burning but were the result of dragging the cables over rocks or from some physical impact. They were also of the opinion that assuming the damage was caused by a short circuit, the short was not of sufficient magnitude to cause the massive damage to fuses which actually took place (the cases of the fuses were destroyed). The main difficulty with this line of testimony is that it is based on interpretation of photographs which all admit is unsatisfactory and illusive. Mr. Knott and Mr. Harris inspected the cables themselves with a magnifying glass. They saw slag and were of the opinion that the damage was caused by a short circuit of sufficient magnitude to cause the fuses to blow. As stated Mr. Harris was particularly well qualified in this particular phase of electrical engineering. Mr. Gardner and Mr. Zemke looked at the cables with the naked eye but neither purported to be experts in this particular field of electricity. Further there is a strong presumption which comes into play. The best evidence was the cables themselves and not the photographs. The cables belonged to Reynolds and were in its possession when the basic issue of fact was raised. It should have preserved the questioned sections and placed them in evidence. The failure to do so raises a presumption that an inspection of the cables themselves at the hearing would have been unfavorable to the position taken by the appellants. This is an ancient and common sense rule of evidence which is usually traced to the famous chimney sweep case, *Armory v. Delamirie*, 1 Strange 505. In this case a chimney sweep found a jewel and gave it to a jeweler for appraisal. The jeweler did not return it and in an action of trover by the chimney sweep contended that the stone was worthless. For some reason the stone itself was not put in evidence. "... the Chief Justice directed the jury that unless the defendant did produce the jewel and show it not to be of the finest water, they should presume the strongest against him, and make the value of the best jewels the measure of damages; which they accordingly did." See 2 Wigmore, *Evidence* § 285 (3d ed. 1940). *Clifton v. United States*, 4 How. 242 (1846), 11 L. Ed. 957; *United States v. Johnson*, 288 F.2d 40 (5th Cir. 1961).

There was considerable testimony relating to whether the temporary span between Poles A and B was properly strung. It was a long span and the sag in the line was determined by eye and not by instrumentation. The contracting officer contends that there was

too much sag, allowing the lines to play back and forth in the wind. Both Mr. Danieli and Mr. Priest who installed the line were experienced linemen. They testified that they followed the standard practice in New Mexico with respect to the spacing of the cables and the sag. This dispute with respect to the standard used is unimportant. Certainly winds with gust of 50 miles an hour in New Mexico are not "acts of God". Cf. Prosser, *Torts*, p. 275. If in fact the two cables were blown together, the doctrine of *res ipsa loquitur* applies. Of more importance and in fact of controlling importance as far as negligence is concerned was the failure of Reynolds to install a fuse at least at Pole A. All of the experts agree that in view of the second circuit running from the substation to Bldg. 9970 and the other installations this should have been done. Reynolds contends that the temporary line was installed under the supervision of the engineering division of Sandia. The evidence in this respect was not convincing to say the least. Sandia had to approve the temporary line and probably a representative of Sandia did indicate in a general way where the lines and poles would be placed. However, there is no evidence that a specific instruction was given with respect to fusing. A properly installed fuse would be designed to protect against the precise hazard involved, namely the blowing of the fuse. It is found the Reynolds Company was negligent in not installing a fuse. Giving due weight to the presumption, if the case had stopped at this point the Contracting Officer would certainly have sustained the burden of proof and shown by the preponderance of the evidence that the negligence of the appellant and the intervenor proximately caused the destruction of the building. However, there was a certain strong line of rebuttal evidence.

The appellant introduced a chart showing the phasing of the transformers.<sup>6</sup> Mr. Danieli and Mr. Priest testified that they tied the cables of the temporary line into buses A and C as shown on Attachment A. This was undisputed and in fact could not be disputed because the insulation on the buses would show where the connections were made. Mr. Danieli and Mr. Priest testified that when they walked around the substation on the morning of February 11 they looked at the fuses and the two west fuses marked H 2 and H 3 on Attachment A had been temporarily repaired with "hot clamps".

Mr. Gardner testified that in his inspection of February 11 he observed that the two west fuses were repaired. It appeared that up until the time of the hearing Mr. Knott thought that the two west fuses were the ones that had blown. He had had the matter checked out at the time by one of his assistants, a Mr. Hall, and they came to the conclusion that the two westerly fuses were tied into the connections on the temporary line. As late as February 1964 a letter was sent by the attorney for the Contracting Officer after consultation with Mr. Knott to Reynolds stating that the two west fuses were the ones that were blown.

<sup>6</sup> Attachment A was taken in part from this chart. The chart was prepared by Reynolds Engineering Department after a recent inspection of the substation. After February 11, 1963, and prior to the inspection, the substation had been renovated or remodelled. The undisputed evidence shows that the phasing at the substation was not changed in the remodelled so that the chart accurately depicts the phasing in February 1963.

All the experts agreed that with the connection and phasing shown on the chart, a short circuit in the temporary line would have blown the east and west fuses, that is H 1 and H 3 as shown on Attachment A. It could not have caused fuses H 1 and H 2 to blow. The only evidence to refute this line of testimony was the testimony of Mr. McGinnis, the foreman of the linemen who replaced the fuses. He stated that it was his memory that the east and the west fuses had been replaced. On cross-examination Mr. McGinnis stated that the two linemen who assisted him at the time were Mr. Garcia and Mr. Southall who were still in the employ of Sandia. In fact these men actually did the manual work in repairing the fuses. Mr. McGinnis' testimony came on the second day of the hearing. It might have been possible to finish the hearing on that day but an early adjournment was taken. One reason for holding the hearing over another day was to allow time for the attorney for the Contracting Officer to consult Mr. Garcia and Mr. Southall. The hearing was reconvened on the following morning and a limited amount of proof was taken which had no relation to the conflict in testimony with respect to which fuses blew. Mr. Garcia and Mr. Southall did not appear and no explanation was given for their absence. No explanation was given for Mr. Hall's absence. As stated by Chief Justice Stone in reviewing an antitrust case where the defendants failed to call as witnesses certain company officials who were in a position to know about the matters in issue—

"... The failure under the circumstances to call as witnesses those officers who did have authority to act for the distributors and who were in a position to know whether they had acted in pursuance of agreement is itself persuasive that their testimony, if given, would have been unfavorable to appellants. . . . Silence then becomes evidence of the most convincing character. . . ." *Interstate Circuit v. United States*, 306 U.S. 208, 226 (1938)

In conclusion, viewing the evidence as a whole, the Contracting Officer failed to prove by the preponderance of the evidence that the negligence of the appellant caused the destruction of the building. On the contrary taking into consideration the applicable presumption, the preponderance of the evidence leads to the conclusion that the negligence of the appellant could not have been the cause.

It is unfortunate that the line of proof relating to the phasing of the circuits and the two fuses that blew was not presented to the Contracting Officer because, as stated, it was evident that he was fair. Apparently this evidence was developed by the contractor after the Contracting Officer's decision when they made the inspection and diagram showing the phasing. It appears that they made a full presentation of the evidence which they had in hand prior to the decision and there is no indication that they suppressed anything.

There were several rulings on the evidence which were contested by the Contracting Officer's brief. Objection was made to the admission of evidence relating to the remodelling of the substation on the ground that evidence of repair is not admissible to prove negligence. This is an elemental rule based on obvious public policy. See 2 Wigmore, *Evidence* § 283 (3d ed. 1940). It has no application here. The evidence of remodelling was introduced to show that the remodelling had not changed the phasing of the transformers, not

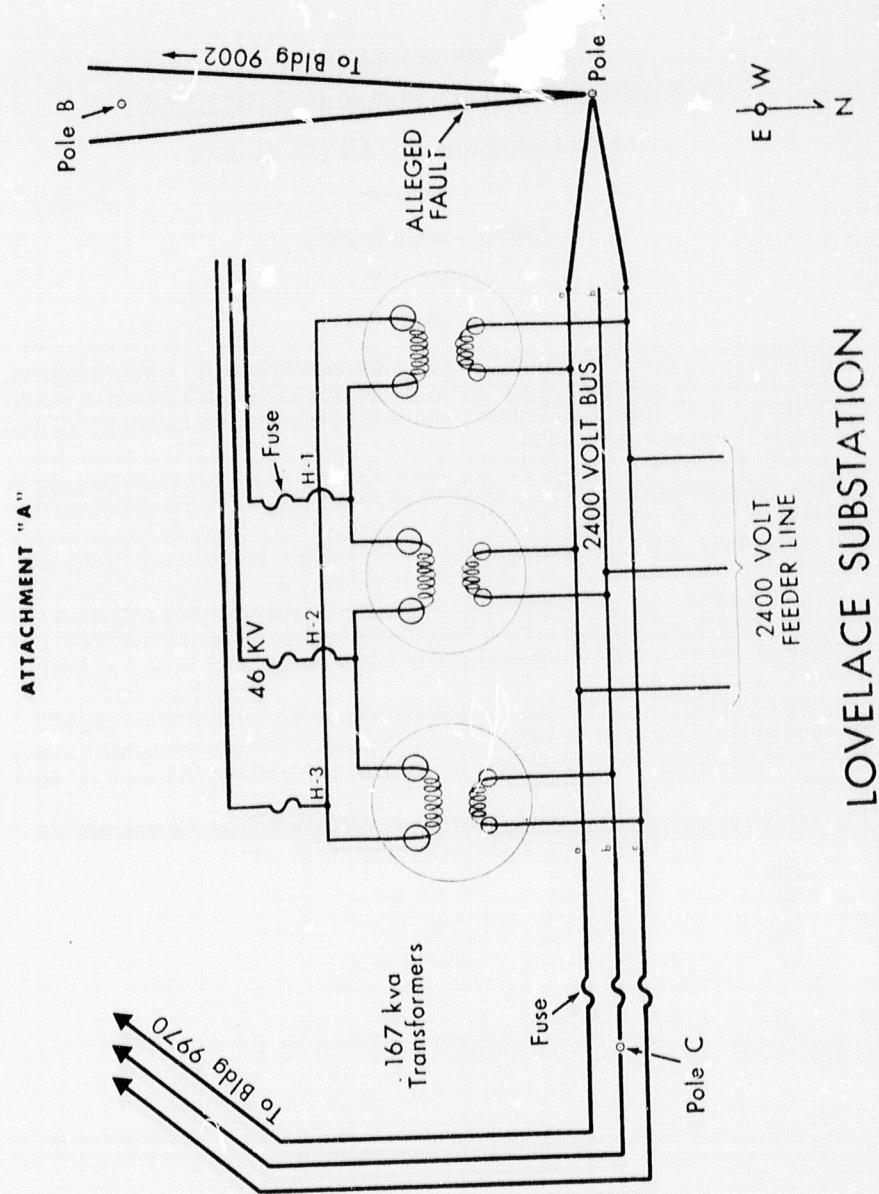
as proof of negligence. Likewise, decision was reserved on a motion by the appellant to strike certain evidence which was clearly admissible under the amended answer and the Commission's broad rules relating to admissibility. The motion is overruled.

In the end there may always be an aura of mystery surrounding the outage at the Lovelace Substation on February 10, 1963. The station and fuses were antiquated and a number of other outages had taken place before. The substation was viewed. It was not housed but was surrounded by a fence. The Sandia Base is on a broad, arid plateau. At the time of the view a wind of approximately 15 m.p.h. was blowing tumbleweed and other loose matter about. Mr. Walker, with long experience as Chief Engineer of the El Paso Electric Company stated that he knew of instances in which material carried on the wind had caused fuses to blow. The weather report showed that an electrical storm was roving in the area the evening of February 10. There is much room for speculation with respect to causes. As stated the Contracting Officer did not sustain the burden of showing the appellant's negligence caused the outage. Accordingly the monies withheld because of the destruction of Bldg. 9970 should be paid to McKee.

This decision becomes the final decision of the Commission within 30 days unless an appeal is taken within 20 days or unless the Commission decides to review the matter on its own motion.

E. RIGGS McCONNELL,  
*Hearing Examiner.*

Attachment A.



IN THE MATTER OF WM. E. GOETZ & SONS

UNDER CONTRACT No. AT(29-2)-1352

---

*Issued June 8, 1964*

---

ORDER

At a session of the Atomic Energy Commission held at Washington, D.C., on the 8th day of June 1964, Chairman Glenn T. Seaborg and Commissioners John G. Palfrey, James T. Ramey, and Gerald F. Tape present, it appearing that:

1. On February 13, 1964, the Manager of the San Antonio Area Office, as contracting officer, filed with the Commission a petition for review of the decision of the Chief Hearing Examiner, dated January 24, 1964, ordering the payment of \$1,092 to Wm. E. Goetz & Sons, contractors under Contract No. AT(29-2)-1352;

2. No important questions of law, policy or discretion are presented by the record in the case, and review of the decision of the hearing examiner is not required under applicable statutes and rules, including 10 CFR § 2.440; it is

ORDERED that the petition for review of the decision is denied, without prejudice to a motion for reconsideration of the decision, addressed to the presiding officer and filed within 10 days after the date of this order.

UNITED STATES ATOMIC ENERGY COMMISSION,  
*By* WOODFORD B. MCCOOL, *Secretary.*

IN THE MATTER OF BIG 4 PAVING, INC.

UNDER CONTRACT No. AT(29-1)-1654

---

*Issued July 8, 1964*

---

ORDER

At a session of the Atomic Energy Commission held at Washington, D.C., on the 8th day of July 1964, Chairman Glenn T. Seaborg and Commissioners John G. Palfrey, James T. Ramey, Gerald F. Tape and Mary I. Bunting present, it appearing that:

1. On March 11, 1964, the Assistant Manager of the Los Alamos Area Office, as contracting officer, filed with the Commission a petition for review of so much of a decision of Hearing Examiner McConnell, dated February 19, 1964, as awarded \$6,926.34 to Big 4 Paving Inc. under Contract No. AT(29-1)-1654;

2. No important questions of law, policy or restrictions are presented by the petition for review, and review of the decision of the hearing examiner is not required under applicable statutes and rules, including 10 CFR § 2.440; it is

ORDERED that the petition for review of the decision is denied, without prejudice to a motion for reconsideration of the decision, addressed to the presiding officer and filed within 10 days after the date of this order.

UNITED STATES ATOMIC ENERGY COMMISSION,  
*By* WOODFORD B. MCCOOL, *Secretary.*

IN THE MATTER OF BIG 4 PAVING, INC.

UNDER CONTRACT No. AT(29-1)-1654

*Issued July 10, 1964*

ORDER

In accordance with the letter to the parties dated March 17, 1964, and in the light of the Commission's Order of July 8, 1964, it is ordered that the Decision in this case filed February 19, 1964, be amended in the following respects: On page 16 delete the line after the tabulation and insert instead, "In the event it is found that the appellant is entitled to an equitable adjustment for the additive, the Contracting Officer disputes the amount of the claim as stated." In the last two lines on page 19 delete "in the amount of \$6,926.34". Add a sentence after the last line on page 19, "The case is remanded to the Contracting Officer to effect the adjustment."

E. RIGGS McCONNELL,  
*Hearing Examiner.*

IN THE MATTER OF E. I. NOXON CONSTRUCTION CO.

