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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION '87 AUG 11 P3:41

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of	)	
	)	Docket Nos. 50-446 OL
COMMONWEALTH EDISON COMPANY	)	50-447 OL
	)	
(Braidwood Station,	)	
Units 1 and 2)	)	

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NRC STAFF BRIEF IN SUPPORT OF LBP-87-14

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Gregory Alan Berry  
Counsel for NRC Staff

August 11, 1987

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ISSUES PRESENTED

1. Do subjective feelings of quality control inspectors that inspection quality was less important than quantity preclude a reasonable assurance finding where the evidence establishes that this belief did not have a detrimental effect on the inspectors' performance?
2. Did the Board improperly place the burden of proof on Intervenor?
3. Can an issue not placed in controversy by an admitted contention or raised by a board sua sponte and which does not pose a threat to the public health or safety preclude a licensing board from authorizing the Director of the Office of Nuclear Reactor Regulation to issue an operating license?

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NRC STAFF BRIEF IN SUPPORT OF LBP-87-14

INTRODUCTION

On May 19, 1987, the Atomic Safety and Licensing Board issued a concluding Partial Initial Decision in the above-captioned proceeding. <sup>1/</sup> In this decision the Board resolved all matters in controversy relating to Intervenor Bridget Little Rorem's ("Intervenor") inspector harassment contention favorably to the Commonwealth Edison Company ("Applicant" or "CECo"). PID at 77-78. <sup>2/</sup> Specifically, all members of the Board found that none of the matters alleged in Intervenor's inspector harassment contention, alone or in combination, supported the conclusion that there had been a breakdown of Applicant's quality control program with respect

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1/ Commonwealth Edison Company (Braidwood Station, Units 1 and 2), LBP-87-14, 25 NRC \_\_\_\_ (May 19, 1987), as amended, LBP-87-14A, 25 NRC \_\_\_\_ (May 22, 1987) (hereinafter "PID" or "LBP-87-14").

2/ In a companion partial initial decision issued on May 13, 1987, the Board resolved Intervenor's emergency planning contention in Applicant's favor. Commonwealth Edison Company (Braidwood Station, Units 1 and 2), LBP-87-13, 25 NRC \_\_\_\_ (May 13, 1987). Although not appealed by Intervenor, this decision currently is before the Appeal Board for sua sponte review. See June 9, 1987 Order (unpublished).



to the activities of Comstock, its electrical contractor, of sufficient dimension to raise legitimate doubt as to whether the Braidwood Station can be operated without endangering the public health and safety. Id. at 71-76; see Minority Opinion at 2. <sup>3/</sup> Accordingly, a majority of the Board concluded that Applicant had carried its burden of proof with respect to the matters in controversy and authorized the Director of the Office of Nuclear Reactor Regulation, upon making the requisite findings pursuant to 10 C.F.R. § 50.57, to issue full-power licenses for Units 1 and 2 of the Braidwood Station. <sup>4/</sup> PID at 77-78.

Intervenor has appealed the PID, arguing that: (i) the record does not support the Board's findings that (a) Applicant had complied with Criterion I of 10 C.F.R. Part 50, Appendix B and (b) Comstock quality control inspectors performed their duties properly during the period in issue; (ii) the Board improperly placed the burden of proof on Intervenor; and (iii) the grid area weld inspections conducted by Comstock inspectors prior to October 1983 threaten the public health and

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<sup>3/</sup> On July 1, 1987, the Commission completed the reviews of LBP-87-13 and LBP-87-14 it had undertaken "to determine whether there are safety reasons for delaying the effectiveness of the Board's concluding PID." Commonwealth Edison Company (Braidwood Station, Units 1 and 2), CLT-87-07, 26 NRC, slip op. at 2 (1987) (footnote omitted). The Commission concluded that there were none. The following day, July 2, 1987, the Director of the Office of Nuclear Reactor Regulation issued full-power operating licenses for the Braidwood Station.

<sup>4/</sup> The Board Chairman wished to receive further evidence on the efficacy of Comstock weld inspections conducted prior to October 1983, a matter not placed in controversy by Intervenor's contention. Minority Opinion at 2. The majority of the Board found that those weld inspections posed no danger to the public health and safety. PID at 68-71.

safety. See Opening Brief of Intervenors-Appellants Bridget Little Rorem, et al., at 5 (July 1, 1987) (hereinafter "Intervenor Brief").

As explained in the following sections of this brief, there is no merit to any of the arguments presented by Intervenor. The Board's factual conclusions are supported by substantial, reliable, and probative evidence and the Board did not shift the burden of proof to Intervenor or commit any other error warranting reversal. Accordingly, the Appeal Board should deny Intervenor's appeal and affirm LBP-87-14.

#### BACKGROUND AND PROCEDURAL HISTORY

The procedural history of this proceeding, which consists of two admitted contentions -- emergency planning and "inspector harassment" -- has been well documented in other written submissions, see e.g., Applicant's Proposed Partial Initial Decision (Harassment and Intimidation) (January 5, 1987); Applicant's Proposed Partial Initial Decision (Emergency Planning Issues) (April 4, 1986); NRC Staff Response to Applicant's Motion for Directed Certification (July 23, 1985); Brief of Intervenor Rorem, et al., on Admissibility of Harassment Contention (April 30, 1985), and thus need be addressed only briefly here.

Intervenor's inspector harassment contention, (Rorem, et al. Contention 2.C), which was filed late, was admitted originally by the Board on stipulation of the parties on July 24, 1985. See Tr. 254-268. In April 1986, the Commission ruled that it was error for the Board to have admitted Intervenor's late-filed contention without first determining that the balance of the five factors listed in 10 C.F.R. § 2.714(a)(1) weighed in favor of admitting the contention. Commonwealth Edison

Company (Braidwood Nuclear Power Station, Units 1 and 2), CLI-86-6, 23 NRC 241, 250-51 (1986). Consequently, the Commission directed the Board to evaluate the admissibility of Contention 2.C in light of the five-factor test. Id. On May 2, 1986, the Board issued an order concluding that the balance of the five factors listed in 10 C.F.R. § 2.714(a)(1) weighed in Intervenor's favor and admitted the contention. Memorandum and Order (Admitting Harassment and Intimidation Issues on Five-Factor Balance) at 4 (May 2, 1985) (unpublished). The contention, as admitted, states:

Contrary to Criterion I, "Organization" of 10 C.F.R. Part 50, Appendix B, and 10 C.F.R. Section 50.7, Commonwealth Edison Company and its electrical contractor, L.K. Comstock Engineering Company have failed to provide sufficient authority and organizational freedom and independence from cost and schedule as opposed to safety considerations to permit the effective identification and correction of quality and safety significant deficiencies. Systematic and widespread harassment, intimidation, retaliation and other discrimination has been directed against Comstock QC inspectors and other employees who express safety and quality concerns by Comstock management. Such misconduct discourages the identification and correction of deficiencies in safety-related components and systems at the Braidwood Station.

Instances of harassment and intimidation include [at least the following]:

1. [At various times since at least August 1984,] more than twenty five (25) Comstock QC inspectors have complained to the NRC in March 1985 about harassment and intimidation by Comstock supervisors. Such harassment and intimidation has been carried out or participated in by QC Manager Irv DeWald, [Assistant QC Manager Larry Seese, QA Manager Bob Seltmann] and QC Supervisor R.M. Saklak.

Such harassment included widespread pressure to approve deficient work, to sacrifice quality for production and cost considerations and to knowingly violate established quality procedures. Harassment and retaliatory treatment included threats of violence,



verbal abuse, termination of employment, transfer to undesirable jobs or work in areas where quality deficiencies could not be noted, assignments to perform burdensome or menial "special projects" and other adverse treatment. Such discriminatory action was taken because of the victim's expression of quality or safety concerns. Former Level II QC Inspector John D. Seeders has knowledge of these widespread instances of harassment. By letter of August 17, 1984, Seeders complained to the NRC, Edison and Comstock management regarding instances of harassment directed against him. Subsequently, Mr. Seeders was involuntarily transferred to the position of Engineering Clerk in retaliation for his expression of quality concerns. Such assignment was intended by Comstock to keep Mr. Seeders away from sensitive work areas. Although QC Supervisor R.M. Saklak was finally terminated in 1985 for his mistreatment of QC inspectors and other misconduct, the effects of his harassment remain uncorrected [and systematic harassment continues at Comstock to the present]. The existence of widespread harassment impugns the integrity and effectiveness of on-going corrective action programs designed only to address other widespread QA failures at Comstock. [As stated in Mr. Seeder's affidavit, these Comstock QC inspectors are eager to cooperate with the Licensing Board in identifying and correcting the harassment problems at Comstock, but require Board protection from retaliation in order to provide testimony and documentation of their harassment.]

