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UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of	)	
	)	
CAROLINA POWER & LIGHT COMPANY	)	50-400 OL
	)	50-401 OL
(Shearon Harris Nuclear Power	)	
Plant, Units 1 and 2)	)	

APPLICANTS' BRIEF

(As To Qualifications Of Persons Proffered By  
Intervenors As Experts To Evaluate The Shearon Harris  
Nuclear Power Plant Security Plan)

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INTRODUCTION

The necessity for this brief concerning the qualifications, if any, of individuals proffered as experts by Intervenors Kudzu Alliance, Conservation Council of North Carolina, and Wells Eddleman (hereinafter "Intervenors") to view and evaluate Applicants security plan for the Shearon Harris Nuclear Power Plant arises out of the filing of several proposed contentions as to the adequacy of the security plan (specifically, KUDZU 12, CCNC 3, and Eddleman 24, 25, 26, 35, 54(2d), 64(a), and 133). In its Memorandum and Order (Reflecting Decisions Made Following Prehearing Conference) dated September 22, 1982, the Atomic Safety and Licensing Board, followed the approach of the Catawba Licensing Board as to certain procedural issues surrounding the ultimate issue of admissibility of contentions concerning the

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adequacy of an applicant's security plan. The Board held that prior to a consideration of the admissibility of any of the proposed security plan contentions, the Intervenor must demonstrate that they are able to retain experts qualified, under applicable principles, to assess the adequacy of the Harris security plan. The Board ordered Intervenor to submit a statement of qualifications and experience of any proposed experts by October 15, 1982.

The Intervenor, proceeding jointly, submitted some information as to the background of three proposed experts (Charlie A. Beckwith, John R. Maples, and Richard J. Sanders) in Intervenor's "Response to Questions," filed October 15, 1982. Subsequently, in a telephone conference held among the Board and all parties, Applicants expressed the need for further information as to the qualifications of the proposed experts and stated their intention to depose them. Counsel for the NRC Staff also expressed his intention to depose the proffered experts. Subsequently, the Intervenor withdrew the names of Messrs. Beckwith and Sanders. As of the time of the second prehearing conference in this proceeding held on February 24, 1983 in Raleigh, North Carolina, Intervenor had one proposed expert, John R. Maples, proffered to review Applicants' security plan.

At the second prehearing conference, Intervenor stated that they anticipated proffering more proposed experts and the Board accordingly required the Intervenor to file with the Applicants and Staff, by March 18, 1983, a resume for each proposed expert and a brief statement of the area of expertise for which the

expert was to be offered. On March 21, 1983, Intervenor filed and served brief resumes and/or copies of correspondence concerning eight more proposed experts -- Ernest Tabata, Charles David Crockett, James F. Blair, William G. Brady, III, Bobby J. Tuggle, Lowell Wesley Stevens, Earl Roy Bleacher, and James MacKie. On April 6, 1983, Applicants filed and served Notices to Take Depositions of all nine proposed experts which called for the depositions of Messrs. Tabata, Crockett, Blair, Brady, Tuggle, Stevens and Bleacher to be taken on April 18, 1983 and Messrs. Maples and MacKie to be conducted on April 25, 1983. On April 14, 1983, Intervenor provided Applicants with some limited further information concerning proposed experts Maples and MacKie.

On April 18, 1983, in Fayetteville, North Carolina, Applicants and the NRC Staff deposed Messrs. Tabata, Crockett, Tuggle, and Brady.<sup>1</sup> Prior to the commencement of these depositions, a dispute arose between Mr. Barth and Ms. Greenblatt as to whether Messrs. Bleacher and Stevens had been sufficiently proffered as experts, and the parties agreed to defer those depositions pending a Board resolution of this dispute. The Board, in its April 22, 1983 Order (Resolving a Discovery Dispute), ruled that Attorney Greenblatt had sufficiently cured her previous insufficient proffer of Bleacher and Stevens, and that both individuals were being proffered by Intervenor as generalists.