UNDER CONTRACT No. AT(29-1)-1656

*Issued July 31, 1964*

MEMORANDUM OPINION AND ORDER AND NOTICE OF HEARING

1. This contract appeal proceeding was tentatively scheduled for hearing in September by statements made on the record at the prehearing conference which was held in Santa Fe, New Mexico on July 9, 1964. The appellant's attorney then objected on the ground that counsel could not be ready for hearing before November. Also it was then urged for the appellant that the hearing be held in Los Angeles, the location of the corporation's main office. As permitted by the prehearing conference rulings, the appellant has now filed a request that the hearing be held "no earlier than November 2, 1964" and in Los Angeles rather than in Santa Fe. The contracting officer, by counsel, has filed an answer opposing each of the appellant's requests.

2. Upon reconsideration of these procedural issues which were tentatively resolved at the prehearing conference, and in the light of the additional presentations now made, it is found that the appellant's plea for postponement is supported by a showing that the trial attorney for the appellant, who is also an officer and a director of that corporation, will not be available for this proceeding before November because of previously made conflicting professional and personal commitments. The appellant's assertion that it would be inequitable and would impose upon it undue and extreme hardship to require a hearing before November is not outweighed by the need to achieve an expeditious hearing and decision in this proceeding. The plea for postponement is sustained.

3. Reconsideration of the place of hearing controversy is persuasive that the convenience and necessity of the parties, their representatives and witnesses (Administrative Procedure Act § 5(a)) will be better served by conducting the hearing in Santa Fe, New Mexico (see Commission's Rules of Practice §§ 2.430(b) and 2.703(b)). The record and pleadings now show that the number of witnesses to be presented on behalf of the contracting officer is more than twice the number of those to be called by the appellant. Santa Fe is reasonably near the Los Alamos AEC Office which has cognizance of the contract out of which this dispute arose, and court room facilities for conducting hearings such as this are there available. The appellant's contention that there is "no guarantee" that two witnesses who

are no longer employed by it will be willing to attend the hearing in New Mexico is without merit in view of the fact that ample time between now and the time for hearing affords to the appellant full opportunity to avail itself of the procedural remedies for compelling the testimony of witnesses which are specified in the Commission's Rules of Practice.

4. For the reasons hereinabove indicated, It Is ORDERED, this 31st day of July, pursuant to §§ 2.430 and 2.718 of the Commission's Rules of Practice, that the hearing in this proceeding shall be commenced at 10 a.m. local time on Wednesday, November 18, 1964, in the U.S. District Court Room at Lincoln and South Federal Place in Santa Fe, New Mexico.

J. D. BOND,  
*Hearing Examiner.*

DOCKET No. CA-178

IN THE MATTER OF TIMMONS, BUTT AND HEAD, INC.

UNDER CONTRACT No. AT(29-2)-1425

Issued August 14, 1964

APPEARANCES:

*William T. Butt*, President of the appellant on behalf of the appellant.  
*Albert E. Wehde, Esquire*, on behalf of the contracting officer.

DECISION

As of September 4, 1962, Timmons, Butt and Head, Inc. (TB&H) of Dayton, Ohio entered into a contract with the Atomic Energy Commission to construct a building called the Component Development and Standards Facility at the Mound Laboratory outside of Dayton for the lump sum of \$898,000. The building was to be constructed on the top of an existing underground structure called the T Building. Utilities and certain other facilities necessary for the operations carried on in T Building were supplied by encased pipes suspended above ground on T-shaped stanchions. These stanchions were anchored into the top of T Building, which was some five feet below the surface of the ground. The top was composed of concrete 15 feet thick, heavily reinforced by steel. The new structure required the removal and replacement of certain of the stanchions. It was provided that the new stanchions be secured by anchor bolts in holes 12 inches deep and 1¾ inches in diameter bored in the top of T Building. Insofar as pertinent it was provided in the specifications: Section 25—Mechanical Work

"... Wherever possible, attachment to concrete shall be by inserts amply sized for the total stress required of them. Where this is not practicable, approved masonry anchors, properly installed in rotary drilled holes, shall be used. Hammer drilling, or the use of expansion shields, will not be allowed. Diamond Caulking Anchors, Ackerman-Johnson Expansive Screw Anchors or Type 77 Rawl-Tapers shall be used. Self-drilling anchors, such as Phillips 'Red Head', may be used provided that drilling is done only with an electric hammer which has been approved (in writing) for the purpose by the Contracting Officer. Otherwise, all drilling of concrete shall be rotary drill, only. No other anchors than the ones named above shall be used except upon written approval by the Contracting Officer." (underscoring supplied)

TB&H entered into a contract with Hughes-Simonson, Inc. (H-S) also of Dayton to perform the mechanical and certain other work for an approximate sum of \$260,000. The notice to proceed was received on September 13, 1962, and on October 3 H-S started drilling the anchor holes for the stanchions with a Thor Power Tool Company Model 38 Rock Drill which it had rented from a contractors' supplier for the purpose. On October 4 a field engineer charged with the

responsibility of seeing that the specifications were carried out told H-S's superintendent in charge at the site that the holes drilled with the Thor 38 did not meet specifications. From that moment until the present the parties have been hopelessly at loggerheads as to whether or not holes drilled with the particular tool did meet the requirements. The dispute was crystallized at an early date by an exchange of letters in October 1962. After some preliminary arguments between subordinates in the two organizations, on October 10 the contracting officer's representative wrote to TB&H:

"It has been brought to my attention that holes, for anchoring the stanchions for outside utilities on top of the 'T' building are being made with a 'rock drill' utilizing a piston type hammer to effect a rotary motion to the drill rod.

"Specification Section 25 stipulates that 'approved' masonry anchors shall be installed in rotary-drilled holes and that hammer drilling *will not* be allowed.

"It is the content of this office that this operation does not conform to the requirements of the specifications and shall be discontinued. All remaining holes shall be made with equipment utilizing abrasive type cutting action such as that imparted by a core drill. Work accomplished to date will be accepted if the holes already drilled be extended another 12 inches in depth and then filled with embico grout after the necessarily longer anchor bolts have been set."

On October 12 TB&H's project manager replied by letter:

"We herewith take exception to your letter in its entirety.

"We have conformed to the contract requirements in drilling for the anchors for stanchions on top of T. Building. The holes were drilled with a Rotary Drill as required by the Specifications."

\* \* \* \* \*

"We are proceeding with your directive as to drilling the remaining holes with a core drill, extending the holes already drilled another 12 inches in depth, extending the anchor bolts and grouting the top 12 inches of holes with embico grout.

"We herewith request payment for this extra work and we will present a proposal for this extra work and request an extension of our contract time as soon as the cost and time can accurately be determined."

Thereafter the holes which were already drilled, some 128 in number, were redrilled and anchors placed in accordance with instructions in the contracting officer's letter of October 10. A diamond pointed core drill was used. The remaining holes, some 16 in number, were drilled with a core drill. In letters sent to the contracting officer in February 1963 TB&H reasserted its position that the letter of October 10, 1962, was a *de facto* change order and claimed that some \$5,000 was due for extra work. See *Polan Industries Inc.*, 58-2 BCA ¶ 1982 and cases cited on page 8189. By a decision dated November 7, 1963, the contracting officer denied the claim. An appeal was perfected in due course and a hearing on the merits was held in Dayton on June 10 and 11, 1964. The scope of the hearing was limited to a determination of whether or not the appellant was entitled to an equitable adjustment.<sup>1</sup>

Of course the specifications were a part of the invitation to bid and are an integral part of the contract. Thus the problem is purely one

<sup>1</sup>At the conclusion of the hearing it was stated on the minutes that the parties at their option could file cross briefs on July 21. At the request of the attorney for the contracting officer the time of filing was extended to August 3. On August 3 the contracting officer filed a brief. The appellant submitted the case without brief.

of contract interpretation. The issue is a very narrow one, namely whether or not the Thor 38 is a "hammer" drill or a "rotary" drill within the meaning of Section 25. Though narrow and technical, the issue is not without complications. This is indicated by the fact that the dispute exists at all. Both TB&H and H-S are very reputable and experienced contractors, and placing anchor bolts in concrete is routine in the trade. On the other hand the specification was drawn and interpreted by Giffels & Rosetti (G&R) of Detroit, a very experienced and reputable firm of architects and engineers. It is clear that the question cannot be resolved by resort to formalistic semantics. As Justice Holmes once remarked—

"A word is not a crystal, transparent and unchanged, it is the skin of the living thought and may vary greatly in color and content according to the circumstances and the time in which it is used."<sup>2</sup>

In any given case the pole star is the meaning that would be attached to the terms by a reasonably intelligent person acquainted with the operative uses in the trade and knowing all the facts and circumstances prior to and contemporaneous with the making of the contract. *Restatement, Contracts* § 230; *Randolph Engineering Company*, 58-2 BCA ¶ 2053; *Kostos, Ambiguous, Defective and Conflicting Government Specifications*, Government Contracts Monograph No. 4 at 10, Geo. Wash. Univ. (1962) and cases cited.

The Thor 38 is a well-known tool which is commonly used in construction work for drilling holes in concrete for various purposes. Applying the definition in Webster's Dictionary it would be classified as a pneumatic percussion drill. Compressed air strikes a piston head in a repetitive manner driving the drill, which in effect is a chisel with four cutting edges at the bottom, down into the material to be drilled. It is so constructed that with each separate action the bit rotates to a certain degree so that the cutting edges strike a different place in the hole with each impact. As the operation goes on, this rotation reaches 360°. In the process the hole is automatically cleaned by the compressed air. The Thor Company's catalog was put into evidence. It contained a cutaway diagram of the tool with arrows pointing to the working parts and marginal notes explaining the functioning of the parts. These notes emphasize both the "rotary" and "hammering" functions of the drill. For example ". . . completes a full stroke of *piston hammer* under severe drilling conditions giving more blows per minute and better *rotation* qualities." (Emphasis supplied.) Thus it would seem that certainly in a non-technical sense the Thor is a hybrid, having both rotary and hammer features.

Mr. Butt, the president of TB&H, took the stand. He is a graduate civil engineer from MIT with considerable experience in construction. He stated the basic position of the appellants in answering certain questions by the Examiner:

Q. "As an expert, do you interpret that language as permitting a Thor 38?"  
[Section 25 was read.]

A. "I do, without any question, I do."

Q. "Will you give your basis for that opinion in that regard?"

A. "The Thor rock drill is primarily a rotary-type drill, its construction permits, by the use of air, a rotation to be imparted to the drill stock and drill bit."

<sup>2</sup>*Towne v. Eisner*, 245 U.S. 418, 425 (1918).

Mr. Bechtol, a senior member of H-S with a great deal of experience in boring holes in concrete for various purposes, was likewise of the opinion that the Thor 38 was a rotary within the meaning of the specifications. He traced the history of boring holes in concrete. In the early days the holes were drilled by star point drills of the type used in the Thor by manually hitting the drill head with a hammer, the drill being turned by hand after each blow. Later the hammering effect was supplied automatically and holes were drilled by what is called a "jack hammer" which was turned by hand. In recent years the Thor type was developed where both the hammer action and the rotation action were automatically imparted by built-in features of the tool. To Mr. Bechtol the term "hammer drill" connoted the older type tools where the rotation was furnished by hand. Messrs. Fields, Dickenson and Hines, all construction foremen and superintendents of TB&H and H-S with long experience in field operations, were all of the opinion that the Thor 38 satisfied the meaning of Section 25. All the witnesses emphasized the inch and three fourths diameter of the holes and stated that in the trade the Thor 38 would immediately come to mind as the tool most suitable for drilling a hole of this size. It appears that rotary abrasive drills which are operated by electric motors are customarily used to drill much smaller holes. They were also of the opinion that anchor bolts fitted into 12-inch holes drilled by a Thor would meet every conceivable contingency as far as the security of the stanchions was concerned. In this respect it was pointed out that there were four anchor bolts securing each stanchion and that from the top of the T Building to the grade level, a distance of some five feet, the stanchions were to be encased in concrete two and one half feet square which would weigh approximately 5,500 pounds.<sup>3</sup> Finally Mr. Schuracher, president of the Flack Equipment Company which supplied the Thor 38 in question, took the stand. The Flack Equipment Company is the largest contractors' supply company in the area. His views were in accord with those of the other witnesses for the appellant. They are summed up in his answers to several questions on direct examination:

Q. "We would like to pose to you a question relative to drilling a hole in concrete. If the contractor were to call you, asking for a piece of equipment to perform a certain job, an example, to drill a 1 3/4 inch hole in a reinforced concrete slab, 15 feet thick, for the purpose of installing a 7/8th inch rod anchor bolt to be retained by an Ackerman-Johnson type anchor, and qualify the request and say the hole had to be rotary drilled, what piece of equipment would you recommend to him for use on this?"

A. "Our first recommendation would be a Thor 38 rock drill or something in that class, with an air compressor or some source of air if you had your own air, but we usually would send a compressor along with it."

Q. "In the trade is that considered a rotary drill?"

A. "Yes, I think you would call it a rotary drill, because any other type of drill that you would use to drill a hole like that you would have to rotate by hand. This tool rotates automatically. The action of the tool is to rotate."

As stated, the specifications, including Section 25, were drawn by G&R. From the evidence it is clear that the writer of the specifications intended that, with the limited exception of the electric hammer drill approved for the Phillips Red Head, the holes were to be drilled

<sup>3</sup> The stanchions varied. As far as figures are concerned a typical one is taken.

by a rotary drill using an abrasive type cutting action and not by a percussion drill using a chisel type cutting action embraced in the Thor 38.<sup>4</sup> Mr. Horsch, a senior member of the firm, in charge of its department of specifications and materials research, was the contracting officer's principal witness. He traced the history of Section 25. It appears that approximately eight years ago G&R, due to an unfortunate experience, had conducted certain tests to determine the holding power of anchor bolts embedded in holes in concrete board by an abrasive cutting rotary drill and a percussion drill of the Thor 38 type embracing certain rotary features. Sixteen holes were drilled in a uniform concrete slab, eight by a rotary abrasive action drill and eight with a percussion drill. Anchors were inserted in the holes and then using equipment furnished by the Pittsburgh Testing Laboratory, it was found that the anchors in the rotary abrasive holes had much more holding power than those cut by the percussion drill. Further tests were carried on to determine the cause of this. New holes were cut and by the use of a dye, it was found that in the percussion-cut holes there were minute fractures in the concrete not visible to the naked eye. Mr. Horsch testified that after this experiment the firm adopted the policy that "... whenever the integrity of the concrete in the area is important there shall be no percussion or hammer drilling, it will be rotary drilling only." Section 25 became the standard clause used by G&R in implementing this policy. Mr. Horsch stated that it had been used in many contracts during the past eight years and until the instant case its meaning had never been brought into doubt.

Mr. Horsch is an exceptionally well qualified witness. He was born in the coal mining region of Pennsylvania, graduated from Carnegie Tech in 1923 in engineering, and has been practicing or teaching engineering since his graduation. For a time he was president of the West Virginia Polytechnic Institute. Having his roots in a mining area, it was clear that he was unusually well versed in the various types of drills and their application. He stated his position with respect to the issue on direct examination:

Q. Mr. Horsch, would you classify a Thor Rock 38 as a Thor rotary drill?  
A. No sir. It does not cut by rotary action. If you took a Thor star point drill, such as Thor has, and you put pressure on that and rotated it with a rotary motor, I estimate that you wouldn't go through a quarter of an inch of concrete before you wore the drill out. It is not made for that.

Q. The cutting edges are where?

A. They are inclined planes. They would, if you rotate them, they would ride over obstruction of the things you are trying to cut out.