2. Comstock management, including QC Manager Irv DeWald and Corporate QA Manager Bob Marino harassed, discriminated and retaliated against, and ultimately terminated Level III QC Inspector Worley O. Puckett because Mr. Puckett made numerous complaints about safety and quality deficiencies which he identified in the course of his duties at Braidwood.

Mr. Puckett was hired by Comstock in May 1984 in the newly created position of Level III QC Inspector whose duties included conducting a review of Comstock procedures, tests requirements for the more than 50 Level II QC inspectors, review of the Level II's inspection work, and the resolution of inspection disputes. Mr. Puckett was highly qualified with 20 years' nuclear Navy and nine years' nuclear power experience. See Resume, Exhibit B. During the course of his employment with Comstock Mr. Puckett was shocked by the widespread deficiencies in procedures, qualifications and workmanship. He identified numerous instances of improper construction

procedures, improper qualification of welders, and material traceability deficiencies. He ultimately recommended a complete stop work order for all welding activity to permit effective corrective action. See, Memos of August 10 and August 17, 1984, Exhibits C and D.

Finally, he warned QC Manager Irv DeWald that "we are approaching a complete breakdown in our QC program." August 22, 1984 Memo, Exhibit E. Puckett was subjected to harassment and retaliation because he raised these safety and quality concerns and was terminated on August 27, 1984 by DeWald on the pretext that he should have scored higher than his 86% on a qualification test. He filed a complaint with the U.S. Department of Labor, alleging violation of the employee protection provisions of the Energy Reorganization Act, 42 USC 5851. Letter, September 5, 1984, Exhibit F. The U.S. Department of Labor Area Director sustained Mr. Puckett's complaint finding unlawful discrimination by Comstock against Puckett and ordered relief. Notes of Decision. November 6, 1984, Exhibit G. Mr. Puckett presented his case at a hearing before an Administrative Law Judge on Comstock's appeal. See, Complainants' Prehearing Exchange, Exhibit H. Comstock settled Mr. Puckett's claim before putting on its case. The terms of settlement are subject to a non-disclosure agreement between Comstock and Mr. Puckett.

The admitted contention did not call into question the validity of design or engineering principles or the adequacy of construction materials and methods. PID at 71. Those and other aspects of Applicant's quality assurance program were challenged by Intervenor in a separate contention which was dismissed by the Commission in April 1986. CLI-86-6, 23 NRC 241, supra. Intervenor's Contention 2.C put in controversy only the adequacy and effectiveness of Applicant's efforts to ensure that Comstock quality assurance personnel had sufficient organizational freedom and independence to perform their duties and accuses certain Comstock quality control managers of impeding Comstock inspectors in the performance of

their duty. PID at 71. These were the only issues presented to the Board for decision. Id. <sup>5/</sup>

The evidentiary hearing on this contention commenced May 6, 1986 and continued through November 26, 1987. The evidentiary record was closed on December 17, 1986. Memorandum and Order (Admitting Applicant Exhibit 185 and Closing Evidentiary Record) (December 17, 1987) (unpublished). During the hearing, the parties presented the testimony of more than fifty witnesses (compiling a record of nearly 18,000 transcript pages) and offered into evidence more than 500 exhibits. Hearing sessions were held in the cities of Kankakee, Markham, Joliet, and Chicago, all in the state of Illinois and all within a fifty mile radius of the Braidwood Station. Proposed findings of fact and supporting briefs were filed by Applicant on January 5, 1987, by Intervenor on February 3, 1987, and by the Staff on February 13, 1987. Applicant filed a reply brief on February 18, 1987.

On May 19, 1987, the Board by a 2-1 majority (the Board Chairman dissenting) issued a decision resolving the issues favorably to Applicant. The Board found that Applicant had not unreasonably pressured the management of Comstock's quality control department to accelerate the pace of inspections; that Comstock management did not pressure, systematically or otherwise, Comstock inspectors to accept work that should have been rejected; and that the widespread harassment and production pressure allegedly brought to bear on Comstock inspectors did

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<sup>5/</sup> No issues were raised sua sponte by the Board pursuant to the provisions of 10 C.F.R. § 2.760a.



not have a deleterious effect on the quality of their inspections. PID at 9-10; Minority Opinion at 2. <sup>5/</sup>

In its appeal, Intervenor challenges these conclusions. In addition, Intervenor argues that the Board improperly shifted the burden of proof from Applicant to it. Finally, Intervenor takes the position that Applicant failed to carry its burden of proof with respect to the adequacy of the weld inspections conducted by Comstock prior October 1983, a

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6/ With respect to the ultimate issue in the case -- whether the alleged harassment, intimidation, and production pressure alleged by Intervenor had a deleterious effect on the performance of Comstock inspectors -- the Board Chairman agreed with his colleagues that they did not. Minority Opinion at 2; Minority Findings of Fact at 280-81. The Board Chairman disagreed, inter alia, with the majority regarding the legitimacy of Mr. Puckett's termination and the probative value of Applicant's reinspection evidence. See Minority Opinion at 1-2.

Additionally and unlike the majority, the Board Chairman recommended the imposition of civil penalties against Applicant for conduct which he considered to be in violation of 10 C.F.R. § 50.7. Id. at 2. Even had the majority shared the Board Chairman's view, this action would have had no legal significance. This is because unless expressly charged to do so by the Commission, licensing boards have no authority to impose civil penalties. E.g. Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit No. 1), CLI-82-31, 16 NRC 1236, 1238 (1982); Commonwealth Edison Company, supra, CLI-87-07, slip op. at 2.

Finally, the Board Chairman would not have authorized the issuance of an operating license to Applicant because of concerns he had regarding the adequacy of Comstock's pre-October 1983 grid weld inspections. See Minority Opinion at 2, 35-38. As discussed in Part III, infra, this matter was not placed in controversy by Intervenor's contention or raised by the Board sua sponte. Licensing boards are authorized to decide only those matters placed in controversy by an admitted contention or raised sua sponte; matters not placed in controversy are left to the Staff for resolution. Thus, the adequacy vel non, of the pre-October 1983 weld inspections was not a valid basis for the Board to deny the Director of the Office of Nuclear Reactor Regulation authorization to issue operating licenses for the Braidwood Station.

matter not encompassed by Intervenor's contention. As discussed in the following sections of this brief, there is no merit to any of these arguments. Consequently, the Appeal Board should affirm LBP-87-14.

### ARGUMENT

#### I. THE BOARD'S "REASONABLE ASSURANCE" FINDINGS ARE SUPPORTED BY THE RECORD.

##### A. Legal Standards

##### 1. Standard of Review

As Intervenor concedes, the Appeal Board will not reject findings of fact made by a licensing board unless it is "convinced that the record compels a different result." Carolina Power and Light (Shearon Harris Nuclear Power Plant, Unit 1), ALAB-852, 24 NRC 532, 541 (1986), quoting, Niagara Mohawk Power Corporation (Nine Mile Point Nuclear Station, Unit 2), ALAB-264, 1 NRC 347, 357 (1975). In applying this standard it is important to note that the fact that the record evidence could support the drawing of "inconsistent or contrary" inferences "does not prevent a licensing board's findings from being supported by substantial evidence." Northern Indiana Public Service Company (Bailey Generating Station, Nuclear 1), ALAB-303, 2 NRC 858, 866 (1975). For as the Appeal Board has stated, "[i]t is the Licensing Board's role to weigh and consider all of the record evidence." Shearon Harris, supra, 24 NRC at 537. The burden is upon the appellant to demonstrate that a challenged factual finding is erroneous. Id. As explained in Part I(B-D), Intervenor has not met its burden. The challenged factual findings are amply supported by the evidence.