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<sup>1</sup>Attorney Greenblatt, counsel for Wells Eddleman, withdrew Intervenor's proffer of Mr. Blair as an expert prior to his being deposed.

On April 25, 1983, in accordance with the Notices of Deposition, counsel for Applicants, Staff and Intervenor and Messrs. Maples, MacKie, Bleacher and Stevens assembled at the offices of Carolina Power & Light Company in Raleigh, North Carolina. Applicants and Staff deposed Messrs. Maples, Bleacher, and Stevens.<sup>2</sup> Counsel for Staff also deposed Mr. MacKie. Over Applicants' objection, however, Mr. MacKie left the deposition before Applicants had had an opportunity to depose him. Applicants' counsel, Mr. Carrow, pointed out that the April 6, 1983 Notice of Deposition had provided ample notice to Mr. MacKie and Ms. Greenblatt that the deposition was to be conducted throughout the day of April 25, 1983. (MacKie's deposition (hereinafter "MK.") at 83). Mr. Barth also remarked that had Ms. Greenblatt advised him and Mr. Carrow of the need for Mr. MacKie to make an early departure, his deposition could have been conducted early in the day. (MK. at 79). Mr. Carrow expressed Applicants' willingness to attempt to accommodate Mr. MacKie's schedule and to continue the deposition, preferably to be conducted later that same week. (MK. at 80, 82). Ms. Greenblatt made no effort at that time, while Mr. MacKie was still present, to reschedule the deposition but did twice acknowledge that consequences could arise from Mr. MacKie's departure which would have to be faced. (MK. at 80 and 83).

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<sup>2</sup>During the course of Mr. Stevens deposition, Attorney Greenblatt announced the withdrawal of the proffer of Tabata, Crockett and Brady as proposed experts. (Stevens deposition (hereinafter "S.") at 4).

In a telephone conversation on May 6, 1983, between Ms. Greenblatt and Mr. Carrow, Ms. Greenblatt indicated that the Intervenor wanted to proceed with Applicants' deposition of Mr. MacKie. Mr. Carrow replied that if that were the case, it would be necessary for Mr. MacKie to return to Raleigh as soon as possible, preferably by May 9 or soon thereafter, in order that the deposition could be completed within sufficient time to enable Applicants to receive a transcript and meet the already extended briefing schedule. Attorney Greenblatt stated that she would have to confer with Mr. MacKie about this and would advise Applicants' counsel of their decision and schedules. Ms. Greenblatt has made no effort to contact Applicants' counsel since that date. Mr. Carrow telephoned Ms. Greenblatt on May 17, 1983 and is informed that the earliest Mr. MacKie would be available for a deposition is June 13, 1983.

While Applicants have made every effort to accommodate Mr. MacKie and to cooperate with Ms. Greenblatt in proceeding with respect to the possible qualification of this proposed expert, Applicants have been put to substantial inconvenience by Mr. MacKie's departure from the deposition on April 25 and have been seriously disadvantaged by Ms. Greenblatt's failure to proceed in a diligent fashion to accept Applicants' offer to reschedule the deposition. Under all of the circumstances, Applicants believe that Mr. MacKie's name should be deemed to be withdrawn from further consideration as a possible expert in this matter. Because Applicants and Intervenor have been unable to resolve this matter informally, Applicants have no alternative

but to file a motion requesting the Board to rule that Mr. MacKie be deemed to be withdrawn from consideration. Applicants intend to submit such a motion concurrently with the filing of this brief.

#### LEGAL CONSIDERATIONS

While the security plan for a nuclear facility is highly sensitive, confidential information protected from disclosure under Commission regulations, 10 C.F.R. §§2.790 and 73.21, contentions alleging inadequacies in a security plan may be cognizable in a licensing proceeding. Pacific Gas & Electric Co., (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-410, 5 N.R.C. 1398 (1977). Disclosure of the plan is permissible, however, only to the extent deemed by the presiding officer to be necessary for a proper decision in the proceeding, and only if made subject to carefully fashioned protective measures. 10 C.F.R. §2.744.