Q. Are they faced downward?

A. The only point is the vertical 3/4 int.

Q. Mr. Horsch, have you in your work and profession read a number of periodicals?

A. I try to keep pretty well abreast of technical literature; that is my primary function.

Q. Have you ever seen a drill such as the Thor 38 referred to as a rotary drill?

A. No."

<sup>4</sup> G&R did not have a resident inspector at the site of the construction. Mr. Russell, a field engineer of Monsanto Chemical Company acted in this capacity. The contracting officer consulted G&R prior to writing his letter of October 10.

Mr. Horsch took the stand on the second day of the hearing after listening to testimony on the first day. After the adjournment on the first day he went to the library in Dayton and ran down the references to "rotary drills" in the Engineering Index. He stated that from 1956 to date he noted 22 such references and none referred to a drill of a Thor 33 type.

Mr. Horsch testified that the policy of requiring that anchor holes be drilled with abrasive rotary drills applied with unusual force to the construction in question. The pipes supported by the stanchions furnished the utilities and other facilities for carrying on the operations in the T Building, which were classified. The Component Development and Standards Facility contained explosive areas and there were blast doors adjacent to the stanchions. There was another factor. The top of the T Building was heavily reinforced with steel. Although a Thor 38 might in time run through this reinforcing steel, it was customary to burn the steel away with an acetylene torch when such a drill was used. This was being done by H-S on October 4 when the inspector raised the question with respect to the drill. Mr. Horsch testified that the burning weakened the concrete texturally. A rotary abrasive drill would drill through the steel, making the burning unnecessary. In the end the entire impact of Mr. Horsch's testimony was to the effect that sound engineering principles dictated the use of a rotary abrasive drill under all the circumstances.

A usage is always admissible to show the meaning of terms in a particular contract even though they are drawn from a technical field and are defined in professional and trade literature with some degree of precision. See Corbin, *Contracts* §§ 555-557; Williston, *Contracts* § 608; *Restatement, Contracts* § 235(b).<sup>5</sup> A local usage will control where both of the parties are residents of the same locale and the subject of the contract is parochial in nature. Otherwise the countrywide meaning of the terms will be applied. See Corbin and Williston, *supra*; *Restatement, Contracts* § 235(a).<sup>6</sup> Certainly there is nothing parochial about the operations of the AEC and the services which G&R performs for it. For example, G&R draws specifications for construction of AEC installations at Idaho Falls, Idaho. The work may be performed by a construction firm from Texas. Accordingly, no matter how firmly ingrained or clear the understanding of the distinction between "hammer" and "rotary" drills may be in Dayton, this will not be dispositive by the issue in this case. In this respect the spectrum of G&R is much broader and due to his professional background and duties, the testimony of Mr. Horsch is most convincing as far as the applicable usage is concerned. However, there are other factors to be considered.

It is a canon of interpretation that the terms in question must be projected against the manifest purpose of the particular aspect of the construction to which the specification relates. See *Restatement*,

<sup>5</sup> There is some authority for the proposition that usage can be shown only where the meaning of the terms is doubtful. See *W. G. Cornell Co.*, 1963 BCA ¶ 3741 and cases cited; *Blatt Electric Company*, 1964 BCA ¶ 4031. For criticism of this rule see Corbin and Williston, *supra*.

<sup>6</sup> These rules are to be distinguished from those relating to choice of law for interpretative purposes. See Goodrich, *Conflict of Laws* § 112.

*Contracts* § 236(b). Mr. Bechtol testified that the bid calculation was based on a rented drill of the Thor type. The core drill eventually used was much more expensive. In assuming the use of the Thor, it is plain from the evidence that Mr. Bechtol reckoned in a reasonable way with the purpose of the anchor bolts in the holes to be drilled. At the time neither TB&H nor H-S knew of the tests which had been performed by G&R eight years earlier. Mr. Horsch testified that they had never been written up in any professional or trade journal and the results were peculiarly within the knowledge of G&R. It is always incumbent upon the Government to make its specifications crystal clear, particularly in lump sum contracts let by competitive bidding. *Peter Kiewit & Sons v. United States*, 109 Ct. Cl. 390 at 418 (1947). This rule would seem to apply with unusual force where the particular specification was the outgrowth of an experiment peculiarly within the knowledge of the Government's draftsmen. Cf. *Helene Curtis Industries, Inc. v. United States*, 312 F. 2d 774 (Ct. Cl. 1963).

The specification could have been more precisely drawn. It is clear that the underlying dichotomy of drills in the mind of the draftsmen was "rotary" and "percussion". In fact in his testimony Mr. Horsch used the term "percussion" more often than "hammer". When asked why the term "hammer" was used instead of "percussion", he replied—

"Now, we don't use the word 'percussion' because we are not sure of connotation in the field. Hammer, everybody knows, everybody knows what hammering action is, you can feel it and see it, and that is why we use the simpler term. . . ."

This explanation is not quite satisfactory. "Percussion" is not an esoteric work. Anyone who follows a high school band is familiar with the term. It is a fact that competent people were misled by the specification as it was cast. In this regard it is clear that the size of the hole and the security factors compounded the difficulties arising out of the terminology.<sup>7</sup>

It is very difficult to draw the line between situations in which doubtful language is to be construed against the Government under the doctrine of the *Kiewit* case and those situations in which the contractor is under a duty to ask for clarification. See *Consolidated Engineering Co. v. United States*, 98 Ct. Cl. 256 (1943); *WPC Enterprises, Inc. v. United States*, 323 F. 2d 874 (Ct. Cl. 1963); *George E. Jensen*, 1964 BCA ¶ 4196. One underlying consideration seems clear. Care must be taken that contractors do not substitute their general judgment for that of the architect-engineers, particularly where matters of stress are concerned. Probably the best delineation of the rule imposing on contractors the duty to inquire as to the intended meaning of Government specifications is in Judge Davis' opinion in the *WPC* case at 877:

"Although the potential contractor may have some duty to inquire about a major patent discrepancy, or obvious omissions, or a drastic conflict in

<sup>7</sup> TB&H takes the position that under any circumstances a lateral blast would have knocked out the pipes before it affected the stanchions.

provisions [cases cited], he is not normally required (*absent a clear warning in the contract*) to seek clarification of any and all ambiguities, doubts, or possible differences in interpretation. The Government, as the author, has to shoulder the major task of seeing that within the zone of reasonableness the words of the agreement communicate the proper notions—as well as the main risk of a failure to carry that responsibility. If the defendant chafes, under the continued application of this check, it can obtain a looser rein by a more meticulous writing of its contracts and especially of the specifications." (Italics supplied.)

Section 25 is prefaced by the standard general provision that the specifications do not purport to describe in detail the construction methods or the equipment to be used. Then in the body of the specifications there is minute detail with respect to the type of tools to be used in boring holes in concrete for anchor bolts and the type of anchor bolts. Of course the specific limits the general [*Restatement, Contracts* § 236(c)] and points up the fact that there is something special about the equipment to be used in this particular phase of the construction. This is accentuated by the repetitive characteristics of the specification itself. First, there is a statement that the anchor bolts will be installed ". . . in rotary drilled holes. Hammer drilling . . . will not be allowed." Then there is a specific provision for an ". . . electric hammer which has been approved . . ." in connection with the Phillips Red Head. Lastly, there is the warning ". . . Otherwise, all drilling of concrete shall be rotary drill, only." Thus the whole texture of the specification is caveatorial in character. It bristles with implications that the draftsmen attached special significance to the type of drill to be used: "There was a clear warning in the contract" that tools must be selected with great care for this part of the work. Under these circumstances it was the duty of TB&H to inquire with respect to the intended meaning. Such an inquiry would certainly have brought to light the experiment of G&R, and most likely a selection of acceptable drills would have been given. Accordingly, the contracting officer was within his rights in directing the discontinuance of the Thor 38 and ordering that remedial measures be taken in the holes already drilled by it.

There is another aspect of the matter. The holes were eventually drilled with a diamond pointed core drill. This is a type of drill which is customarily used to extract a specimen core of material for testing purposes. It operates by rotary action but is a very unique specie of the rotary family. It is an expensive tool, each drill costing approximately \$97. It is likewise costly to operate. It is clear that if the draftsman intended that the work be done by core drill, he should have so specified.

There is some obscurity surrounding the communications which took place between the contracting officer's representatives and the H-S representative in the field at the time the core was substituted for the Thor. However, the preponderance of the evidence indicates that the representatives of the contracting officer gave the impression that the diamond point core drill was the appropriate tool. Mr. Russell, the inspector, stated—"When I read the specification I thought of this drilling as being core drilling with a diamond drill." The contracting officer's letter of October 10 mentions "core drill". Mr.

Horsch, who seemed to have an encyclopedic knowledge of drills, stated there were a number of drills available which would have satisfied the specifications other than the core drill and implied that some of them could be very economically used. Under these facts the appellant is entitled to an equitable adjustment measured by the difference in the cost of carrying on the work with the core drill and the cost which would have been entailed if the most economical drill which would have met the specifications had been used to make the corrections.

A question of evidence was left outstanding. Three letters were introduced into evidence, subject to a reserved decision on the contracting officer's motion to strike. These letters were from contractors' suppliers and contain the opinions of the writers that in the trade the Thor 38 was a rotary drill within the meaning of the specifications. These opinions are certainly relevant. They are cumulative. The motion to strike is denied. *S & E Contractors, Inc.*, 2 AEC 850, May 13, 1964.

The case is remanded to the contracting officers to effect an equitable adjustment in accordance with this decision.

This decision becomes the final decision of the Commission within thirty days unless an appeal is taken within twenty days or unless the Commission decides to review the matter on its own motion.

E. RIGGS McCONNELL,  
*Hearing Examiner*

IN THE MATTER OF ROBERT E. McKEE GENERAL  
CONTRACTOR, INC.

UNDER CONTRACT No. AT(29-2)-1382

Issued August 19, 1964

ORDER

At a session of the Atomic Energy Commission held at Washington, D.C., on the 19th day of August 1964, Chairman Glenn T. Seaborg and Commissioners John G. Palfrey, James T. Ramey, Gerald F. Tape and Mary I. Bunting present, it appearing that:

1. On June 5, 1964, the contracting officer of the Sandia Area Office under Contract No. AT(29-2)-1382 filed a petition for review of a decision of Hearing Examiner McConnell, dated May 21, 1964, directing payment to the contractor of \$9,184.69 withheld for damages allegedly caused by its negligence;

2. No important questions of law, policy or discretion are presented by the record in the case, and review of the decision of the hearing examiner is not required under applicable statutes and rules, including 10 CFR § 2.440; it is

ORDERED that the petition for review of the decision is denied.

UNITED STATES ATOMIC ENERGY COMMISSION,  
By F. T. HOBBS, *Acting Secretary*.

IN THE MATTER OF FENCO-POLYTRON BY AND  
THROUGH WALSH CONSTRUCTION COMPANY

UNDER CONTRACT No. AT(29-2)-929

Issued August 19, 1964

ORDER

At a session of the Atomic Energy Commission held at Washington, D.C., on the 19th day of August, 1964, Chairman Glenn T. Seaborg and Commissioners John G. Palfrey, James T. Ramey, Gerald F. Tape and Mary I. Bunting present, it appearing that:

1. On April 20, 1964, the contracting officer filed with the Commission a petition for review of the decision of Hearing Examiner McConnell, dated April 1, 1964, which directed that an equitable adjustment be granted;

2. Important questions of law and policy are presented by the record, and review of the decision of the hearing examiner is appropriate under applicable statutes and rules including 10 CFR § 2.440; it is

ORDERED that the petition for review is granted. Exceptions and briefs may be filed in accordance with 10 CFR §§ 2.762 (f) and (g). While this order granting the petition for review is not limited in scope to specific issues, the Commission desires that the parties discuss in their briefs the applicability and effect of 10 CFR § 2.401 (e), which defines the parties in a contract appeal as being the prime contractor and subcontractor if the dispute arises or is alleged to arise under a subcontract.

UNITED STATES ATOMIC ENERGY COMMISSION,  
By F. T. HOBBS, *Acting Secretary*.

## IN THE MATTER OF GAS DRYING, INC.

UNDER CONTRACT No. AT(10-1)-1160

Issued August 28, 1964

## NOTICE OF HEARING

## MEMORANDUM OPINION AND ORDER

1. This proceeding involves an appeal from a decision of the Manager of the Idaho Operations Office, U.S. Atomic Energy Commission, which denied in substantial part the appellant's claim in settlement of a subcontract with an AEC prime contractor which was terminated for the prime contractor's convenience. By letter submitted shortly after the filing of the complaint, the appellant formally requested a hearing and expressed its desire that the hearing be held in either Newark, New Jersey, New York City, or Germantown, Maryland; it was therein stated that appellant would not attend a hearing in Idaho Falls because that would be too burdensome. Appellant's place of business is in Summit, New Jersey and the pertinent AEC prime contract involved work at, and is administered by officials of, the National Reactor Testing Station in Idaho.

2. A petition to intervene, an entry of appearance and a motion for decision on the record, have been filed by counsel for the Manager, Idaho Operations Office. The appellant, apparently represented in this proceeding by the corporation's president, has not responded to these pleadings; however, its position on the matter of a hearing is clearly shown by the letter mentioned above.

3. It appears from the petition to intervene, the answer and the record herein, that the Manager, Idaho Operations Office, is a contracting officer as defined in § 2.401(a) of the Commission's Rules of Practice and thus is the representative of the Government which is ultimately the real party in interest in this proceeding. Accordingly, it is found that good cause exists for permitting his intervention under the provisions of § 2.401(c) of the rules.

4. The Government's motion for decision on the record as now constituted must be denied for the reasons here indicated. The appellant has requested a hearing and hence is entitled to present its evidence and contentions in a *de novo* hearing conducted in conformity with Part 2 of the Commission's rules. Likewise the appellant's demand for a hearing entitles it to a decision based on a hearing record made as provided in those Commission rules (e.g., §§ 2.432, 2.433, 2.700, 2.717, 2.718, 2.750, 2.754, 2.760), and as prescribed in Sec. 181 of the Atomic Energy Act and Secs. 2(g), 5, and 8 of the Administrative

Procedure Act. These hearing and decisional rights have not been impliedly waived as they might have been under § 2.419 of the Commission's rules; on the contrary, they have been expressly asserted and accordingly must be and are recognized.

5. The place of hearing may be specified, under § 2.430(b) of the rules, at the Commission office which administers the contract or at the Commission's headquarters in Germantown, Maryland or at "such other place as the hearing examiner may designate." The Administrative Procedure Act, Sec. 5(a), requires that in determining this matter, due regard shall be had for the convenience and necessity of the parties or their representatives. It is considered, for the reasons herein stated, that the place of hearing should be at the Commission's headquarters in Germantown, Maryland. The amount of the claim in dispute is relatively small and it would be disproportionately expensive and inconvenient to require the parties to appear for hearing in either Idaho or the New York City area. On the other hand, it is believed that the AEC representatives reasonably can provide counsel and the evidence deemed necessary for a hearing at the Commission's headquarters. The appellant has stated—albeit as its secondary preference—that it is willing to appear here for the hearing. On balance, it is concluded that the AEC headquarters is a suitable place for this hearing.<sup>1</sup> The ensuing notice of hearing accords to each party at least 30 days notice as required by § 2.430(a) of the Commission's rules.

IT IS ORDERED this 28th day of August 1964 that the petition to intervene filed by counsel on behalf of the Manager, Idaho Operations Office, U.S. Atomic Energy Commission is granted and the Manager, Idaho Operations Office, U.S. Atomic Energy Commission is made a party to this proceeding;

IT IS FURTHER ORDERED that the Government's motion for decision on the record is denied; and

IT IS FURTHER ORDERED that a hearing upon this appeal shall be commenced in the Auditorium of the U.S. Atomic Energy Commission in Germantown, Maryland at 10 a.m. local time on Tuesday, October 6, 1964.