2. "Reasonable Assurance"

The Commission's regulations do not require absolute assurance that a nuclear facility has been constructed without error. Union Electric Company (Callaway Plant, Unit 1), ALAB-740, 18 NRC 343, 346 (1983); Carolina Power and Light (Shearon Harris Nuclear Power Plant, Unit 1), ALAB-852, 24 NRC 532, 541 (1986); Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-813, 22 NRC 59, 65 (1985); Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1344-45 (1983). Indeed, it long has been recognized that construction errors occur. E.g. Catawba, supra, Callaway, supra. One of the purposes for having in place a quality assurance program is to ensure that such errors are identified and corrected. Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-756, 18 NRC 1340, 1344 (1983). To deny an operating license solely because construction defects occurred and were identified would be tantamount to penalizing an applicant for having an effective quality assurance program, a result plainly at odds with the Commission's intent.

Nor, as the Appeal Board has observed, is it reasonable to expect an applicant's quality assurance program to uncover every error. Id. at 1344-45. "By virtue of the sheer size and complexity of the plant," some quality assurance lapses are bound to go unnoticed. Id. Therefore, the question is not whether errors may have occurred, but whether such errors are of sufficient dimension to lead one to conclude that there has been a "pervasive breakdown" in the quality assurance program that raises legitimate doubt as to whether the plant can be operated without



endangering the public health and safety. E.g. Callaway, supra, 18 NRC at 346. Deficiencies, alone or in combination, that do not rise to this level do not preclude the issuance of an operating license. E.g. Philadelphia Electric Company (Limerick Generating Station, Units 1 and 2), ALAB-819, 22 NRC 681, 729 (1985); Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LBP-84-24, 19 NRC 1418, 1434 (1984).

As the cited cases indicate, in evaluating the efficacy of a quality assurance program, a licensing board must first determine whether errors, irregularities, or mistakes have occurred. If the board determines that the applicant (who bears the burden of proof <sup>7/</sup>) has disproved the existence of the quality assurance failings alleged in the contention, the way is paved for the board to make the requisite reasonable assurance finding. For if the errors alleged in the contention did not occur, the alleged breakdown in the quality assurance program could not have resulted. <sup>8/</sup> If, on the other hand, a board is persuaded that the failings alleged in the contention have occurred, it must then consider the implications of the errors. As the Appeal Board indicated in Callaway, to stand in the way of the required reasonable assurance finding, those errors must be of "sufficient dimension to raise legitimate

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<sup>7/</sup> See 10 C.F.R. § 2.732.

<sup>8/</sup> It is, of course, well settled that in an operating license proceeding the jurisdiction of a licensing board is limited to resolving matters placed in controversy by admitted contentions or by the Board sua sponte. E.g. Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-674, 15 NRC 1101, 1102-03 (1982). Once those issues are resolved, the Board's inquiry is ended. As noted in n.5, ante, no issues were raised sua sponte by the Board.

doubt as to the overall integrity of the facility and its safety-related structures and components." 18 NRC at 346.

The Board evaluated the evidence admitted into the record in accordance with the foregoing principles. The Board stated that Intervenor's contention presented three simple but related questions: (i) whether the Commonwealth Edison Company intentionally and unreasonably pressured Comstock's quality control managers to increase the productivity of their department; (2) whether Comstock quality control managers systematically engaged in conduct intended to pressure Comstock quality control inspectors to overlook deficiencies and accept discrepant work; (3) whether the Comstock quality control inspectors succumbed to the pressure. See PID at 9, 71-72. Questions 1 and 2 are central to the inquiry of whether the misconduct alleged in the contention occurred; question 3 entails a consideration of the consequences of the alleged misbehavior. The Board correctly resolved each of these questions favorably to the Applicant.

B. The Board Properly Found That Applicant Did Not  
Unreasonably Pressure Comstock's Quality Control  
Managers To Increase Productivity

The contention that was litigated below alleged that CECo, in contravention of Criterion I of 10 C.F.R Part 50, Appendix B, failed "to provide sufficient authority and organizational freedom and independence [to Comstock's quality control personnel] from cost and schedule as opposed to safety considerations to permit the effective identification and correction of quality and safety significant deficiencies." In particular, Intervenor argued that Applicant had violated Criterion I because it had

permitted Comstock's quality control activities to be overseen by Daniel Shamblin, CEC's Braidwood Project Construction Superintendent, who also had oversight responsibility for construction activities. According to Intervenor, Mr. Shamblin's involvement in quality control matters constituted a per se violation of Criterion I. See Intervenor Brief In Support of Proposed Findings of Fact at 48-52 (February 3, 1987). In the alternative, Intervenor argued that the requirements of Criterion I were violated in fact because Mr. Shamblin took an excessive interest in the affairs of Comstock's quality control department. Id. As explained below, the Board correctly rejected both of these positions.

The Commission's regulations require all applicants to establish and carry out a quality assurance program designed to provide "adequate confidence" that those systems, structures and components having safety-related functions "will perform satisfactorily in service." 10 C.F.R. Part 50, Appendix B (Introduction); Shearon Harris, 24 NRC at 541; Catawba, 22 NRC at 64. This quality assurance program must conform to the eighteen criteria set forth in 10 C.F.R. Part 50, Appendix B. The NRC generally relies upon an applicant's adherence to its quality assurance program in assessing whether the facility and its component parts have been constructed or fabricated properly. See 35 Fed. Reg. 10,498 (1970); 10 C.F.R. Part 50, Appendix B; Louisiana Power and Light Company (Waterford Steam Electric Station, Unit 3), ALAB-812, 22 NRC 5, 18 (1985). Under the Commission's regulations an owner of a nuclear facility ultimately is responsible for ensuring that a quality assurance program is established and implemented; however, it "may delegate to others, such as contractors, agents, or



consultants, the work of establishing and executing the quality assurance program[.]" 10 C.F.R. Part 50, Appendix B (Criterion I); see Commonwealth Edison Company (Byron Nuclear Power Station, Units 1 and 2), ALAB-770, 19 NRC 1163, 1170 (1984).

Since the purpose of a quality assurance program is to provide reasonable assurance that safety-related systems perform satisfactorily, the regulations require that an applicant's quality assurance program be structured so that persons performing quality assurance functions be able to perform their duties free from the pressure of cost and schedule. 10 C.F.R. Part 50, Appendix B (Criterion I). These duties include identifying and reporting quality problems; initiating, recommending, and providing solutions; and verifying that appropriate solutions are implemented. Id. To ensure that such individuals are not restrained improperly in the performance of their duties by cost or schedule considerations, Criterion I does not permit such individuals to be supervised by those concerned with cost and schedule considerations. Id. Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-152, 6 AEC 816, 817 (1973). Rather, Criterion I states that quality assurance personnel "shall report to a management level such that the required organization freedom and independence . . . are provided." Id.; Long Island Lighting Company (Shoreham Nuclear Power Station, Unit 1), ALAB-788, 20 NRC 1102, 1150 (1984). The regulation leaves it to the applicant in the first instance to establish an organizational structure that complies with these requirements. Id.

Whether an applicant's quality assurance program provides the requisite organizational independence and freedom to quality assurance

personnel is a determination to be made case by case. See Id. In making this determination, all aspects of the quality assurance program, including oversight by various groups within the utility, should be considered. Id. The question is not whether quality assurance personnel are absolutely free from cost and schedule considerations, but whether they have "sufficient independence from cost and schedule when opposed to safety considerations." To assure the independence and organizational freedom to "identify quality problems, to initiate, recommend or provide solutions and to verify implementation of solutions." 10 C.F.R. Part 50, Appendix B (Criterion I) (emphasis added); see Shoreham, supra, 20 NRC at 1150; Georgia Power Company (Alvin W. Vogtle Nuclear Plant, Units 1 and 2), LBP-74-48, 7 AEC 1166, 1176-77 (1974), aff'd, ALAB-375, 5 NRC 423 (1977) (no violation of Criterion I where applicant's project superintendent had oversight responsibility for quality assurance activities of contractors).

The Board found on the basis of the evidence that quality assurance personnel at Braidwood were afforded the organizational independence and freedom contemplated by Criterion I. See PID at 10-13. The Board noted in this regard that the Comstock Quality Control Manager did not report to the Comstock Project Manager but rather to Comstock's Regional Manager for QA/QC Services, who in turn reported to Comstock's Corporate Manager for QA/QC Services, who reported directly to the head of the company. PID at 12. Comstock's production managers were employed by a subsidiary company and reported under a parallel chain of command. Id. The Board found a similar separation in the chains of command relating to CEC's construction and quality assurance activities.

PID at 13; Shamblin, ff. Tr. 16,274, at 6-7, 15; Tr. 9998, 10,113 (Shewski).

As Project Construction Superintendent, Mr. Shamblin served essentially as CEC's liason to Comstock and the other major contractors who performed construction and quality assurance activities at Braidwood. Shamblin, ff. Tr. 16,274, at 3-4. In this capacity, Mr. Shamblin was responsible for ensuring that skilled contractor engineers and craftsmen are employed and that they perform their work in accordance with approved installation procedures; that installed construction work is inspected by trained and certified quality control inspectors pursuant to approved inspection procedures; that contractor quality assurance organizations are independent of contractor production organizations; and that contractor quality assurance engineering, production, and quality control departments. Id. at 4. Functional, or day to day, supervision over quality activities was the responsibility of Mr. Shamblin, but rather of the appropriate department heads who were accountable to quality assurance supervisors located off-site. See e.g., DeWald, ff. Tr. 1700, at 3; Shamblin, ff. Tr. 16,274, at 6. <sup>9/</sup> The Board found that the arrangements described above satisfied the requirement of Criterion I that quality assurance personnel "shall report to a management level such that

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<sup>9/</sup> Because Mr. Shamblin did not have "functional" responsibility over quality assurance personnel, this case is distinguishable from that presented in Consumers Power Company (Midland Plant, Units 1 and 2), ALAB-147, 6 AEC 636, reconsideration denied, ALAB-152, 6 AEC 816 (1973). There the Appeal Board held that the applicant's quality assurance program did not comply with Criterion I because its Project Superintendent held line authority over the quality assurance department. ALAB-152, 6 AEC at 817.



the required organizational freedom and independence . . . are provided." See PID at 12-13.

While it is true that starting in June 1984 Mr. Shamblin directed the Comstock Quality Control Manager, Mr. DeWald (and the Comstock Project Manager, Mr. Rolan), to meet with him weekly to discuss the status of the backlog inspection effort, (Int. Ex. 8), a brief review of the nature, purpose, and circumstances leading to this direction confirms the Board's conclusion that Mr. Shamblin's conduct was consistent with, not contrary to, regulatory requirements. PID at 14-15.

In the autumn of 1983, after conducting a routine inspection of Comstock's quality control department, the NRC identified a number of matters which called into question the ability of Comstock's quality control department to carry out its responsibilities in an acceptable manner. Int. Ex. 3; Tr. 11,479-85. The NRC was especially concerned that Comstock, inter alia, did not appear to have sufficient quality control personnel to perform needed inspections of work already installed (i.e., "backlogged inspections") while at the same time remaining current in its inspections of work then being completed (i.e., "current inspections"). Int. Ex. 3. In fact, the NRC was so troubled by this situation that it contemplated suspending Comstock's operations until the backlog was eliminated or reduced substantially. Int. Ex. 3. Before it took that action, however, Applicant and Comstock were afforded the opportunity to demonstrate that Comstock was capable of accomplishing its assigned tasks. Int. Ex. 3. Based on Applicant's assurance that Comstock would have sufficient quality control inspectors to assure that "timely inspections are performed and that the number of backlogged inspections are reduced," (Int. Ex.

7), the NRC refrained from suspending Comstock's operations. In this regard it should be noted that Applicant committed to the NRC that its Project Construction Department would monitor Comstock's progress in eliminating the inspection backlog as well as its ability to perform the other responsibilities within its scope of work. Int. Ex. 7. Mr. Shamblin's weekly status meetings with Mr. DeWald were intended to fulfill this commitment. PID at 14-15; Shamblin, ff. Tr. 16,274, at 8-17. <sup>10/</sup>

Intervenor makes much of the fact that in June 1984, Mr. Shamblin informed Mr. DeWald (and Mr. Rolan) that "positive results (i.e., significant current backlog inspection reductions) must be seen very shortly." <sup>11/</sup> Intervenor Brief at 8. Mr. Shamblin's admonition to Comstock was not, as Intervenor implies, a veiled threat to Mr. DeWald that the quality of inspections was to be subordinate to the quantity of inspections. On the contrary, as the Board observed, Mr. Shamblin's action (which included "the possibility of a work shutdown if progress on reducing the backlog was not made") was "a necessary action considering the potential consequences of not reducing the backlog" of inspections to

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<sup>10/</sup> Moreover, it should be emphasized that these weekly meetings, which began in June 1984, commenced shortly after the NRC had advised Applicant in May 1984 of the need "for more aggressive CECO management" to ensure that its contractors remained in compliance with applicable regulations and other commitments. (Int. Ex. 88). It is absurd to fault Mr. Shamblin and Applicant for engaging in the type of conduct recommended by the NRC.

<sup>11/</sup> See Int. Ex. 8 at 2.

assure that the electrical work installed and inspected by Comstock was done properly. <sup>12/</sup> PID at 15; Shamblin, ff. Tr. 16,274, at 8-9.

The Board found that the need to eliminate the inspection backlog may have placed production "pressure" on Comstock's quality control department. PID at 9, 72. Unlike Intervenor, however, the Board recognized that "pressure" is, as Mr. Malman, Applicant's Vice-President and Manager of Projects, testified (Tr. 3893), an unavoidable fact of life in any business environment, the nuclear industry not excepted. See PID at 72. Whenever goals are set or deadlines established, someone is under pressure to perform. Thus, as the Board recognized, the important question was not whether pressure existed but rather whether Comstock was pressured unreasonably to eliminate its inspection backlog and perform current inspections in a timely fashion. Id. The record establishes that it was not. For example, there is no evidence that Applicant established an unreasonable deadline for completion of the backlog or denied Comstock the resources necessary to carry out its responsibilities. In fact, on more than one occasion, Applicant extended the target date for completion of the backlog, (Shamblin, ff. Tr. 16,274, at 17), and approved Comstock's request to hire additional quality control inspectors. E.g., DeWald, ff. Tr. 1700, at 7; Int. Ex. 9. Similarly, there is no evidence that Applicant directed Comstock to eliminate the backlog by any improper means, such as, for example, by ignoring

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<sup>12/</sup> The Board found that the "elimination of the backlog was of great importance because an expanding volume of installed work of indeterminate quality was being created and because adverse quality trends in ongoing work might not be identified soon enough to be corrected in a timely fashion." PID at 14.



quality or safety considerations. <sup>13/</sup> Indeed, members of Applicant's quality assurance department attended Mr. Shamblin's meetings with Mr. DeWald and conducted audits and surveillances of Comstock activities to ensure that quality considerations were not ignored. Shamblin, ff. Tr. 16,274, at 7, 15. These facts amply support the Board's conclusion that although production pressure existed, "it was not undue pressure and there was adequate justification which was related to the overall goal of a well constructed and safe plant." PID at 9.

C. Production Pressure by Comstock Management

Intervenor's inspector harassment contention charged that Comstock quality control inspectors who expressed safety and quality concerns were subjected to "systematic and widespread harassment, intimidation, retaliation and other discrimination[.]" Contention 2.C. In support of this allegation, Intervenor claimed that John Seeders was transferred from his calibration inspector position to a clerk position in Comstock's engineering department to punish him for bringing to the attention of the NRC, Applicant, Comstock, and others, instances of alleged harassment directed against him by Comstock quality control officials and to remove him from an area where he could identify and report deficiencies. Id. Intervenor also claimed that Worley Puckett was fired from his Level III Weld Inspector position by Comstock "because he made numerous

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<sup>13/</sup> The record indicates that Mr. Shamblin took a number of actions to help Comstock manage its workload, including the assignment of Sargent & Lundy personnel to complement the backlog inspection taskforce. See Int. Ex. 8; Shamblin, ff. Tr. 16,274, at 11.

complaints about safety and quality deficiencies which he identified in the course of his duties at Braidwood." Id. Finally, Intervenor asserted that more than twenty other quality control inspectors complained to the NRC in March 1985 about the harassment, intimidation, and production pressure to which they allegedly had been subjected. Id.