J. D. BOND,  
Hearing Examiner.

<sup>1</sup> If Government counsel should suggest—or if the parties should agree—that a hearing in the vicinity of the appellant's place of business would be reasonably convenient, then consideration will be given to the issuance of an appropriate modifying order.

IN THE MATTER OF FENCO-POLYTRON BY AND  
THROUGH WALSH CONSTRUCTION COMPANY

UNDER CONTRACT No. AT(29-2)-929

Issued November 4, 1964

OPINION AND ORDER

In this contract appeal proceeding, the contracting officer's petition for review of the decision of a hearing examiner was granted by our order of August 19, 1964. The parties collectively designated as "Fenco-Polytron" have filed a motion for allowance of oral argument before the Commission. 10 CFR § 2.763. The issues raised by the contracting officer's exceptions to the decision of the hearing examiner may be discussed adequately in the briefs of the parties, and Fenco-Polytron has shown no substantial reason why oral argument should be granted. *Cf.* 10 CFR § 2.730(b).

It is therefore ORDERED that the motion for allowance of oral argument is denied.

BY THE COMMISSION,  
W. B. McCool, *Secretary.*

COMMISSIONERS:

GLENN T. SEABORG, *Chairman.*  
JOHN G. PALFREY.  
JAMES T. RAMEY.  
GERALD F. TAPE.  
MARY I. BUNTING.

IN THE MATTER OF GAS DRYING, INC.

UNDER CONTRACT No. AT(10-1)-1160

Issued November 10, 1964

APPEARANCES:

*Dayrel G. Hoke*, President, Gas Drying Inc., on behalf of the Appellant.  
*Richard L. Hames, Esquire*, on behalf of the Manager, Idaho Operations Office, U.S. Atomic Energy Commission.  
*Ronald K. Hosford, Esquire*, filed a Statement of Appearance on behalf of the Manager, Idaho Operations Office, U.S. Atomic Energy Commission.

DECISION

1. Upon submission of a low bid the New Jersey domiciled appellant was issued, by an Idaho cost-type prime contractor of the Atomic Energy Commission, a purchase order for supplying at a fixed price two automatic electric air dryers. The contract required the appellant to submit shop drawings, including four certified prints of all shop and outline drawings, for approval by the contracting officer. Notice to proceed was given to appellant on July 23, 1963, and on July 29, 1963, it was instructed to, and it did, stop all work on the project. Thereafter the purchase order contract was terminated in its entirety, effective July 29, 1963, for the convenience of the Government and its prime contractor.

2. A disputes article in the purchase order provided that the Manager, Idaho Operations Office, United States Atomic Energy Commission (hereinafter referred to as the contracting officer) would issue a written decision upon any question of fact in dispute which was not disposed of by agreement. The contract also included a termination for convenience article which provided that in the event of such an occurrence the appellant would be entitled to, ". . . all necessary and reasonable costs incurred by the Vendor in connection with the purchase order, plus a reasonable profit with respect to all work performed, . . ." This appeal is from the contracting officer's decision upon a dispute as to the settlement amount due the appellant by reason of the work stoppage and termination as above stated.

3. After termination the appellant claimed in settlement the sum of \$742 itemized as 20 hours of engineering at \$25 per hour in the amount of \$500, profit of \$200, and settlement expenses of \$42. The prime contractor, having initial settlement responsibility, was unable to secure acceptable justification for the amount of the appellant's claim and, after unproductive written and telephone discussions, issued a terminating change order and a unilaterally determined settlement offer of \$362 which consisted of \$100 for cost to enter the

order, \$200 for engineering, \$20 for profit and \$42 for settlement expenses. The appellant rejected this offer and requested a decision pursuant to the disputes article.

4. The contracting officer deemed it appropriate before deciding the matter to secure a Government audit of the appellant's books as permitted under the terms of the purchase order. That was accomplished by auditing officials from the New York AEC office, and a report of findings was submitted to the contracting officer and is in the record here. The contracting officer's decision considered at length the procedural and factual matters then ascertainable and concluded that the cost-type prime contractor's settlement offer was reasonable; and hence it was approved. This appeal followed.

5. Pursuant to § 2.431 of the Commission's Rules of Practice a *de novo* hearing upon the appeal was held in New York on September 22, 1964, at which the appellant was represented only by its president. He presented sworn testimony and arguments contending that the offered settlement was not consistent with the contract obligation to pay all necessary and reasonable costs plus a reasonable profit upon termination of the purchase order. The appeal record now includes that presentation for the appellant, the depositions of two witnesses taken on behalf of the Government, and all documents which were submitted as the appeal record in this proceeding. At the close of the hearing the parties were granted time to and including Friday, November 6th within which they might, but were not required to, file proposed findings, conclusions and reply pleadings. Neither party has submitted post-hearing pleadings.

6. The dispute essentially involves the dollar amount properly allowable to the appellant for engineering services. Although the audit report pointed to the difficulty in verifying—because the appellant's business records do not include such information—the total time expended by the appellant in its engineering work under this purchase order, and although this record includes opinions casting doubt on the number of hours that reasonably should have been expended in doing such engineering work, the evidence now at hand supports this finding that 20 hours of engineering-drafting work was performed by the appellant toward the development of the drawings which were required to be submitted for approval.

7. The sworn testimony of the appellant's president directly states that at least 20 hours of engineering time were expended in design-drafting under this contract. His statements described at length the nature of the work that was required in ascertaining and calculating the variable sizes, dimensions, and arrangements of the numerous components and piping and fittings in order to transmute the appellant's generalized catalog-type of drawing—which was submitted with its bid—into the specific design requirements for units to be furnished here. This testimony finds corroboration in a comparison of the partially completed shop drawing, which appellant furnished upon demand in support of its claim, with the less detailed drawing which accompanied the bid. The whole record affords insufficient basis to reject as incredible or untrue the direct testimony of the appellant's president that he did expend at least 20 hours to prepare the partially

complete shop drawing for the purpose of sizing and specifically designing the units in fulfillment of the contract obligations then existing. Finally, as to the amount of engineering time expended, it is noted that both the prime contractor and the contracting officer apparently implicitly accepted the 20 hours of work figure; their reduced settlement figure appears to rest on a judgment that \$10 per hour rather than \$25 per hour constituted an appropriate allowance.

8. The real issue thus becomes the hourly allowance which should be made for engineering services performed. The prime contractor and the contracting officer had for consideration the somewhat generalized statements by appellant's president, as made in his correspondence, that his was a unique corporation wherein the usually applied standards and methods of cost accounting are inapplicable. The contracting officer also had available the audit report hereinabove and hereinafter referred to. The figure of \$10 per hour for engineering expense which underlies the challenged statement figure is not inconsistent with the maximum figures which were shown by cost information upon a number of concerns which provide engineering services. Nevertheless, at the hearing the appellant's president explained in detail the basis for his contention that engineering costs in other concerns and corporations are not comparable or relevant indicators of what should be a proper allowance in his business operation. The appellant met the burden of proving this point. The reasons for this statement are summarized below.

9. Appellant is a small corporation entirely owned by its president who, with assistance by his wife, serves as its chief, if not its only, executive officer. It has 8 or 10 employees. The responsibilities for procuring orders and for designing and delivering acceptable products rest upon the corporation's president who views gas drying systems more as an art than as a business of fabricating specially designed equipment. Varying requirements for drying to different degrees the numerous gases employed in a multitude of industrial operations may well be more an art than an exact science, but it is unnecessary here either to make or undertake to explain a differentiating finding upon this point. The appellant's accounts and business records are not organized or administered in the formats usually employed by larger industrial enterprises; the appellant's president believes that its functioning as a creative producer would be unduly burdened by such practices. The appellant's position in this respect is sustained.

10. In view of the findings above made it is now concluded that the contracting officer's decision was in error, in general by holding that the prime contractor's settlement offer based on \$10 per hour was reasonable, and specifically in finding that the audit report indicates that the hourly rate for the period in question was \$9.63 for the president's services to the appellant. And yet, the appellant failed at the hearing to cure the deficiency which plagued its claim from the beginning, namely, the absence of substantial definitive evidence upon which to base a conclusion that the engineering hourly charge of \$25 was justified or reasonable. The undocumented assertion that the cost to the corporation of its president's time was a much greater fig-

ure than the \$25 as claimed is not tangibly persuasive evidence to support either figure. However, the report of audit which is in this record includes this paragraph which is which is deemed to be acceptably helpful in these circumstances:

"We reviewed the subcontractor's organizational structure and financial statements for the period ended July 31, 1963 and were able to abstract the following information as concerns engineering services:

|   |                     |
|---|---------------------|
| Hourly Rate (Mr. Dayrel G. Hoke)-----         | \$9.63              |
| Engineering Department Overhead (37.4%)-----  | 3.60                |
| Subtotal-----                                 | \$13.23             |
| General & Administrative Expense (21.4%)----- | 2.83                |
| Selling Expense-----                          | 1.15 <sup>(1)</sup> |
| Total per hour-----                           | \$17.21             |

(1) Consists primarily of freight, literature on products and travel expenses. Commissions and entertainment expenses have been excluded.

"The foregoing information was determined on the basis of nomenclature and without specific knowledge, in view of the absence of cost records, as to the indirect expense pools or bases to be used in computing overhead or G & A rates. Therefore, the information is furnished for guidance only and is not to be considered as a recommendation as concerns the subcontractor's termination proposal."

After carefully considering all evidence and contentions of record herein, and weighing as less than controlling the caveat last quoted above, it is concluded that the necessary and reasonable costs incurred by the appellant include engineering costs at a total hourly rate of \$17.21. The audit report is the best available guidance upon this point and is therefore adopted. Accordingly it appears that the appellant is entitled to be compensated in its termination settlement for 20 hours of engineering work at \$17.21 per hour which is \$344.20, for a reasonable profit which is deemed to be 10% thereof which amounts to \$34.42, and to settlement expenses in the amount of \$42. Thus the appellant's settlement claim for the total sum of \$420.62 is allowed. The alleged "Cost to enter order" item is not supported and is disallowed. The appeal is sustained to the extent herein indicated and the matter is remanded for settlement in accordance herewith.

IT IS ORDERED, this 10th day of November 1964 that the appeal is sustained to the extent hereinabove specified. The decision of the contracting officer is set aside, and the proceeding is remanded for settlement in accordance with the findings and conclusions herein made.

Pursuant to §§ 2.433(c), 2.440 and 2.762 of the Commission's Rules of Practice, this Decision will be final 30 days after its date unless a party files a petition for review within 20 days of its date or the Commission directs that the record be certified to it for final decision.

J. D. BOND,  
Hearing Examiner.

(DOCKET No. CA-170)

IN THE MATTER OF WM. E. GOETZ AND SONS

UNDER CONTRACT No. AT(29-2)-1352

Issued December 15, 1964

APPEARANCES:

Walter Goetz, Individually for the Partnership of Wm. E. Goetz and Sons.  
John F. McNett, Esquire for the Contracting Officer.

DECISION UPON MOTION FOR RECONSIDERATION

The Contracting Officer filed a Motion for Reconsideration of the Decision issued herein on January 24, 1964, after the Commission denied a Petition for Review of that Decision with provision for the filing of the motion. The reconsideration requested was based upon the same grounds as asserted in the aforesaid Petition for Review.

The principal point set forth was that the Contracting Officer had a right under the contract to take possession of the building being constructed, and thus, any agreement with Goetz, for and on behalf of another tradesman, to let him onto the premises, was null and void, and that the rights accruing to the Contractor Goetz by virtue of that agreement could be ignored and disregarded.

Briefly the facts are that Goetz had a contract to construct a building in which was to be undertaken some melting of scrap metal. Goetz was also obligated to construct a gas line and to install a gas regulator. Another contractor or tradesman, was to install a furnace for the melting process.

The Goetz contract was to be completed by June 30, 1962. On two occasions prior to that date, the Contracting Officer talked with Goetz about letting the furnace contractor onto the premises as soon as convenient. On June 5, 1962, which was the second and the more important occasion, Goetz and the Contracting Officer discussed this request for the furnace contractor. The personnel of the furnace contractor were from places other than San Antonio, where the building was being constructed, and advance accommodations were understood to be convenient for them. On June 5, 1962, Goetz was still in the process of construction, but he agreed, as shown by the Contracting Officer's letter of June 6, to permit the furnace contractor to enter upon the premises on June 15. Goetz asserts, and it is not disputed that the agreement also contained the provision that Goetz would permit this advance entry onto the uncompleted premises ". . . if it did not cost . . . any additional money."

The Contracting Officer assessed damages to Goetz for the delay until July 24 in delivery of the gas regulator. On that date, the furnace was not ready to use the gas.

In the insistence upon strict compliance with the contract, the Contracting Officer relies mainly upon the following clause:

"GC-V COMPLETION OF WORK

V-1 Possession Prior to Completion:

The Government shall have the right to take possession of or use any completed or partially completed part of the work. Such possession or use shall not be deemed an acceptance of any work not completed in accordance with the contract. If such prior possession or use by the Government delays the progress of the work or causes additional expense to the Contractor an equitable adjustment in the contract price and/or the time of completion will be made and the contract shall be modified in writing accordingly."

In his Petition for Review, the Contracting Officer asserted that while mitigating circumstances may exist for the incident, the Decision issued on January 24, 1964, totally omitted consideration of this clause. Were it not for this omission, it was further asserted, the rights of the Contracting Officer would be clear to take possession of the Goetz constructed building without any notice, agreement, or consultation of any kind, at any time prior to completion of the construction.

These assertions by the Contracting Officer appear to have been made with little guidance, if any, or limitation, from the evidence in the proceeding. The principal witness for the Contracting Officer stated with certainty that the arrangement made for the furnace contractor was not to be construed as any use or possession by the government. That evidence negates the selection of the possession clause for the action taken by the Contracting Officer in this proceeding. The testimony is as follows:

"At no time did we ever infer (*sic*) the possibility that the allowing of another contractor to start installing a furnace would constitute any form whatsoever, as use by the government."

The importance of the evidence has another aspect: the indication that the agreement with Goetz was for the convenience of and benefit to the furnace contractor, and not for the government. The contracts for the total work: first, the building and the gas line and regulator, were to be undertaken by Goetz, second the melting furnace was to be installed by another. The totality of the government's objectives was achieved by those contracts, and the government neither needed nor asserted any possession under the contract for the Goetz constructed building.

Other points included in the Petition for Review, as blanketed in the Motion for Reconsideration, are adequately covered in the Decision.

In summary, an agreement was made by Goetz for the entry by the furnace contractor, and the term of the agreement for no costs is undisputed in the evidence, although the Contracting Officer indicates that he did not recognize the effect of the evidence as it was introduced.<sup>1</sup> The government saved two weeks of guard costs by this advance entry

<sup>1</sup>The Contracting Officer complains that this issue was first observed by him in the initial decision in this proceeding, and not in any of the briefs filed in the case. The Contractor represented himself without the aid of a lawyer. It may be worthy of comment that at no time during the negotiations for the agreement with the Contractor did the government assert entry under the possession clause, which was first mentioned, without discussion, in the Decision by the Contracting Officer. When the government, during contract performance, identifies the basis for its action taken or sought, the reference should be clear and definite; this was done here, the basis asserted for the arrangement for entry by the furnace contractor was only the agreement.

onto the premises; those savings are the "consideration"<sup>2</sup> for the agreement not to charge about an equal amount for guard and architect inspection costs, presumably for waiting for a gas regulator to arrive. Goetz questioned the reasonableness of and necessity for those costs, but no analysis of them need be made here.