At the hearing each of these matters was exhaustively explored. The evidence establishes that Mr. Seeders was relieved of his calibration inspection duties as part of Comstock's plan to correct significant deficiencies in the calibration department, deficiencies for which Mr. Seeders was primarily responsible. See PID at 36-39; see generally Minority Findings at 133-171. Similarly, the Board found that Comstock had not acted improperly in terminating Mr. Puckett's employment. PID at 30, 73. The Board concluded that Comstock was justified in firing Mr. Puckett because he was "ill-suited" for the senior weld inspector position for which he had been hired inasmuch as "his strength was not in interpreting weld procedures or welding codes[.]" PID at 73. <sup>14/</sup> Nor does the record establish that senior Comstock managers, or any of them, systematically harassed, intimidated, or pressured any inspector into overlooking\* deficiencies or accepting work that should have been rejected. PID at 74; see Minority Findings of Fact at 280 ("the weight of

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<sup>14/</sup> The record citations in support of the Board's findings are very extensive and in view of Intervenor's failure to challenge the Board's factual findings regarding the bases of Comstock's actions against Mr. Seeders and Mr. Puckett, those citations are not repeated here. For a detailed discussion of the evidence supporting the Board's conclusions, see NRC Staff Proposed Findings of Fact at 16-46 (Seeders), 47-88 (Puckett), 88-168, 173-87 (other Comstock inspectors) (February 13, 1987).

the evidence is that management made no effort to discourage inspectors from documenting ordinary discrepancies"). <sup>15/</sup>

On appeal, Intervenor does not challenge any of the Board's determinations on these issues. Instead, Intervenor seeks reversal of the Board's Partial Initial Decision on the novel ground that there was among Comstock inspectors a "widespread perception of harassment and pressure to compromise quality." Intervenor Brief at 7 (emphasis added). According to Intervenor, Criterion I is violated and an operating license must be denied whenever inspectors "commonly believe (whether correctly or incorrectly) that management prefers speed over careful work[.]" Intervenor Brief at 10 (emphasis added). The Board did not accept Intervenor's theory and, as explained below, the Appeal Board should reject it here.

The proposition that a subjective feeling of production pressure on the part of Comstock inspectors compels the denial of a license even if that belief is ill-founded and did not affect adversely the quality of any inspector's work is in conflict with Commission case law. In Callaway, supra, the Appeal Board held that the existence of "some construction

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<sup>15/</sup> The record establishes only that on two occasions, a mid-level Comstock manager, Richard Saklak, directed an inspector to engage in conduct prohibited by applicable procedure, neither of whom succumbed to his demand. See Tr. 4182-98 (Snyder); Tr. 4970-75 (Mustered). Mr. Saklak's conduct was not countenanced by his superiors or Applicant. DeWald, ff. Tr. 1700, at 32. Indeed, after Comstock and Applicant learned of the incident involving Mr. Snyder, Mr. Saklak was fired by Comstock and permanently disqualified by Applicant from further employment in any safety-related capacity in any of its facilities. Int. Ex. 39. The first incident was not brought by the inspector to management's attention because Mr. Mustered did not regard the incident as harassment. Tr. 4975, 5034-37 (Mustered).



defects tied to quality assurance lapses" is not sufficient grounds to deny an operating license. 18 NRC at 346. According to the Appeal Board, in such circumstances denial of a license requires at a minimum a finding that "there has been a breakdown in quality assurance procedures of such dimensions to raise legitimate doubt as to the overall integrity of the facility and its safety-related components and structures." Id.

Intervenor proposes that a licensing board irrebuttably presume that the integrity of a facility and its safety-related components is wanting whenever it is shown that a "large group" of inspectors believed (whether reasonable or not) that management was concerned more with quantity than with quality. The test laid down in Callaway, however, requires that there be proof of a breakdown in quality, not presumptions. 18 NRC at 346; see Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LBP-84-24, 19 NRC 1418, 1433-34 (1984) (applying Callaway test to inspector harassment contention), aff'd, ALAB-813, 22 NRC 59 (1985).

There are practical problems with Intervenor's theory as well. If the grant of an operating license hinged not upon an applicant's conduct (which can be objectively evaluated) but alone upon the feelings and beliefs of its employees (which are difficult or impossible to assess), an applicant effectively would be barred from ever requiring that a quality assurance employee be productive or from taking disciplinary action against him for failure to perform his duty properly because other of its employees might believe that such action was motivated by improper considerations. This point is illustrated by an examination of the conduct alleged by Intervenor to be a source of the inspectors' perception that management subordinated quality to quantity.

In May 1984, Comstock quality control management developed and instituted a system to enable it to monitor the progress of the activities within its scope of work, particularly those intended to eliminate the inspection backlog. Seese, ff. Tr. 2330, at 8-9; DeWald, ff. Tr. 1700, at 20. Under this system, each quality control inspector was required to complete and submit to his lead inspector a report documenting the numbers of inspections he had completed that day. Seese, ff. Tr. 2330, at 11. The lead inspector would then use this information to compile a daily inspection status report for his group and submit this report to his supervisor. Tr. 2518 (Seese). Each supervisor in turn used this information to compile a daily status report for each of the inspection disciplines under his jurisdiction which he submitted to Mr. Seese. Id. Mr. Seese used the information to compile his own-weekly status reports which he distributed to senior Comstock management. Id. These status reports were used by Comstock management to determine, among other things, whether, in light of present trends, target completion dates set by Comstock were feasible. Seese, ff. Tr. 2330, at 8-9.

Intervenor suggests that the use of the routine management device requiring status reports was improper because it led inspectors to believe that management was establishing inspection quotas. Intervenor Brief at 9. The record shows, however, that the status reports were not intended or used for the purpose of establishing inspection quotas <sup>16/</sup>

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<sup>16/</sup> The only instance in which it could be construed that an inspector's status report was used adversely to him involved a reprimand issued to inspector Herschel Stout for excessive absenteeism and "poor

and that Comstock management made a point of communicating this fact to the inspectors. Seese, ff. Tr. 2330, at 9; Tr. 1576-77 (DeWald); Tr. 2498-99 (Seese). <sup>17/</sup> Intervenor's theory would foreclose management from using this administrative tool (thus denying it the means to obtain the information necessary to determine whether quality assurance tasks were being performed) solely on the basis of a presumption that inspectors would perceive that quotas were being established and hence compromise the quality of their inspections to meet the quota. See PID at 14-15. <sup>18/</sup>

For these reasons, the Appeal Board should reject Intervenor's position that the subjective feelings of quality control inspectors that they were under pressure to sacrifice the quality of their inspections is sufficient to establish a violation of Criterion I of Appendix B to

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(FOOTNOTE CONTINUED FROM PREVIOUS PAGE)

performance." See DeWald, ff. Tr. 1700, Attachment 4. This document indicates that the reprimand was issued because by March 19, 1985, Mr. Stout had already used 44 of the 64 hours of excused absence to which he was entitled for the entire year. Id. The reprimanded noted that these absences (which occurred on either the first or last day of the scheduled work week) accounted for the fact that Mr. Stout had performed only 34, or a daily average of 1.58, inspections during the period January 28 through March 19, 1985. Id.

<sup>17/</sup> The Board majority and the Board Chairman agreed that Mr. Stout's performance fell far short of any acceptable norm and warranted the disciplinary action taken by Comstock. PID at 53; Minority Findings of Fact at 236.

<sup>18/</sup> Intervenor's position also is inconsistent with 10 C.F.R. § 50.7(d) permits an employer to discharge or discipline an employee (even one who has engaged in protected activity) where there are "legitimate reasons" for doing so.



10 C.F.R. Part 50, especially where, as here, the record demonstrates that quality was not adversely affected.

D. The Comstock Inspectors Performed Satisfactorily.

As noted above, Callaway requires a licensing board to evaluate the significance of ascertained quality assurance lapses and to determine whether they are "of such dimensions to raise legitimate doubt as to the overall integrity of the facility and its safety-related components and structures." Callaway, supra, 18 NRC at 346. Thus, assuming arguendo, that there was a subjective belief among Comstock inspectors that the quantity of inspections was paramount to their quality, under the Callaway decision an assessment of the impact of this "violation" on the overall integrity of the facility and its safety-related systems, structures, and components must still be made. The Board considered all of the evidence presented on this issue and concluded that despite the existence of some harassment and schedule pressure, the Comstock inspectors "performed their inspection duties in a professional manner and the fruit of their labors was not poisoned by management's actions." PID at 75. <sup>19/</sup> As explained in this section, the Board's conclusion is amply supported by the evidence.