Goetz cooperated with the furnace contractor throughout the time following June 15; he knew the furnace was slowly being installed and made operable and knew that the gas regulator would be available at the time needed. Goetz introduced evidence that the architect delayed approval of the selection of the gas regulator for a period of two weeks, the necessary sanction was received by Goetz on May 21, and the gas regulator supplier promised delivery before June 30, then promised again before July 9, and it finally arrived on July 20. Goetz asserted that he thought the two projects, of building construction and furnace installation were well coordinated, although after June 20, there was a development of hurry by the Contracting Officer to have the building completed, per terms of the contract, on June 30. Goetz endeavored to hurry his supplier of the regulator. The first indication that Goetz had that any costs, for a delay in installation of the regulator, were to be assessed to him was on July 19.

It is concluded that the agreement made for or on behalf of the furnace contractor precludes the assessment of costs imposed by the Contracting Officer on Goetz, and the Motion for Reconsideration by the Contracting Officer is denied. The Decision issued on January 24, 1964 is affirmed.

Pursuant to Sections 2.433(c) and 2.760 of the Commission's Rules of Practice, this decision will be final thirty (30) days after its date of issuance unless a party files a petition for review within twenty (20) days of the date of issuance or the Commission directs that the record be certified to it for final decision.

SAMUEL W. JENSCH,  
Hearing Examiner.

<sup>2</sup>The Contracting Officer contends the considerations for modification, or waiver, of provisions of a contract should be about equal on both sides. The authority cited by him (Chichester 312 F. 2d 275) concerns a consideration involved for one party of \$437,059, where rightfully the court held the consideration was substantial. In the Goetz case \$1,092 are involved, and are appropriately the same for both parties to the agreement. Goetz, in addition, referred to a cost assumed by him for a change in specifications for a fence, which might have warranted a change order, but which was not issued.

IN THE MATTER OF FRANK BRISCOE COMPANY, INC.

UNDER CONTRACT No. AT(29-2)-1589

Issued December 17, 1964

ORDER DENYING MOTION TO DISMISS APPEAL

The Contracting Officer has made a Motion to Dismiss the Appeal without a hearing. The contention is that an interpretation of the contract<sup>1</sup> is involved, and that is asserted to be only a question of law, as to which there is no jurisdiction in this forum.

The Contractor contends that the plain and ordinary meaning of a contract can only be ascertained by a consideration of the facts and circumstances surrounding the negotiation of the contract. The Contractor requests that a hearing be held to consider the facts.

At issue is the extent of the obligation of the Contractor to furnish certain valves for piping to be installed in a building. The parties differ as to the meaning of the words used in Addendum No. 6; the Contracting Officer states that it is for clarification only, the Contractor states that it does not know what previous portions of the contract were "clarified" and that actually a limitation of liability was created.

Two additional aspects developed during the course of the oral argument held on the motion and the briefing that followed. First, the Contracting Officer asserted that if there had been any doubt about the meaning of the language in this Addendum, which was issued as No. 6 before the bidding closed, it should have been brought to the attention of the Contracting Officer before the contract was signed. The Contractor stated that it can only show those circumstances at a hearing. Second, the Contractor asserted that the real clarification of the meaning of the language of this Addendum can only be shown by evidence including that from the architect-engineer, but the authority of this speaker is contested by the Contracting Officer.

Without commitment as to the position of either party hereto, it does appear that enough factual dispute exists to accord to the Contractor the hearing it desires. The motion of the Contracting Officer may be well founded, but it is not yet clearly established and it can be better determined when more facts<sup>2</sup> are contained in the record. The ascertainment of the plain and ordinary meaning of language is in most instances, a question of fact. The particularity of language used here

<sup>1</sup>At one place in the oral argument, the Contracting Officer described the problem as "... an interpretation actually of a silence on a subject ..."  
<sup>2</sup>The Contracting Officer stated that "... the valves in dispute in this case, were not specifically set out in any section as being either Government furnished or Contractor furnished." This view seems to be about the position of the Contractor.

in the specifications has left a gap in the meaning that needs to be clarified or supported by facts. This gap relates to the obligation to furnish valves under 2 inches in size for certain designated piping. The issue here is not solely whether the Government list of furnished property includes these valves, but the issue includes whether some undesignated person was assumed to furnish the valves. This case is not free from all doubt.

WHEREFORE, IT IS ORDERED, the Motion to Dismiss Appeal is denied without prejudice to a renewal thereof.

A date for hearing for the presentation of evidence will be set after consultation to ascertain the convenience of the parties.

SAMUEL W. JENSCH,  
*Hearing Examiner.*

TABLE OF CASES CITED

|   | Page               |
|---|--------------------|
| <i>Abbett Electric Company v. United States</i> , 142 Ct. Cl. 609.....  | 647                |
| <i>A &amp; B Surplus Company</i> , 61-2 BCA par. 3186.....  | 756                |
| <i>Action Manufacturing Company</i> , 57-1 BCA par. 1397.....   | 756                |
| <i>Aerco Sonic</i> , 59-1 BCA 2115.....   | 804                |
| <i>Advance Industrial X-Ray Laboratories</i> , 1 AEC 281.....   | 428, 431           |
| <i>Air-A-Plane Corporation</i> , ASBCA No. 3842, 60-1 BCA par. 2547.....  | 729                |
| <i>Air Transport Associates v. Civil Aeronautics Board</i> , 199 F. 2d 181 (D.C. Cir.).....   | 428                |
| <i>Alabama Great Southern Railroad Company v. United States</i> , 340 U.S. 216 (1950).....  | 742                |
| <i>Allegheny Sportwear Company</i> , ASBCA No. 4163, 58-1 BCA par. 1684.....  | 729                |
| <i>Allen B. DuMont Laboratories, Inc.</i> , 2 AEC 570 (1962).....   | 641, 690, 742, 779 |
| <i>Allied Contractors, Inc.</i> , 59-2 BCA par. 2441.....   | 641                |
| <i>Altman-Wolfe Associates</i> , ASBCA No. 8315, 1963 BCA Sec. 390.....   | 854                |
| <i>American Pipe &amp; Steel Corporation v. Firestone Tire and Rubber Company</i> , 292 F. 2d 640 (1961).....                                 | 592                |
| <i>American Stevedores, Inc.</i> , 60-2 BCA 2686.....   | 859                |
| <i>American Textile Machine Corporation v. United States</i> , 220 F. 2d 584 (1955).....  | 592, 595           |
| <i>Ames &amp; Denning</i> , 1962 BCA par. 3406 (ASBCA).....   | 641, 768           |
| <i>American Trading and Production Corporation</i> , 1963 BCA par. 3662.....  | 803                |
| <i>Arcole Midwest Corporation v. The United States</i> , 125 Ct. Cl. 818.....   | 653                |
| <i>Armory v. Delamirie</i> , 1 Strange 505.....   | 863                |
| <i>Arundel Corporation v. United States</i> , 103 Ct. Cl. 688, cert. denied, 326 U.S. 752.....  | 640, 641           |
| <i>Assignee v. United States</i> , 91 Ct. Cl. 1.....  | 647                |
| <i>Austin Co. v. United States</i> , 314 F. 2d 518 (Ct. Cl. 1963) cert. denied, 375 U.S. 830 (1963); 58 Ct. Cl. 98 (1923); 61-1 BCA 2927..... | 598, 803, 804, 809 |
| <i>Avondale Shipyards, Inc.</i> , 1963 BCA par. 3743.....   | 803                |
| <i>B. H. Baker, Inc.</i> , 60-2 BCA par. 2687.....  | 786                |
| <i>Baltimore &amp; Ohio Railway Company v. United States</i> , 201 F. 2d 795 (3rd Cir.).....  | 742                |
| <i>Bank of America v. Parnell</i> , 352 U.S. 29 (1956).....   | 592                |
| <i>Barnard-Curtiss Company v. United States</i> , 301 F. 2d 909 (Ct. Cl. 1962).....   | 799                |
| <i>Bateson Company, J. W., Inc. v. United States</i> , 143 Ct. Cl. 228 (1958).....  | 798                |
| <i>Bateson, T. C., Construction Company</i> , ASBCA No. 5985, 60-2 BCA 2767.....  | 647, 854           |
| <i>Bechtel-McCone Corporation</i> , BCA 771; 2 C.C.F. 1084.....   | 535                |
| <i>Belco Engineering Company, Inc.</i> , 60-2 BCA par. 2842.....  | 804                |
| <i>Bell Aircraft Corporation</i> , ASBCA No. 248.....   | 526                |
| <i>Benjamin &amp; Fleming</i> , ASBCA No. 219 (1950).....   | 573                |
| <i>Bing, Gerald D.</i> , ASBCA Nos. 4437, 3584; 58-2 BCA 1979.....  | 785                |
| <i>Blatt Electric Company</i> , 1964 BCA par. 4031.....   | 878                |
| <i>Boston Pneumatics, Inc.</i> , 1963 BCA par. 3667 (ASBCA).....  | 768                |
| <i>Bostwick-Batterson Company</i> , ASBCA No. 4363.....   | 729                |
| <i>Bruce Construction Corporation v. United States</i> , 324 F. 2d 516 (Ct. Cl. 1963), ASBCA No. 5932, 60-2 BCA par. 2797.....                | 728, 816, 824      |
| <i>Burton-Rogers, Inc.</i> , ASBCA No. 548, issued March 7, 1960, 60-1 BCA par. 2558.....   | 539                |
| <i>Caldwell &amp; Drake v. Schmulbach</i> , 175 Fed. 429 (1909).....  | 598                |
| <i>California Air Charter, Inc.</i> , 30 C.A.B. 17.....   | 431                |
| <i>Cardinal Building &amp; Constructors, Inc.</i> , ASBCA 6857, 62-1 BCA 3271.....  | 573                |
| <i>Caribbean Engineering Company v. United States</i> , 97 Ct. Cl. 195.....   | 640                |
| <i>Carlo Bianchi v. The United States</i> , 144 Ct. Cl. 500.....  | 655                |
| <i>Carman v. United States</i> , 166 F. Supp. 759.....  | 640                |
| <i>Carnegie Steel Company v. United States</i> , 240 U.S. 156 (1915).....   | 639, 809           |
| <i>Cape Ann Granite Company v. United States</i> , 100 Ct. Cl. 53.....  | 640                |
| <i>Caskel Forge, Inc.</i> , 61-1 BCA par. 2891.....   | 859                |

|  | Page          |
|--|---------------|
| <i>Century Engineering Corporation</i> , ASBCA 2932, 57-2 BCA 1419   | 578           |
| <i>Chalendar v. United States</i> , 119 F. Supp. 186   | 640           |
| <i>Chouteau v. United States</i> , 95 U.S. 61 (1877)   | 572           |
| <i>Clark v. United States</i> , 73 U.S. 543 (1867)   | 766           |
| <i>Clearfield Trust Company v. United States</i> , 318 U.S. 363 (1942)   | 592           |
| <i>Clifton v. United States</i> , 4 How. 242 (1846), 11 L. Ed. 957   | 863           |
| <i>Coastwise Marine Disposal Company</i> , 1 AEC 581, aff'd. 1 AEC 619   | 428, 429      |
| <i>Commonwealth v. King</i> , 150 Mass. 211, 22 N.E. 905   | 325           |
| <i>Con Structors</i> , 60-1, BCA par. 2627   | 660           |
| <i>Cornell, W. J., Co.</i> , 1963 BCA par. 3741  | 878           |
| <i>Consolidated Avionics Corporation</i> , 1963 BCA par. 3888  | 804, 809, 810 |
| <i>Consolidated Edison Co. v. National Labor Relations Board</i> , 305 U.S. 197  | 823           |
| <i>Consolidated Engineering Company</i> , No. 43159, February 1, 1943 (98 Ct. Cls. 256)  | 798, 855, 879 |
| <i>Consolidated Vultee Aircraft Company</i> , ASBCA No. 1648, 4 C.C.F. par. 60, 720  | 526           |
| <i>Consolidated Welding &amp; Engineering Company</i> , 1 AEC 967  | 756           |
| <i>Continental Illinois National Bank v. United States</i> , 112 Ct. Cl. 563 (1949): cert. denied, 343 U.S. 963 (1952); 126 Ct. Cl. 631 (1953) | 798           |
| <i>Conway Electric Company</i> , ASBCA 5223, 59-2 BCA par. 2315  | 742           |
| <i>Credit Company Limited v. Arkansas Central Railway</i> , 128 U.S. 258 (1888)  | 721           |
| <i>Crook v. United States</i> , 270 U.S. 4 (1925)  | 640           |
| <i>Culp Construction Company</i> , ASBCA No. 7780, 1962 BCA par. 3441  | 627           |
| <i>Curtis, Helene v. United States</i> , 312 F. 2d 774 (Ct. Cl. 1963)  | 784, 879      |
| <i>Dane Construction Company</i> , IBCA 255, 60-2 BCA par. 2838  | 742           |
| <i>Day v. United States</i> , 245 U.S. 159 (1917)  | 639           |
| <i>DeArmas v. United States</i> , 70 F. Supp. 605  | 640           |
| <i>Dermott v. Jones</i> , 69 U.S. 1 (1964)   | 639           |
| <i>Dineen v. United States</i> , 109 Ct. Cl. 18 (1947)   | 596           |
| <i>Dittmore-Freimuth Corporation</i> , ASBCA 6446, 61-2 BCA 3112   | 573           |
| <i>D &amp; L Construction Company</i> , 1963 BCA par. 3676   | 799           |
| <i>Donovan Construction Co. v. United States</i> , 138 Ct. Cl. 97 (1957) cert. denied, 355 U.S. 826 (1957)                                     | 799, 802      |
| <i>Douglas Aircraft Corporation, Inc.</i> , WDBCA 1258, 4 C.C.F. 50  | 535           |
| <i>DuBois, A., &amp; Sons, Inc.</i> , 60-2 BCA par. 2750   | 799           |
| <i>Earley Construction Company</i> , ASBCA No. 5637, 60-1 BCA par. 2508  | 614           |
| <i>Eastern Produce Company v. Benson</i> , 278 F. 2d 606 (3rd Cir.)  | 428           |
| <i>Edward Engineering Corporation v. United States</i> , Ct. Cl. No. 218-59 (April 5, 1963)  | 781, 786      |
| <i>E. L. Cournaud &amp; Company, Inc.</i> , 60-2 BCA par. 2840   | 803, 810      |
| <i>Elizabethtown Lincoln Mercury v. Jones</i> , 231 S.W. 2d 42 (Ky. 1950)  | 595           |
| <i>Erie Ry. Company v. Tompkins</i> , 304 U.S. 64 (1938)   | 592, 594      |
| <i>Esso Standard Oil Company</i> , 57-1 BCA par. 1277, 58-1 BCA par. 1611  | 859           |
| <i>Fairbanks, Morse &amp; Co.</i> , 58-2 BCA 7483  | 596           |
| <i>Farnsworth &amp; Chambers Co., Inc.</i> , 60-2 BCA pars. 2712 and 2733  | 660           |
| <i>Federal Communications Commission v. Allentown Broadcasting Corp.</i> , 349 U.S. 358 (1955)   | 429           |
| <i>Federal Telephone &amp; Radio Company</i> , 59-1 BCA par. 2246  | 799           |
| <i>Federal Trade Commission v. Cement Institute</i> , 333 U.S. 683   | 823, 856      |
| <i>Flippin Materials Company v. United States</i> , Ct. Cl. No. 8-87   | 641           |
| <i>Framlco Corporation</i> , ASBCA No. 228, 61-2 BCA par. 3116   | 627           |
| <i>Fuller Company v. United States</i> , 69 F. Supp. 409   | 640           |
| <i>Gay Manufacturing Company v. Camp</i> , 65 Fed. 794 (1895)  | 596           |
| <i>Gennett &amp; Sons, Inc.</i> , ASBCA No. 743 (1950)   | 573           |
| <i>Georgia Lumber Co. v. Compania de Nevegacion Transmar, S. A.</i> , 323 U.S. 334 (1945)  | 721           |
| <i>Gilbertville Trucking Co., Inc. v. United States</i> , 196 F. Supp. 351 (D.C. Mass.)  | 742           |
| <i>Glanzer v. Shepard</i> , 233, N.Y. 236, 135 N.E. 274 (1922)   | 800           |
| <i>Globe Indemnity v. United States</i> , 102 Ct. Cl. 21, 38 (1944)  | 638, 784, 804 |
| <i>G. M. Company Manufacturing, Inc.</i> , ASBCA No. 2883  | 729           |
| <i>Gramm Trailer Corporation</i> , ASBCA 5847, 61-2 BCA 3208   | 573           |