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<sup>19/</sup> The dissenting Board Chairman also subscribed to this view:

With regard to the period after October, 1983 [the period encompassed by Intervenor's contention], the evidence is that the Comstock Quality Control inspectors performed their field inspections competently and successfully resisted any attempts that may have been made by management to sacrifice quality.

Minority Findings of Fact at 280-81.

1. Inspector Denials

During the hearing, several weeks were devoted to receiving testimony from 17 Comstock inspectors, many of whom were sponsored by Intervenor. <sup>20/</sup> Not one of these inspectors testified that he had compromised the quality of his inspections because of harassment, intimidation, threats, production pressure, or the like directed at him or to others. E.g. Tr. 4743-44, 4955-57 (Rolan); Tr. 4991-94, 5039-47 (Mustered); Tr. 4479 (Snyder). Their testimony stands uncontradicted by direct evidence and the Board accorded it the weight it deserved. PID at 75; Minority Opinion at 33-34; Minority Findings of Fact at 280-81. Intervenor, however, faults the Board for accepting the Comstock inspectors' "self-serving" denials. Intervenor Brief at 15. According to Intervenor, the number of inspectors was too small to establish that the remainder of the Comstock inspector workforce was unaffected. Id. Ironically, it is the testimony of these same inspectors which Intervenor claims establishes a "widespread" perception of production pressure among the Comstock inspectors. Id. at 9. The fact that not a single inspector identified an instance in which the quality of his inspection had been compromised because of production pressure shows that the production

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<sup>20/</sup> The inspectors were: Richard Snyder, Tr. 3946-4279, 4451-4618; Franco Rolan, Tr. 4625-4960; Michael Mustered, Tr. 4961-5083; Terry Gorman, Tr. 5706-5891; Dean Peterson, Tr. 5892-6121; Therman Bowman, Tr. 6758-7005; Robert Wicks, Tr. 7025-7281; Larry Perryman, Tr. 9622-9808; Larry Bossong, Tr. 9817-9978; Danny Holley, Tr. 5097-5276; Robert Hunter, Tr. 8469-9066; Richard Martin, Tr. 8264-8458, 9146-9621, 12,697-12,780; Herschel Stout, Tr. 18,539 (deposition received in lieu of testimony); Mark Klachko, Tr. 18,539 (deposition received in lieu of testimony); Gregory Archambault, Tr. 12,136-12,696; John Seeders, Tr. 7290-7881; and Worley Fuckett, Tr. 5294-5701, 6135-6758.



pressure alleged by Intervenor should not be presumed to have affected Comstock inspectors.

Second, Intervenor argues that the inspectors reasonably could not be expected to confess to having violated inspection procedure or accepted work that should have been rejected because the possible consequences (i.e., termination) militated against making such an admission. Id. Intervenor does not explain, however, why an inspector, or indeed 17 inspectors, would lie after taking an oath to tell the truth. It is not likely that the possible loss of employment would have a more powerful effect on the veracity of these witnesses than would the threat of going to jail for perjury. In any event, the credibility of these witnesses was an issue which the Board, the trier of fact, was uniquely qualified to resolve. The evidence clearly does not compel a different result from the one reached by the Board and the Appeal Board should defer to the Board's judgment on this issue. See Duke Power Company (Catawba Nuclear Station, Units 1 and 2), ALAB-355, 4 NRC 397, 404 (where the credibility of evidence turns on the demeanor of a witness, the judgment of of the trial board which heard and saw his testimony is to be accorded "particularly great deference").

2. Expert Testimony of Robert Laney

Intervenor next challenges the Board's reliance on the expert testimony of Robert Laney (PID at 53-54) which indicated that quality control inspectors generally are persons of great integrity and thus unlikely to yield to pressure to compromise the quality of their inspections. Intervenor Brief at 14. At the time of the hearing, Mr. Laney had nearly 40 years experience in construction, scheduling, and



quality assurance matters relating to nuclear facilities. Laney, ff. Tr. 17,245, at 1. Mr. Laney testified that quality control inspectors by nature are "proud and protective of their technical skills and personal integrity" because "these represent not only their job security but also their badge of acceptance in the workplace." Id. at 24. According to Mr. Laney, an inspector, working as he does alone in the field, will scrupulously protect these attributes, unaffected by external group dissatisfactions. Id. at 24-25. Mr. Laney further testified that he was not surprised to learn that Comstock inspectors had resisted perceived production pressure because such conduct was consistent with his long experience and familiarity with quality control inspectors. Tr. 17,337.

Intervenor does not challenge Mr. Laney's qualification to offer these opinions or the opinions themselves. See Intervenor Brief at 14. Rather, Intervenor states that the Board erred in crediting Mr. Laney's testimony because it was "so general and speculative" that it had little or no relevance to the issue of whether individual inspectors were affected by harassment or production pressure. Intervenor Brief at 14. Unlike the Board, Intervenor misunderstands the significance of Mr. Laney's testimony. Even though Mr. Laney's testimony may not have been probative of the question whether a particular Comstock inspector succumbed to production pressure, it nonetheless shed light on issues the Board was called upon to decide. A fundamental responsibility of the trier of fact, of course, is to assess the credibility of witnesses. In this respect Mr. Laney's expert testimony is relevant because, if accepted, it indicates that the Comstock inspectors' denials that they succumbed to production pressure is consistent with the behavior they could be

expected to have exhibited in the field. The Board, which had the opportunity to observe the demeanor of the inspectors, found them to be the type of inspectors that fit Mr. Laney's description:

In every instance, the QC inspector's testimony regarding their [sic] overall approach to their job was consistent with their [sic] denial of any effect of management pressure on job performance. That is, each seemed conscientious, proud of his work and well aware of the corporate and regulatory mechanisms which protect employees at nuclear power plants from unlawful production pressure or retaliation for raising safety concerns.

PID at 9-10; see PID at 75. <sup>21/</sup>

Additionally, Mr. Laney's testimony was relevant because of its usefulness to the Board in evaluating the likely effect, if any, of the alleged widespread perception of production pressure on the Comstock inspector workforce. Intervenor hardly can complain that this was not a relevant purpose inasmuch as this was an issue raised by Intervenor itself. Indeed, Intervenor offered the testimony of two industrial psychologists for the purpose of showing that the alleged widespread perception of production pressure among the Comstock inspectors caused them to compromise the quality of their inspections. See Arvey, ff. Tr. 4391; McKirnan, ff. Tr. 10,267. Mr. Laney's testimony tended to show the opposite. Thus, Intervenor's real complaint is not that Mr. Laney's testimony was not relevant but rather that the Board found his testimony

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<sup>21/</sup> As part of its orientation and training program, Comstock inspectors were apprised of their right to contact the NRC to report any concerns they may have affecting safety and quality. Seltmann, ff. Tr. 1960, at 26. The Comstock inspectors testifying in this proceeding were familiar with the provisions of 10 C.F.R. § 50.7, the Commission's regulation which prohibits an applicant or its agents from taking adverse action against an employee who makes known safety or quality concerns. See e.g. Tr. 5073 (Mustered); Tr. 5254 (Holley); Tr. 4461 (Snyder).

more persuasive than that of Intervenor's experts on this issue. <sup>22/</sup> The Board committed no error in doing so. As the Appeal Board has stated, "the possibility that inconsistent or even contrary inferences could be drawn if the views of [Intervenor's] experts were accepted does not prevent the trial board's findings from being supported by substantial evidence." Northern Indiana Public Service Company (Bailey Generating Station, Nuclear 1), ALAB-303, 2 NRC 858, 866 (1975).

### 3. Reinspection Evidence

Intervenor also questions the utility of the "reinspection" <sup>23/</sup> evidence presented by Applicant to show that the alleged production pressure had minimal, if any, impact on the quality of the work performed by the Comstock inspectors. Intervenor Brief at 12-14. The Board relied upon this evidence as additional support for its finding that

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<sup>22/</sup> Neither Dr. Arvey nor Dr. McKirnan could match Mr. Laney's extensive experience in the nuclear industry or his involvement and familiarity with the duties and behavior of quality control inspectors. Compare, Laney, ff. Tr. 17,245, Attachment 1, with, Arvey, ff. Tr. 4391, Attachment 1 and McKirnan, ff. Tr. 10,267, Attachment 1. Nor did either Drs. Arvey or McKirnan devote as much time familiarizing themselves with the incidents to which their opinions related as did Mr. Laney. Compare, Tr. 4394 (Arvey) and Tr. 10,279 (McKirnan), with, Laney, ff. Tr. 17,245, at 7.