|  | Page                    |
|--|-------------------------|
| <i>Grant, Inc.</i> , 1 AEC 948 (1962)  | 615                     |
| <i>Great Lakes Airlines, Inc. v. C.A.B.</i> , 291 F. 2d 354 (9th Cir. 1911) and 294 2d 217 (D.C. Cir. 1961)                            | 350, 351                |
| <i>Great Lakes Dredge and Dock Company v. United States</i> , 119 Ct. Cl. 504  | 669                     |
| <i>Greenfield Tap and Die Corporation v. United States</i> , 68 Ct. Cl. 61 (1929)  | 598                     |
| <i>Grier-Lawrence Construction Co., Inc. v. United States</i> , 98 Ct. Cl. 434   | 855                     |
| <i>Guerin</i> , ABCA No. 1551 (1948)   | 641, 768                |
| <i>Guerini Stone Co. v. Carlin Construction Co.</i> 248 U.S. 334 (1919)  | 647                     |
| <i>Hadley v. Barendale</i> , 9 Exch. 341 (1854)  | 669                     |
| <i>Hagstrom Construction Co.</i> , 61-1 BCA par. 3090  | 660                     |
| <i>Hargis Canneries, Inc. v. United States</i> , 60 F. Supp. 729   | 640                     |
| <i>Harris, Charles, Company</i> , 60-1 BCA par. 2491   | 799                     |
| <i>Harris Coal Company</i> , 58-1 BCA par. 1688  | 799                     |
| <i>Harris Truck Lines, Inc. v. Cherry Meat Packers, Inc.</i> , 371 U.S. 215 (1962)   | 721                     |
| <i>Hathaway v. United States</i> , 249 U.S. 460 (1919)   | 595, 596                |
| <i>Hayden, Harding &amp; Buchanan, Inc.</i> , 2 AEC 683, 734, 737, 762 (1963)  | 779                     |
| <i>Hawaiian Dredging and Construction Co., Ltd.</i> , ASBCA No. 7891, 1962 BCA par. 3367   | 627                     |
| <i>Hol-Gar Manufacturing Co.</i> , 1962 BCA, 3551  | 804, 809                |
| <i>Holly Corporation</i> , ASBCA No. 2685, 60-2 BCA § 2685   | 823                     |
| <i>Holmes &amp; Narver</i> , 2 AEC 522, 547 (1962)   | 783                     |
| <i>Huntington Seating Co., Inc.</i> , 1962 BCA par. 3396   | 748                     |
| <i>Hurst, J. W., &amp; Son Awnings, Inc.</i> , 59-1 BCA par. 2095  | 804                     |
| <i>Hughes v. Securities and Exchange Commission</i> , 174 F. 2d 969 (D.C.)   | 428                     |
| <i>Hill v. Hawes</i> , 320 U.S. 520 (1944)   | 721                     |
| <i>Hollingshead Corp. v. United States</i> , 124 Ct. Cl. 681 (1953)  | 802, 812                |
| <i>Houston Radio Supply Co., Inc.</i> , 56-2 BCA par. 1155   | 748                     |
| <i>Ideal Pure Milk Co.</i> , ASBCA No. 3801, 57-1 BCA § 1317   | 824                     |
| <i>Imparato Stevedoring Corp.</i> , 57-2 BCA par. 1427   | 859                     |
| <i>Independent Broadcasting Co. v. Federal Communications Commission</i> , 193 F. 2d 900 (D.C. Cir.) cert. denied, 344 U.S. 837 (1952) | 429                     |
| <i>Industrial Construction Corporation</i> , NASA, BCA 59-1 and 59-2, NASA Appeals Panel, November 27, 1961, 61-2 BSA par. 548         | 539                     |
| <i>Industrial Engineering Co., Inc. v. United States</i> , 92 Ct. Cl. 54   | 639                     |
| <i>In re Carter</i> , 192 F. 2d 15 (D.C. Cir. 1951)  | 351                     |
| <i>In re The Northern Corp.</i> , 12 F.C.C. 1940   | 350                     |
| <i>Intermountain Company</i> , 58-2 BCA par. 2024  | 640                     |
| <i>Interstate Circuit v. United States</i> , 306, U.S. 208 (1938)  | 865                     |
| <i>Irvin Prickett &amp; Sons, Inc.</i> , 60-2 BCA par. 2747  | 799                     |
| <i>Ivey Brothers Construction Co.</i> , ASBCA No. 4334, 58-2 BCA 2004 (1958)   | 785                     |
| <i>Jefferson Hotel Co. v. Braumbaugh</i> , 168 Fed 867 (1909)  | 598                     |
| <i>Jensen, George E.</i> , 1964 BCA par. 4196  | 879                     |
| <i>Johnson, John A., &amp; Sons, Inc.</i> , ASBCA No. 4403, 59-1 BCA § 2088  | 854                     |
| <i>Jordan v. United Insurance Company of America</i> , 289 F. 2d 778 (D.C. Cir. 1961)  | 351                     |
| <i>Keflavik Contractors</i> , 61-2 BCA par. 3161   | 638                     |
| <i>Kiewit, Peter v. United States</i> , 109 Ct. Cl. 390, 418 (1947)  | 536, 742                |
|  | 602, 640, 665, 784, 879 |
| <i>Kirk v. United States</i> , 111 Ct. Cl. 552 (1948)  | 742                     |
| <i>Klein v. U.S.</i> , 385 F. 2d 778 (1961)  | 507                     |
| <i>Kraft Construction Company, Inc.</i> , ASBCA 4976, 59-2 BCA par. 2347   | 742                     |
| <i>Langoma Industries, Inc. v. U.S.</i> , 133 Ct. Cl. 248  | 505                     |
| <i>Langwear, Inc.</i> , ASBCA No. 3607, 57-1 BCA and 1269  | 824                     |
| <i>Levering &amp; Garrigues Co. v. United States</i> , 73 Ct. Cls. 566   | 729                     |
| <i>Lillard's</i> , ASBCA 6630, 61-1 BCA 3053   | 573                     |
| <i>Liu, Chi Sheng v. Holton</i> , 297 F. 2d 740 (9th Cir.)   | 856                     |
| <i>Lockheed Aircraft Corporation War Department</i> , BCA Nos. 1375, 4 C.C.F. par. 60, 391   | 526                     |
| <i>Long v. United States</i> , 102 F. Supp. 134  | 640                     |
| <i>L &amp; O Research and Development Corp.</i> , 57-2 BCA par. 1514   | 803                     |
| <i>Lott, Inc.</i> , 2 A.E.C. 607 (1963)  | 615                     |

|   | Page               |
|---|--------------------|
| <i>Louisville and Nashville Railroad Co. v. United States</i> , 39 Ct. Cl. 405 (1904).....                                  | 859                |
| <i>Mac Exploration Company</i> , 2 AEC 711.....   | 742                |
| <i>Machin v. Zuckert</i> , 316 F. 2d 336 (D.C. Cir. 1963); cert. denied 375 U.S. 896 (1963).....                            | 678, 830           |
| <i>Manhattan Lighting Equipment Co., Inc.</i> , 61-2 BCA par. 3140.....   | 756                |
| <i>Marten v. Hess</i> , 176 F. 2d 834 (C.A. 6th 1949).....  | 721                |
| <i>Martin Company</i> , ASBCA No. 5825.....   | 528                |
| <i>Martz, R. G. Construction Corp.</i> , ASBCA No. 8031, 1962 BCA par. 3421.....  | 627                |
| <i>Mason Company</i> , WDBCA 609, 2 C.C.F. 1160.....  | 535                |
| <i>Maxwell Electronics Corporation</i> , 1963 BCA par. 3916.....  | 804                |
| <i>McFerran v. United States</i> , 39 Ct. Cl. 441.....  | 824                |
| <i>Mead Aviation Equipment Company</i> , 57-2 BCA par. 1391.....  | 748                |
| <i>Merritt v. United States</i> , 267 U.S. 338 (1925).....  | 798                |
| <i>Mertz, J. W.</i> , 59-1 BCA par. 2086.....   | 659, 742           |
| <i>Mifflinburg Body Works</i> , ASBCA No. 427 (1950).....   | 573                |
| <i>Miles Construction Co.</i> , 2 AEC 477.....  | 804                |
| <i>Miles v. Proffitt</i> , 266 S.W. 2d 333 (Ky. 1954).....  | 595                |
| <i>Mills, Robbins Inc.</i> , ASBCA No. 2255 (1956).....   | 804                |
| <i>Minneapolis and St. Louis Railway Co. v. United States</i> , 361 U.S. 173.....   | 742                |
| <i>Mitchell Canneries v. United States</i> , 77 F. Supp. 498.....   | 640                |
| <i>Modern Foods, Inc.</i> , ASBCA No. 2090, 57-1 BCA par. 1229.....   | 729                |
| <i>Montgomery-Macri Company and Western Line Construction Co., Inc.</i> , 1BCA 59 and 72, 1963 BCA par. 3819.....           | 742                |
| <i>Montship Lines, Ltd. v. Federal Maritime Board</i> , 295 F. 2d 147 (App. D.C. 161).....                                  | 721                |
| <i>Morrison-Knudson Co., Inc.</i> , 60-2 BCA par. 2799.....   | 799                |
| <i>Moran Bros. Inc.</i> , 2 AEC 548 (1962).....   | 742                |
| <i>Nager Electric Company and Keystone Engineering Corp.</i> , 2 AEC (1964).....  | 774, 822, 856, 859 |
| <i>National Concrete and Foundation Co.</i> , ASBCA No. 6711, 61-2 BCA par. 3231.....                                       | 730                |
| <i>National Metropolitan Bank v. United States</i> , 323 U.S. 454 (1945).....   | 592                |
| <i>National Relations Board v. Monsanto Chemical Company</i> , 205 F. 2d 763 (C.A. 8th 1953).....                           | 721                |
| <i>National U.S. Radiator Corporation</i> , 59-2 BCA par. 2386.....   | 804                |
| <i>Newcomb v. United States</i> , 68 Ct. Cl. 246 (1929).....  | 598                |
| <i>New England Tank Cleaning Company</i> , 59-1 BCA par. 2180.....  | 859                |
| <i>New York Continental Jewell Filtration Co. v. United States</i> , 55 Ct. Cl. 288 (1920).....                             | 598                |
| <i>New York Shipbuilding Corporation</i> , 1 AEC 707 (1961).....  | 353, 431           |
| <i>Nielsen, S. N. Company v. United States</i> , 141 Ct. Cl. 793 (1958) ASBCA No. 1990.....                                 | 729                |
| <i>Norair Engineering Corp.</i> , ASBCA No. 3527 and cases cited.....   | 640                |
| <i>Northeastern Engineering, Inc.</i> , 61-1 BCA par. 3026.....   | 804                |
| <i>Northwest Airlines Inc., et al. v. Glenn L. Martin Co.</i> , 227 F. 2d 120 at 127 cert. denied, 350 U.S. 937 (1956)..... | 860                |
| <i>Nuclear Advisors, Inc.</i> , 2 AEC 196, 254 (1963).....  | 774                |
| <i>Oakland Industries</i> , ASBCA Nos. 5809-5811, 5813, 5814, 61-1 BCA ¶ 2881, 2899, 2900.....                              | 824                |
| <i>Oliver-Finnie Co. v. United States</i> , 150 Ct. Cl. 189.....  | 824                |
| <i>Oregon Plywood Sales Corp.</i> , 56-2 BCA par. 1083.....   | 748                |
| <i>Old Nick Williams Co. v. United States</i> , 215 U.S. 541 (1910).....  | 721                |
| <i>Orlando, Tony</i> , ASBCA No. 7023, 61-2 BCA and 3154.....   | 824                |
| <i>Ozark Dam Constructors v. United States</i> , 288 F. 2d 913.....   | 641, 647, 654      |
| <i>Page Communication Engineer, Inc.</i> , 58-1 BCA par. 1591.....  | 640                |
| <i>Pan-Atlantic Steamship Corp. v. Atlantic Coast Line R.R.</i> , 353 U.S. 436 (1956).....                                  | 351                |
| <i>Parish v. United States</i> , 98 F. Supp. 347, cert. denied, 342 U.S. 953.....   | 639                |
| <i>Pastushin Industries, Inc.</i> , 1963 BCA par. 3757.....   | 804                |
| <i>Patti-MacDonald and Associates</i> , 60-2 BCA par. 2709.....   | 799                |
| <i>Philips Electronics, Inc.</i> , 58-1 BCA par. 1819.....  | 803                |
| <i>Phoenix Bridge Co. v. United States</i> , 211 U.S. 188.....  | 639                |
| <i>Plant Supervision Corp.</i> , ASBCA No. 6335, 61-1 BCA and 2940.....   | 854                |

|  | Page                         |
|--|------------------------------|
| <i>Platt Contracting Co., Inc.</i> , ASBCA Nos. 2851, 2852, 58-2 BCA 1907 (1958).....                                | 785                          |
| <i>Plumley v. United States</i> , 226 U.S. 545 (1913).....   | 804                          |
| <i>Polan Industries Inc.</i> , 58-2 BCA par. 1982.....   | 874                          |
| <i>Pressed Steel Car Company, Inc.</i> , ASBCA No. 2432.....   | 578                          |
| <i>Prester, Inc.</i> , 61-1 BCA par. 2937.....   | 779, 803                     |
| <i>Priebe &amp; Sons v. United States</i> , 332 U.S. 407 (1947).....   | 592, 595, 596                |
| <i>Railroad Waterproofing Corp. v. United States</i> , 133 Ct. Cl. 911 (1956).....                                   | 803                          |
| <i>Randolph Engineering Company</i> , 58-2 BCA par. 2053.....  | 875                          |
| <i>Rathburn Engineering Corp.</i> , 59-2 BCA par. 2289.....  | 803                          |
| <i>Reed, M. T., Construction Company</i> , 60-2 BCA par. 2684.....   | 785, 803                     |
| <i>Remler Company Ltd.</i> , 59-2 BCA par. 2336.....   | 799                          |
| <i>Rental and Frost Inc.</i> , ASBCA No. 7344, 1962 BCA par. 3536.....   | 627                          |
| <i>Richmond Steel Company</i> , 56-2 BCA par. 1151.....  | 799                          |
| <i>Rispin v. Midnight Oil Company</i> , 291 Fed. 481 (1923).....   | 596                          |
| <i>Robinson v. United States</i> , 261 U.S. 486 (1923).....  | 595, 596, 599                |
| <i>Rogers Construction Company</i> , Appeal of, ASBCA No. 4125, 58-1 BCA par. 1657.....                              | 611                          |
| <i>Rosco Engineering Corp. and Association</i> , ASBCA No. 5902, 61-1 BCA par. 2973.....                             | 730                          |
| <i>Roscoe Engineering Corporation</i> , ASBCA No. 4820, January 16, 1961, 61-1, BCA par. 2919.....                   | 539                          |
| <i>Ross, J. A. and Company v. United States</i> , 126 Ct. Cl. 323 (1953).....  | 742                          |
| <i>Royal Electric Inc.</i> , ASBCA No. 3340, 62 BCA 3571.....  | 823                          |
| <i>Schulman Electric Company v. United States</i> , 142 Ct. Cl. 399.....   | 647                          |
| <i>Schuebel v. Orrick</i> , 153 F. Supp. 701 (D.C.) aff'd, 251 F. 2d 919 (D.C. Cir.) cert. denied, 356 U.S. 927..... | 428, 431                     |
| <i>S. &amp; E. Contractors, Inc.</i> , 2 AEC 631 (1963).....   | 689, 785, 788, 803, 855, 881 |
| <i>Seaview Electric Company</i> , 1962 BCA par. 3365.....  | 748                          |
| <i>Severin v. United States</i> , 99 Ct. Cl. 435 (1943), cert. denied, 322 U.S. 733 (1944).....                      | 795, 798                     |
| <i>Shepherd v. United States</i> , 125 Ct. Cl. 724.....  | 505                          |
| <i>Ship Construction Company v. United States</i> , 91 Ct. Cl. 419.....  | 649                          |
| <i>Simmons Company, Inc. v. United States</i> , 304 F. 2d 886 (Ct. Cl. 1962).....                                    | 798                          |
| <i>Skidmore, Owings and Merrill</i> , ASBCA No. 5115, 60-1 BCA par. 2570.....  | 730                          |
| <i>Smith v. Onyx Oil and Chemical Company</i> , 218 F. 2d 104.....   | 649                          |
| <i>Smith v. Ward</i> , 256 J. W. 2d, 385 (Ky. 1953).....   | 595                          |
| <i>Spearin v. United States</i> , 248 U.S. 132 (1918).....   | 862                          |
| <i>Spencer Explosives, Inc.</i> , 59-2 BCA par. 2795.....  | 804                          |
| <i>Spencer-Safford Loadcraft, Inc.</i> , 1962, BCA 3315.....   | 699                          |
| <i>Standard Store Equipment Company, Inc.</i> , 58-2 BCA par. 1902.....  | 660                          |
| <i>State Corporation Commission of the State of Kansas v. United States</i> , 184 F. Supp. 691 (D.C. Kansas).....    | 742                          |
| <i>Stavrou, Inc.</i> , 1963 BCA 3927.....  | 799                          |
| <i>Sterling Securities Co.</i> , 37 S.E.C. 837.....  | 431                          |
| <i>Stevedoring, Luzon Corporation</i> , ASBCA No. 7714, 62 BCA ¶ 3539.....   | 824                          |
| <i>Stout, Hall and Bangs v. United States</i> , 27 Ct. Cl. 385.....  | 798                          |
| <i>Sun Oil Company v. Federal Power Commission</i> , 256 F. 2d 233 cert. denied, 358 U.S. 872.....                   | 775                          |
| <i>Sun Printing &amp; Pub. Asso. v. Moore</i> , 183 U.S. 642 (1902).....   | 595                          |
| <i>Sutter Construction Company</i> , WDBCA Nos. 747 et. al. (1945).....  | 535                          |
| <i>Sweeney v. Erving</i> , 228 U.S. 233 (1913).....  | 859                          |
| <i>T. Barry Kingman Marine Construction</i> , 60-2 BCA par. 2756.....  | 804                          |
| <i>Taag Designs, Inc.</i> , ASBCA No. 2371 (1956).....   | 573                          |
| <i>Temco Aircraft Corp.</i> , ASBCA 6541, 61-2, BCA 3211.....  | 573                          |
| <i>The Harriman</i> , 76 U.S. 161 (1869).....  | 639                          |
| <i>Tidewater-Kiewit-P.E.C.</i> , 61-2 BCA par. 3178.....   | 799                          |
| <i>Thompkins, Chas. H., Company</i> , ASBCA No. 2661 (1955).....   | 799                          |
| <i>Torres v. United States</i> , 112 F. Supp. 363 (1953).....  | 768                          |
| <i>Towne v. Eisner</i> , 245 U.S. 418, 425 (1918).....   | 529, 875                     |
| <i>Triangle Construction Company</i> , 62-1 BCA par. 3317.....   | 659, 742                     |
| <i>Twain Manufacturing Company, Inc.</i> , 57-2 BCA par. 1371.....   | 748                          |
| <i>Ultramares v. Touche</i> , 255 N.Y. 170, 174 N.E., 441 (1931).....  | 800                          |

|  | Page                    |
|--|-------------------------|
| <i>Unexcelled Chemical Corporation</i> , 60-1 BCA par. 2587                                      | 804                     |
| <i>Union Paving Company v. United States</i> , 126 Ct. Cl. 478 (1953)                            | 596                     |
| <i>United States v. Bethlehem Steel Company</i> , 205 U.S. 105 (1907)                            | 595, 596                |
| <i>United States v. Beuttas</i> , 324 U.S. 768 (1945)  | 609                     |
| <i>United States v. Carlo Bianchi</i> , 373 U.S. 709 (1963)                                      | 804                     |
| <i>United States v. Blair</i> , 321 U.S. 730 (1944)  | 798                     |
| <i>United States v. Brooks-Callaway Co.</i> , 318 U.S. 120 (1943)                                | 594, 595, 596, 599, 640 |
| <i>United States v. Callahan Walker Construction Company</i> , 317 U.S. 56                       | 651                     |
| <i>United States v. Chicago, B&amp;O R. Co.</i> , 239 Fed. 185 (C.C.A. 8th)                      | 325                     |
| <i>United States v. Foley</i> , 329 U.S. 64  | 640                     |
| <i>United States v. Gleason</i> , 175 U.S. 588   | 639                     |
| <i>United States v. Glenn L. Martin Company</i> , 308 U.S. 62                                    | 535                     |
| <i>United States v. Illinois Central R.R. Co.</i> , 303 U.S. 239                                 | 428                     |
| <i>United States v. Johnson</i> , 288 F. 2d 40 (5th Cir. 1961)                                   | 863                     |
| <i>United States v. Jones</i> , 176 F. 2d 278 (1949)   | 592                     |
| <i>United States v. Kanter</i> , 137 F. 2d 828   | 599                     |
| <i>United States v. LeRoy Dyal Company</i> , 186 F. 2d 460 (1951)                                | 592                     |
| <i>United States v. Mississippi Valley Generating Company</i> , 364 U.S. 520                     | 639                     |
| <i>United States v. Peck</i> , 102 U.S. 64   | 640                     |
| <i>United States v. Rice</i> , 317 U.S. 61 (1941)  | 593, 640, 651           |
| <i>United States Sugar Refinery v. E. P. Allis Co.</i> , 56 Fed. 786 (7th Cir.)                  | 823                     |
| <i>United States v. United Engineering Co.</i> , 234 U.S. 236 (1914)                             | 595, 596, 599           |
| <i>United States v. Walkof</i> , 144 F. 2d 75 (1944)   | 597                     |
| <i>United States v. Wood</i> , 39 U.S. 430   | 823                     |
| <i>Universal Camera Corp. v. National Labor Relations Board</i> , 340 U.S. 474                   | 429                     |
| <i>Utah-Manhattan-Sundt</i> , 1963 BCA par. 3839   | 809                     |
| <i>Varcoe v. Lee</i> , 180 Ca. 838, 181 par. 223   | 325                     |
| <i>Vaughan v. American Ins. Co.</i> , 15 F. 2d 526 (C.C.A. 5th 1926)                             | 721                     |
| <i>Victory Salvage Co.</i> , 56-2 BCA par. 1113  | 803                     |
| <i>Virginia Roofing Co.</i> , ASBCA No. 2059 (1954)  | 573                     |
| <i>Volentine and Littleton v. United States</i> , 144 Ct. Cl. 723 (1959)                         | 786                     |
| <i>Walsh v. United States</i> , 102 F. Supp. 589   | 640                     |
| <i>Warren Brothers Co. v. United States</i> , 123 Ct. Cl. 48 (1952)                              | 798                     |
| <i>Warren Painting Co., Inc.</i> , ASBCA 6511, 61-2 BCA 3199                                     | 573                     |
| <i>Wells Bros. v. United States</i> , 254 U.S. 83  | 639, 640, 666           |
| <i>Weather Bros., Transfer Co., Inc. v. United States</i> , 109 Ct. Cl. 310 (1943)               | 596                     |
| <i>West Coast Steamship Company</i> , 57-2 BCA par. 1417, 59-2 BCA par. 2366                     | 859                     |
| <i>Western Contracting Corp.</i> , ASBCA No. 8173; 1962 BCA par. 3519                            | 627                     |
| <i>Whillock Coil Pipe Co. v. United States</i> , 72 Ct. Cl. 473                                  | 639                     |
| <i>Willapoint Oysters, Inc. v. Ewing</i> , 174 F. 2d 676 (9th Cir.) cert. denied, 338 U.S. 860   | 823                     |
| <i>Wingate Construction Co. v. United States</i> , Ct. Cl. No. 394-60 (January 24, 1964 sl. op.) | 813                     |
| <i>Wise v. United States</i> , 249 U.S. 361 (1919)   | 595, 596                |
| <i>W.P.C. Enterprises, Incorporated v. United States</i> , 323 F. 2d 874 (Ct. Cl. 1963)          | 813, 879                |
| <i>W. Southard Jones, Inc.</i> , ASBCA 6321, 61-2 BCA 3182                                       | 573                     |
| <i>X-Ray Engineering Company</i> , 1 AEC 466, aff'd, 1 AEC 553 (1960)                            | 354, 428, 429           |
| <i>Young and Smith Construction Company</i> , 58-1 BCA par. 1803                                 | 799                     |

## TABLE OF STATUTES CITED

|  | Page  |
|--|---|
| Administrative Procedures Act of 1946, 60 Stat. 237: | 884   |
| Sec. 2(g)  | 871, 885  |
| Sec. 5(a)  | 4   |
| Sec. 6(a)  | 348, 349, 427, 4                                |
| Sec. 6(d)  | 884   |
| Sec. 7(c)  | 349 et seq., 428, 430, 432                      |
| Sec. 8   | 441   |
| Sec. 9(b)  | 441   |
| Air Pollution Control Act of 1963, 77 Stat. 392      | 395   |
| Atomic Energy Act of 1954, 68 Stat. 919:             | 3, 30,  |
| Sec. 102   | 49, 155, 178, 181, 286, 315, 393, 411, 422, 446 |
| Sec. 104   | 42  |
| Sec. 161   | 34, 131, 283, 412                               |
| Sec. 170   | 884   |
| Sec. 181   | 46, 328   |
| Sec. 182   | 60  |
| Sec. 183   | 3   |
| Sec. 185   | 41  |
| Sec. 189   | 265, 287, 394                                   |
| Sec. 191   | 196, 243, 254, 255                              |
| Sec. 274   | 350   |
| Interstate Commerce Act, 24 Stat. 379:               | 798   |
| Sec. 311(a)  | 525   |
| Tucker Act, 24 Stat. 505                             | 609   |
| Vinson-Trammell Act of 1934, 48 Stat. 503            | 329   |
| 41 U.S.C.A. 322, 68 Stat. 81                         | 903   |
| 46 U.S.C. 1206, 70 Stat. 731                         |   |

**TABLE OF RULES OF COMMISSION CITED\***

|                                   | Page                          |                                 | Page                    |
|-----------------------------------|-------------------------------|---------------------------------|-------------------------|
| Sec. 1.15                         | 628                           | Sec. 2.730                      | 54,                     |
| Sec. 1.25                         | 249                           | 73, 115, 176, 194, 246, 258,    |                         |
| Sec. 1.63                         | 219                           | 262, 263, 289, 320, 339, 389,   |                         |
| Sec. 1.100                        | 249, 338                      | 621, 624, 628, 676, 710, 735,   |                         |
| Sec. 1.103                        | 346                           | 736, 775, 886.                  |                         |
| Sec. 2.1                          | 389                           | Sec. 2.731                      | 13, 32, 245, 367        |
| Sec. 2.2                          | 430                           | Sec. 2.732                      | 757, 759, 824           |
| Sec. 2.100                        | 430                           | Sec. 2.736                      | 13, 31, 145             |
| Sec. 2.109                        | 347, 352, 424                 | Sec. 2.738                      | 1                       |
| Sec. 2.200                        | 352, 430                      | Sec. 2.740                      | 620, 825                |
| Sec. 2.201                        | 64,                           | Sec. 2.741                      | 619, 621, 624, 830      |
| 343, 344, 351, 352, 428, 430, 432 |                               | Sec. 2.743                      | 324, 434, 449, 823, 856 |
| 95                                |                               | Sec. 2.751                      | 11, 23, 28, 48, 624     |
| Sec. 2.202                        | 628, 675, 883                 | Sec. 2.752                      | 11, 23, 48, 391         |
| Sec. 2.401                        | 676                           | Sec. 2.756                      | 290                     |
| Sec. 2.402                        | 627, 674, 770, 772            | Sec. 2.760                      | 164,                    |
| Sec. 2.413                        | 480, 674, 756                 | 176, 193, 207, 249, 361, 387,   |                         |
| Sec. 2.414                        | 824                           | 769, 893.                       |                         |
| Sec. 2.416                        | 628, 772                      | Sec. 2.761                      | 170, 171, 175, 258      |
| Sec. 2.417                        | 605, 606, 682, 772            | Sec. 2.762                      | 60,                     |
| Sec. 2.418                        | 751, 756                      | 164, 170, 172, 173, 181, 193,   |                         |
| Sec. 2.420                        | 624, 871, 872, 885            | 245, 247, 252, 258, 264, 268,   |                         |
| Sec. 2.430                        | 480, 551, 610, 824, 888       | 270, 271, 282, 303, 313, 361,   |                         |
| Sec. 2.431                        | 148, 627                      | 363, 365, 387, 411, 423, 440,   |                         |
| Sec. 2.432                        | 566,                          | 510, 566, 719, 720, 721, 723,   |                         |
| Sec. 2.433                        | 587, 610, 679, 719, 720, 721, | 734, 735, 737, 739, 750, 757,   |                         |
| 722, 734, 736, 742, 749, 750,     |                               | 774, 843, 852, 883, 890.        |                         |
| 769, 843, 890, 893.               |                               | Sec. 2.763                      | 886                     |
| Sec. 2.440                        | 475,                          | Sec. 2.764                      | 411                     |
| 510, 547, 566, 587, 719, 721,     |                               | Sec. 2.770                      | 772, 774                |
| 734, 742, 750, 758, 762, 774,     |                               | Sec. 2.900                      | 619, 624                |
| 823, 843, 850, 868, 869, 882,     |                               | Sec. 2.904                      | 619                     |
| 883, 890.                         |                               | Sec. 2.905                      | 619                     |
| Sec. 2.443                        | 510                           | Sec. 2.907                      | 624                     |
| Sec. 2.700                        | 824                           | Sec. 2.914                      | 619, 624                |
| Sec. 2.701                        | 674, 735, 736                 | Sec. 9.4                        | 621, 623, 676           |
| Sec. 2.702                        | 722                           | Sec. 9.7                        | 621, 623, 676           |
| Sec. 2.703                        | 871                           | Part 20                         | 10,                     |
| Sec. 2.705                        | 54, 95, 197, 245              | 22, 40, 56, 59, 60, 61, 86, 87, |                         |
| Sec. 2.708                        | 772                           | 138, 139, 147, 150, 157, 174,   |                         |
| Sec. 2.710                        | 770                           | 185, 190, 226, 266, 308, 310,   |                         |
| Sec. 2.711                        | 624, 722, 735                 | 343, 358, 399, 423, 426, 435,   |                         |
| Sec. 2.712                        | 735, 736                      | 439, 461.                       |                         |
| Sec. 2.713                        | 245                           | Part 30                         | 41,                     |
| Sec. 2.714                        | 172, 173, 245, 445, 675       | 49, 56, 59, 60, 130, 155, 255,  |                         |
| Sec. 2.715                        | 172,                          | 295, 341, 346, 349, 425, 431,   |                         |
| 173, 208, 216, 245, 256, 290,     |                               | 823.                            |                         |
| 395, 447.                         |                               | Part 31                         | 342,                    |
| Sec. 2.716                        | 605, 606                      | 343, 355, 357, 358, 423, 425,   |                         |
| Sec. 2.717                        | 316,                          | 431.                            |                         |
| 320, 338, 339, 425, 431, 710      |                               | Part 40                         | 41, 49, 56, 59          |
| Sec. 2.718                        | 211,                          | Sec. 50.12                      | 394, 407                |
| 213, 247, 258, 264, 270, 316,     |                               | Sec. 50.33                      | 394, 406, 409           |
| 339, 431, 445, 621, 624, 628,     |                               | Sec. 50.34                      | 30, 386                 |
| 677, 710, 872.                    |                               | Sec. 50.35                      | 8, 276, 312, 386, 387-  |
| Sec. 2.721                        | 367, 445                      | 411, 447, 465                   |                         |