<sup>23/</sup> The reinspection evidence consisted of the results of the Construction Sample Review (CSR) element of the Braidwood Construction Assessment Program (BCAP), pursuant to which a sample of hardware items installed by the craft and approved by quality control inspectors prior to June 30, 1984 were reinspected. Kaushal, ff. Tr. 13,068, at 3. None of the CSR reinspectors had any prior involvement in construction or inspection activities at Braidwood. *Id.* at 9. The remainder of the reinspection evidence consisted of the results of reinspections conducted by the Pittsburgh Testing Laboratories (PTL) of welds inspected by Comstock inspectors during the period July 1982 through June 1986. Marcus, ff. Tr. 15,568, at 7.



the harassment, intimidation, and production pressure alleged by Intervenor did not have a detrimental effect on the quality of the Comstock inspectors' work. See PID at 75-76. None of Intervenor's objections to the reinspection evidence provides a basis for reversing this finding.

Intervenor first argues that because the CSR element of the BCAP program involved the reinspection of items that had been installed and inspected prior to June 30, 1984, a substantial portion of items inspected by Comstock inspectors during the period when many of incidents of alleged harassment and intimidation occurred was excluded from the sample. Intervenor Brief at 13. While Intervenor is correct, it does not follow that the CSR evidence has "no probative value whatever" as Intervenor states. Id. Intervenor's position was that the production pressure allegedly brought to bear on the Comstock inspectors was "historic," "powerful," "pervasive," and "tangible" and had its genesis in the arrival of Mr. Sakiak as Supervisor of Inspectors and Mr. DeWald as Quality Control Manager. Tr. 7903 (Guild). Mr. Sakiak assumed his position in July 1982, (Tr. 7994 (Sakiak)), and Mr. DeWald took over as Quality Control Manager in August 1983. DeWald, ff. Tr. 1700, at 1. If, as Intervenor claims, the conduct of Mr. Sakiak and Mr. DeWald during this period had a deleterious effect on the performance of the Comstock inspectors, one reasonably would expect to find some evidence of it in the CSR results. There was none.

The results of the CSR reinspection revealed an agreement rate of 98.893% prior to July 1982 and 98.925% subsequent to that time. Frankel, ff. Tr. 17,082, at 12-19. The PTL overinspection revealed an agreement

rate of 92.58% during the period July 1982 through June 1986. Tr. 15,837 (Marcus). An "agreement rate" is the ratio of the number of inspection points found acceptable by Comstock inspectors to the number of these inspection points found acceptable by the CSR reinspector. PID at 59. Intervenor claims that an agreement rate is a meaningless measure of inspector effectiveness because it does not take into consideration the rate of errors committed by craft workers. Intervenor Brief at 14. <sup>24/</sup> This objection, however, cannot overcome the central meaning of the information provided by agreement rates: (i) the quality of the inspections performed by the Comstock inspectors during the period in which they were allegedly subject to extreme production pressure did not differ in any significant respect from those performed by CSR and PTL reinspectors who were not subject to the same constraints; and (ii) the quality of the inspections performed by Comstock inspectors did not vary appreciably during the periods before and after the arrival of Mr. Saklak and Mr. Dewald. Put another way, while "agreement rates" may not be the most reliable measure of how well Comstock inspectors performed their

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<sup>24/</sup> Craft "error rate" is the percentage of deficient work installed by craftsmen to the total work installed. Intervenor's thesis is that the quality of the craft's performance may have improved appreciably over time, thus reducing the pool of discrepant items accepted by Comstock inspectors due to harassment, intimidation, and production pressure. According to Intervenor, as the craft error rate decreases, the likelihood of a high agreement rate increases. It is for this reason that Intervenor argues that an agreement rate is a meaningless statistic. The Board properly rejected this argument, noting that since "there was little or no change in agreement rate over considerable periods of time, some imagination is required to foresee that these effects . . . masked the pervasive effects of intimidation and production pressure described by Intervenor." PID at 67.



inspections, it is a reliable indicator of the effect of the alleged harassment, intimidation, and production pressure had on the Comstock inspectors' performance. As the Board observed, "[i]f harassment and intimidation occurred on a scale commensurate with Intervenor's allegations, it should have manifested itself in the results of both reinspection programs." PID at 76.

For all of the above reasons, the Board's finding that the harassment, intimidation, and production pressure allegedly brought to bear on the Comstock inspectors did not compromise the quality of their inspections is amply supported by the record and should be affirmed by the Appeal Board.

## II. THE BOARD DID NOT SHIFT THE BURDEN OF PROOF TO INTERVENOR

There is no merit to Intervenor's argument that the Board shifted the burden of proof to Intervenor. Intervenor Brief at 18. The Commission's procedural regulations allocate the burden of proof to an applicant. 10 C.F.R. § 2.732. The Board found, after considering all of the evidence, that Applicant had carried its burden. PID at 77. That determination was proper.

As noted in Part I(A) of this brief, where a quality assurance contention is involved, the standard to be applied in determining whether an applicant has carried its burden is whether "there has been a breakdown in quality assurance procedures of such dimensions to raise legitimate doubt as to the overall integrity of the facility and its safety-related components and structures." Callaway, supra, 18 NRC at 346. Thus, an applicant can prevail if it demonstrates (i) there has been



no breakdown in its quality control program or (ii) the quality assurance lapses do not raise legitimate doubt as to the overall integrity of the facility and its safety-related parts. See Id. Applicant succeeded on both counts.

The record establishes that Applicant's and Comstock's quality assurance program was designed to provide quality assurance personnel sufficient organizational freedom and independence from cost and schedule considerations. See Part I(B), ante. Similarly, the record shows that Applicant did not exert unreasonable or unjustifiable pressure on Comstock management to increase inspection output. Id. Nor did senior Comstock management pressure, systematically or otherwise, Comstock inspectors to accept work that should have been rejected under applicable procedure. See Part I(C), ante. The evidence is compelling that Mr. Seeders's removal from his calibration inspector position was due to his poor performance and not for expressing safety or quality concerns as Intervenor alleged. See e.g. Seltsmann, ff. Tr. 1960, at 16 and Attachment 2. The record also amply supports the Board's conclusion that Mr. Puckett was fired because he lacked the judgment and technical expertise necessary to carry out the duties he had been hired to perform. See PID at 16-30. Finally, the evidence reveals only two isolated instances of "harassment" <sup>25/</sup>, each involving a single inspector

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<sup>25/</sup> Under Commission case law, there are two essential elements of a harassment claim: (i) an action taken with the intent to modify an inspector's behavior (ii) for the purpose of impeding the inspector in the proper performance of his duty. See Duke Power Company (Catawba Nuclear Station, Units 1 and 2), LBP-84-24, 19 NRC 1418,

and both perpetrated by Mr. Saklak, a mid-level manager who was subsequently fired for his misbehavior and permanently disqualified from future employment in any safety-related capacity in any of Applicant's facilities. See Int. Ex. 39. The cumulative weight of the evidence supports a finding that there has not been a "breakdown" in Applicant's quality assurance program.