\* The Commission's Rules and Regulations are contained in Title 10, Chapter I, of the Code of Federal Regulations.

|                               | Page                    |                               | Page          |
|-------------------------------|-------------------------|-------------------------------|---------------|
| Sec. 50.40                    | 12, 328, 406, 409, 422  | Part 55                       | 35, 132       |
| Sec. 50.45                    | 406, 422                | Part 70                       | 41, 49, 155   |
| Sec. 50.52                    | 42                      | Part 100                      | 180,          |
| Sec. 50.54                    | 24, 49, 252, 314, 388,  | 292, 325, 401, 404, 435, 449, |               |
| 412, 468                      |                         | 462.                          |               |
| Sec. 50.55                    | 24, 252, 314, 388, 412, | Part 115                      | 92,           |
| 468                           |                         | 109, 111, 208, 210, 212, 213, |               |
| Sec. 50.57                    | 46,                     | 216, 219, 221, 240, 249, 258, |               |
| 48, 125, 126, 141, 142, 154,  |                         | 266, 268, 269, 317, 389.      |               |
| 155, 175, 249, 286, 298, 301, |                         | Part 140                      | 31,           |
| 302, 317, 319, 320.           |                         | 34, 48, 128, 131, 142, 146,   |               |
| Sec. 50.59                    | 42, 141, 293, 300       | 154, 162, 184, 192, 193, 283, |               |
| Sec. 50.60                    | 25, 51, 157, 253, 283,  | 287, 301.                     |               |
| 412                           |                         | Part 150                      | 255, 256, 257 |

## REGULATORY DECISIONS

### Subject Index

|   | Page  |
|---|---|
| Advisory Committee on Reactor Safeguards  | 7   |
| 22, 31, 68, 69, 79, 110, 112, 128, 138, 140, 144, 153, 158, 163, 167, 169, 170, 178, 192, 218, 236, 237, 238, 239, 242, 250, 266, 281, 286, 307, 331, 333, 334, 335, 336, 368, 385, 405, 414, 415, 417, 441, 443, 455, 462. | 330   |
| American Bureau of Shipping   | 143, 221, 266, 446  |
| Boiling Water Coolant   | 160, 161  |
| Boron Removal Accident  | 134, 139, 161, 163, 169, 332, 457   |
| Burnout Ratio   | 80, 160   |
| Burnup  | 1, 27, 60, 64, 70, 196, 243, 254, 338, 340, 365, 423                                      |
| Byproduct Material  | 261   |
| Certification of Issue for Determination by Commission  | 272, 316  |
| Certification of Motion to Commission   | 67, 258, 270  |
| Certification of Question to the Commission   | 175   |
| Certification of Ruling to Commission   | 160, 161, 379, 381, 399   |
| Chemical Shim   | 6   |
| Containment   | 19, 118, 132, 148, 251, 261, 266, 286, 295, 335, 380, 413, 450, 466, 468.                 |
| Control System  | 6, 18, 36, 80, 119, 134, 149, 159, 188, 223, 267, 275, 294, 334, 379, 398, 451, 466, 468. |
| Core Spray System   | 147, 452, 466, 468  |
| Department of Commerce  | 3, 279, 281, 330  |
| Department of State   | 67  |
| Departure from Nucleate Boiling (DNB)   | 161, 163, 179, 188, 457   |
| Doppler Effect  | 16, 286, 332, 379   |
| Emergency Procedure Manuals   | 335   |
| Fuel Elements   | 6, 17, 77, 89, 133, 137, 148, 150, 159, 160, 222, 226, 291, 305, 379, 398, 450.           |
| Fuel Reprocessing   | 272, 305  |
| Gas Coolant   | 12  |
| Graphite Failure  | 291   |
| Graphite Moderator  | 15  |
| Heavy Water Moderator   | 3, 183  |
| Helium Coolant  | 15  |
| Hydrogen-Oxygen Reaction  | 457   |
| Immediate Effectiveness of Initial Decision   | 175, 176, 240, 247, 252   |
| In Camera Submission of Evidence  | 463, 466, 468   |
| Increase in Power Level   | 165, 177  |
| Instrumentation   | 6, 18, 104, 136, 149, 188, 267, 286, 380, 399, 451  |
| Insurance   | 146, 162  |
| Interlocks  | 455, 466, 468   |
| International Convention for Safety of Life at Sea  | 330   |
| International Load Line Convention  | 330   |
| Interstate Commerce Commission  | 57, 58, 60  |
| Intervention  | 54, 63, 145, 172, 173, 184, 245, 288, 445   |
| Iodine Release  | 278, 441, 466, 468  |
| Joint Stipulation   | 129   |
| License Renewal   | 338, 340, 365, 423  |
| Limited Appearance  | 54, 245, 367, 395, 447  |
| Loss of Coolant   | 6, 224, 462   |
| Manual Scram  | 452, 466, 468   |
| Maritime Administration   | 68, 93, 121, 241, 329   |
| Maximum Credible Accident   | 6, 20, 120-123, 139, 151, 180, 189, 191, 235, 436   |
| Meltdown  | 6, 7, 106, 121, 278, 297, 383   |

|   | Page   |
|---|--|
| Memorandum and Authorization  | 68, 112, 241, 321, 416   |
| Memorandum and Order of Commission                                  | 28,  |
| 54, 172, 173, 174, 245, 248, 259, 303, 317, 319, 323, 327, 389, 421 | 413  |
| Memorandum Opinion  | 208, 248   |
| Memorandum Opinion and Interim Authorization Order                  | 8-9, 21, 107,  |
| Meteorology   | 117, 136, 147, 185, 251, 261, 274, 277, 309, 368, 374, 397, 439, 449 |
| Mockup Reactor  | 121  |
| Monitoring  | 275, 325   |
| Moot Proceeding   | 256  |
| Motion for Hearing to Review Initial Decision                       | 54   |
| Motion for Leave to Intervene                                       | 54   |
| Motion to Deny Application and Terminate Proceeding                 | 67   |
| Motion to Revoke License  | 1  |
| Nonradiological Hazards   | 447  |
| Notice of Proposed Denial   | 197  |
| Notice of Violation   | 197  |
| Official Notice   | 324, 434, 449  |
| Order   | 176, 194, 214, 243, 247, 264, 271, 362, 364, 365                     |
| Order of Remand   | 67   |
| Order Reopening Record for Further Hearing                          | 73   |
| Order Suspending License  | 1, 2   |
| Order to Show Cause   | 1, 2, 64, 196, 243, 326, 434, 441                                    |
| Organic Coolant   | 44   |
| Partial Recirculation Flow Rate                                     | 455, 462, 466, 468   |
| Participation by Persons Not Parties                                | 194  |
| Period Scram  | 451  |
| Petition to Reopen Proceeding                                       | 261, 265   |
| Poison Curtains   | 149, 451   |
| Population Change   | 324  |
| Post Incident Cooling System  | 143  |
| Power Reactor Demonstration Program                                 | 14, 74, 130, 215   |
| Pressure Vessel   | 18, 77, 101, 118, 133, 148, 226, 227, 380, 398, 450                  |
| Pressurized Water Cooling   | 158, 177, 366, 393   |
| Provisional Operating Authorization                                 | 91, 111, 121   |
| Public Health Service   | 330  |
| Radiography   | 338, 340, 423  |
| Reactors Cited:   |  |
| Big Rock Point Boiling Water Reactor Plant                          | 15, 148, 168, 370, 449   |
| BR-5  | 286, 296   |
| CP-5  | 5, 54  |
| Carolinas-Virginia  | 161  |
| Chalk River   | 161  |
| Downreay Fast Reactor   | 286, 296   |
| Dresden   | 15, 134, 135, 137, 148, 149, 152, 168, 370, 449                      |
| Experimental Boiling Water Reactor                                  | 148, 221, 296  |
| EBR-1   | 286, 296   |
| Hallam  | 15   |
| Humboldt Bay  | 15, 148, 168, 370, 449   |
| Material Testing Reactor  | 117  |
| Saxton  | 370, 380, 399  |
| Shippingport  | 161, 405   |
| Vallecitos Boiling Water Reactor                                    | 42, 43, 134, 137, 148, 153, 166                                      |
| Yankee  | 370, 380, 398, 399, 405, 408, 409                                    |
| Recommended Decision  | 329  |
| Recommendation for Future Public Hearing                            | 275, 323, 325  |
| Reopening of Proceeding   | 327  |
| Rod Drop Velocity Limiter   | 461  |
| Rod Worth Minimizer   | 461  |
| Scram   | 139, 225, 332, 377, 451  |
| Securities and Exchange Commission                                  | 407, 422   |
| Sodium Coolant  | 71, 94, 99, 285  |
| Sodium-Water Reaction   | 288, 298   |
| Stack   | 8, 19, 120, 190, 277, 442, 454                                       |
| Stay of Immediate Effectiveness                                     | 320  |

|  | Page  |
|--|---|
| Stress Corrosion.....                      | 291, 299  |
| Suspension of Initial Decision.....        | 318   |
| Suspension of License.....                 | 64, 196, 243, 254, 257                                |
| Temperature Coefficient of Reactivity..... | 16, 80, 122, 286, 296, 332                            |
| Termination of Jurisdiction.....           | 320   |
| United States Coast Guard.....             | 61, 330   |
| Untimely Motion.....                       | 54, 172, 173  |
| Variable Speed Recirculation Pumps.....    | 452, 454  |
| Ventilation.....                           | 6, 19, 85, 274, 403, 454                              |
| Void Coefficient of Reactivity.....        | 80, 122, 454  |
| Waste Disposal.....                        | 6, 57, 84, 85, 120, 138, 190, 225, 309, 380, 399, 454 |
| Waste Disposal License.....                | 55, 255   |
| Zirconium-Water Reaction.....              | 190, 404, 452, 456, 462                               |

## CONTRACT APPEALS

## Subject Index

|   | Page  |
|---|---|
| Acceleration.....                         | 659, 739  |
| Best Evidence.....                        | 732, 823, 863   |
| Breach of Contract.....                   | 653   |
| Burden of Proof.....                      | 824, 859  |
| Change Order.....                         | 538, 572, 605, 696, 724, 739, 752, 822, 851                           |
| Changed Conditions.....                   | 718   |
| Changes Clause.....                       | 497, 539, 548   |
| Choice of Law.....                        | 592   |
| Consolidation.....                        | 605   |
| Constructive Change Order.....            | 573, 739, 768, 803  |
| Delivery Schedule.....                    | 828   |
| Discovery.....                            | 618, 676, 825, 830  |
| Disputes Clause.....                      | 572, 579, 609, 756, 795, 888  |
| Election of Remedies.....                 | 730   |
| Equitable Adjustment.....                 | 497,  |
|   | 507, 546, 554, 566, 571, 605, 626, 647, 689, 718, 728, 740, 757, 787, |
|   | 793, 822, 851, 874.   |
| Excusable Delay.....                      | 653, 748  |
| Executive Privilege.....                  | 678   |
| Extensions of Time.....                   | 485   |
| Failure to File an Answer.....            | 736   |
| Failure to State a Cognizable Claim.....  | 481   |
| Federal Law.....                          | 594   |
| Impossibility.....                        | 486, 544, 639, 665, 740, 795, 802                                     |
| Improper Termination.....                 | 507   |
| Interrogatories.....                      | 617   |
| Jurisdiction of the Hearing Examiner..... | 572,  |
|   | 579, 608, 615, 626, 638, 756, 779, 795, 803, 826, 894                 |
| Latent Conditions.....                    | 565, 640  |
| Liquidated Damages.....                   | 591, 595, 745   |
| Mistake.....                              | 627, 689, 756, 779  |
| Motion to Dismiss.....                    | 481, 538, 605, 615, 795   |
| Necessary or Incidental Costs.....        | 525, 535  |
| Negligence.....                           | 860   |
| Notification of Change.....               | 497, 507  |
| Oral Argument before the Commission.....  | 886   |
| Overhead Expenses.....                    | 522, 684  |
| Parol Evidence Rule.....                  | 647   |
| Petition for Review.....                  | 475, 476  |
| Privity of Contract.....                  | 798   |
| Procedural Rules Relaxed by Agency.....   | 721, 775  |
| Promotional Activities.....               | 524   |
| Quantum Meruit.....                       | 578, 639  |
| Reconsideration.....                      | 773   |
| Reformation.....                          | 626, 758, 780   |
| Remand.....                               | 626   |
| Res Ipsa Loquitur.....                    | 864   |
| Restricted Data.....                      | 619, 827  |
| Scope of Commission Review.....           | 774   |
| Security Clearance.....                   | 591   |
| Service of Documents.....                 | 735   |
| Settlement.....                           | 473, 629  |
| Specificity in Complaint.....             | 772   |
| Specificity of Findings.....              | 742   |
| Stipulation for Settlement.....           | 568, 760  |
| Tax Payments.....                         | 524, 535  |
| Termination for Convenience.....          | 803, 829, 841, 887  |
| Termination for Default.....              | 682   |
| Timeliness.....                           | 538, 674, 715, 720, 798   |