Second, even if Intervenor were correct that Comstock inspectors operated under the subjective perception that their management exalted quantity over quality, the evidence is both substantial and persuasive that this "breakdown" in quality assurance does not raise "legitimate doubt as to the overall integrity" of the Braidwood Station or its safety-related components. The alleged production pressure did not have a deleterious effect on the Comstock inspectors' performance. This fact is confirmed by the testimony of the Comstock inspectors, supported by expert testimony, and corroborated by the results of a sample

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(FOOTNOTE CONTINUED FROM PREVIOUS PAGE)

1520-21 (1984), aff'd, ALAB-813, 22 NRC 59 (1985). As noted earlier, n.15, ante, the record indicates that Mr. Saklak twice attempted to deter an inspector from performing his duty in accordance with applicable procedure, neither of which was successful. See Tr. 4182-96 (Snyder); Tr. 4970-94 (Mustered). Mr. Saklak's conduct resulted in his dismissal by Comstock (DeWald Test., supra, at 32) and permanent disqualification from future employment in any safety-related capacity at any of Applicant's facilities. See e.g. Int. Ex. 39; Tr. 3883-89 (Maiman). While the record shows that other Comstock managers exhorted Comstock inspectors to redouble their efforts to eliminate the inspection backlog, there is no evidence that these Comstock managers suggested or encouraged inspectors to violate procedure or accept work that should have been rejected. See PID at 74.



reinspection of their work. See Part I(D), ante, 26/ For these reasons, Applicant met the test established in Callaway and therefore was entitled to a favorable decision on matters placed in controversy by Intervenor's inspector harassment contention. Intervenor's argument that Board misallocated the burden of proof to Intervenor is without merit and should be rejected. 27/

### III. THE PRE-OCTOBER 1983 WELD INSPECTIONS DO NOT PRESENT A SAFETY ISSUE

As noted earlier, Intervenor's inspector harassment contention called into question the efficacy of Comstock quality control inspections during the period beginning August 1984. In order to allow Intervenor the fullest opportunity to present its allegations of harassment and production pressure, however, the Board admitted evidence of certain Comstock inspection activities occurring during the years prior to Mr. DeWald's

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26/ In addition, inspections of each of the safety or quality concerns made known to the NRC by Mr. Puckett and the Comstock inspectors in attendance at the March 29, 1985 meeting with the NRC Senior Resident Inspectors were conducted by the NRC, the results of which revealed nothing presenting a threat to the public health and safety. See Schapker, ff. Tr. 10,954, passim ; App. Ex. 51; Mendez/Neisier, ff. Tr. 10,490, passim; Staff Ex. 17.

27/ Intervenor argues that the Board's statement (PID at 74) that Comstock management's "indiscretions" were not of "sufficient severity to warrant the precipitous action of license denial" betrays a "strong presumption in favor of granting a license[.]" Intervenor Brief at 19. This accusation is unwarranted. A fair reading of this statement indicates that it is merely a restatement of the principle enunciated in Callaway that an operating license is not to be denied simply because errors occurred during construction or in the implementation of a quality assurance program if they do not cast legitimate doubt on the integrity of the facility or its safety-related components. See 18 NRC at 346.



assumption of the Comstock Quality Control Manager position. See Tr. 1250, 1262, 1314-16, 17,487-88, 17496-97, 17,502. Until November 1983, weld inspections were performed pursuant to the "grid" method. See DeWald, ff. Tr. 1700, at 24, <sup>28/</sup> Under the "grid" method, inspectors would inspect the welds on all of the components in a given coordinate range and usually documented their inspection on a single inspection checklist. Id. Since the items within the grid often contained hundreds of welds, it was not unusual for an inspection checklist to represent the product of several day's work. This practice was discontinued in November 1983 at Applicant's direction and ever since that date inspection checklists have been required to be completed and submitted at the end of each work shift. Tr. 9570-77 (Martin). <sup>29/</sup>

On appeal Intervenor argues that the evidence described above raises "serious concerns" about the effectiveness of the grid weld inspections and states that Applicant has failed "to carry its burden on that issue." Intervenor Brief at 17. Intervenor's argument is without merit for two reasons.

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<sup>28/</sup> The record is not clear whether 100% of the welds installed during this period were inspected or only a fraction of them. Mr. DeWald testified that inspections were performed on a 35% sampling basis. DeWald, ff. Tr. 1700, at 7. A contemporaneous Comstock document authored by one of Mr. DeWald's predecessors indicates that 100% of welds were inspected. See Int. Ex. 200.

<sup>29/</sup> The CSR found that 16% of the welds accepted by Comstock inspectors during this period contained deficiencies, although none of these deficiencies were "design significant." See Kaushal, ff. Tr. 13,068, Attachment 4. A "design significant" deficiency is one that could impair the ability of the item to perform its safety function. Id.

First, as the Board Chairman (upon whose minority opinion Intervenor substantially relies) recognized, Intervenor's contention did not encompass the time period in which the grid inspections were performed or the efficacy of the grid inspections themselves. See Minority Opinion at 37-38; Minority Findings at 282. Thus, it is misleading for Intervenor to argue that Applicant failed "to carry its burden on that issue." Intervenor Brief at 17. The matter not being placed in controversy by the contention or by the Board pursuant to its sua sponte authority, there was no issue for which Applicant had a burden to shoulder. Compare e.g., Duke Power Company (Catawba Nuclear Station, Units 1 and 2), CLI-83-19, 17 NRC 1041, 1048 (1983); Metropolitan Edison Company (Three Mile Island Nuclear Station, Unit 1), ALAB-697, 16 NRC 1265, 1271 (1982) (applicant bears burden of proof with respect to issues placed in controversy), with, Carolina Power and Light Company (Shearon Harris Nuclear Power Plant), ALAB-852, 24 NRC 532, 545 (1986) (admitted contention defines issues placed in controversy). In fact, had evidence relating to the grid inspections been offered for the purpose of establishing the inadequacy of those inspections, it would have been error for the Board to admit it because the evidence would not have been relevant to any matter in controversy. See 10 C.F.R. § 2.743(c) ("Only relevant, material, and reliable evidence which is not unduly repetitious will be admitted"). <sup>30/</sup> Applicant carried

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<sup>30/</sup> Perhaps sensing this, Intervenor offered, and the Board admitted, evidence of grid inspections for the limited purpose of providing historical background. This is why the Staff, and presumably Applicant, did not present any evidence relating to this matter.

its burden with respect to the issues placed in controversy. Matters relating to safety not placed in controversy are the province of the Staff. Consequently, the Board was correct to authorize the Director of the Office of Nuclear Reactor Regulation, upon making the requisite finding under 10 C.F.R. § 50.57, to issue operating licenses to Units 1 and 2 of the Braidwood Station.

Second, the grid weld inspections do not present a serious safety matter. Assuming that there remain uncorrected some welds which do not conform to procedural requirements, the reinspection evidence presented at the hearing indicates that such deficiencies will not impair the ability of the item involved to perform its safety function satisfactorily. See PID at 71-72; Kaushal, ff. Tr. 13,068, at 28. <sup>31/</sup>

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<sup>31/</sup> Intervenor argues that design significance is not a reliable measure of the adequacy of safety-related items to perform their function because the design significance calculations were computed by Applicant's architect-engineer, who Intervenor claims cannot be trusted to be objective. See Intervenor Brief at 13-14. This suspicion is not warranted. As the Board majority observed:

There is no evidence to indicate that Sargent & Lundy's participation in evaluating BCAP discrepancies was anything less than highly professional and impartial. Sargent & Lundy did not perform construction, and there is no reason why it would be adversely affected by identified construction defects. Additionally . . . the overall regulatory atmosphere surrounding the BCAP program with virtually continuous oversight by BCAP QA, IEOG [the Independent Expert Overview Group] and a full-time NRC inspector assigned only to BCAP activities reduced the possibility of lenient treatment of discrepancies to virtually zero.

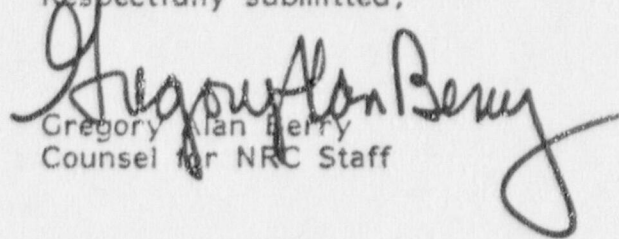
PID at 63; see also Gardner, ff. Tr. 17,606, at 8.



CONCLUSION

For the reasons stated in this brief, the Appeal Board should deny Intervenor's appeal and affirm LBP-87-14.

Respectfully submitted,

  
Gregory Alan Berry  
Counsel for NRC Staff

Dated at Bethesda, Maryland  
this 11th day of August 1987

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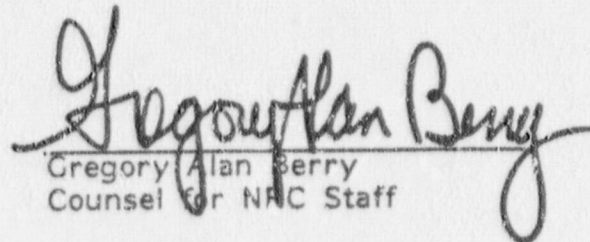
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