These protective measures were set forth by the Appeal Board in the leading case regarding security plan issues in a licensing proceeding, Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-410, 5 N.R.C. 1398 (1977). In Diablo Canyon, the Appeal Board ruled that while the adequacy of a security plan is a proper issue for consideration in Commission adjudicatory proceedings, the extremely sensitive nature of such plans requires that strict procedural rules shall govern the discovery of the plan:

1. The plan's relevance must be demonstrated by the party requesting access to the plan. Only those portions of a plan which an Intervenor can demonstrate are relevant to his contentions should be released to him. Thus, to the extent that any portion of the plan is disclosed, disclosure is limited to a "sanitized" version of such portion of the plan, i.e., one from which has been deleted all details not necessary for proper evaluation of its adequacy. Diablo Canyon, ALAB-410 at 1405.

2. A plan should not be released except under a protective order, and in considering a protective order, the Board should consider whether the recipient of the information is likely to abide by the protective order. (ALAB-410 at 1404. Access to the security plan was limited to the expert witness and counsel for the intervenor.)

3. A security plan need only be released to an expert witness who has been shown to possess the specific technical competence necessary to evaluate the portions as to which disclosure is sought. Disclosure is to be limited to those portions of the plan which the expert witness is competent to evaluate. Parties sponsoring the witness have the burden of demonstrating his expertise. (ALAB-410 at 1404-1406).

In Pacific Gas & Electric Co. Diablo Canyon Nuclear Power Plant, Units 1 and 2), LBP-78-36, 8 N.R.C. 567 (1978), the Licensing Board denied a petition by Intervenors to establish their proposed expert as a security plan expert witness. In doing so, the Licensing Board discussed the standard to be utilized in ruling on the proffered witness' expertise.

Relying upon the guidance provided by the Appeal Board in ALAB-410, the Licensing Board stated:

The key words here are "technical competence" and "the party sponsoring the witness has the burden of demonstrating his expertise." Webster defines "technical" as "having special, usually practical knowledge, especially of a mechanical or scientific subject." We believe that "technical competence" to evaluate the components of a security plan ideally requires practical knowledge flowing from working with the assembly of the "nuts and bolts," etc., of the various components of the security system, at least to the extent of being able to design an overall system. It does not necessarily mean the raw manual labor involved, but an intimate, on-the-spot knowledge of the fabrication and assembly of each component. We recognize that the Board must make a subjective determination here, but, noting the fact that the burden is on the party sponsoring the candidate, we believe that the burden will not have been met unless there exists evidence of actual practical knowledge or its equivalent.

LBP-78-36, 8 N.R.C. at 569.

As stressed by the Appeal Board in ALAB-410, the security plan is an extremely important document. The Appeal Board reiterated the unique nature of the plan in Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-592, 11 N.R.C. 746, 749 (1980) (Second Prehearing Conference Order of April 11, 1980), where it was stated, "... the security plan is very sensitive information. Severe consequences to the public safety may result from its compromise. Accordingly, precautions necessarily must be taken to safeguard the plan." This concern for the highly sensitive nature of the plan has justifiably resulted in a very high standard of expertise

required for evaluating security information. As the Diablo Canyon Licensing Board confirms, these are "more restrictive requirements for the demonstration of expertise than has existed previously." LBP-78-36, 8 N.R.C. at 570.

In making its determination as to whether the proposed expert offered by the intervenors met this high standard, the Diablo Canyon Licensing Board looked to the expert's education and experience: "In general, the qualifications of an expert witness are established either through consideration of his academic training or of his relevant experience, or through some combination of these factors." Id. In that proceeding, the Licensing Board was adjudicating the qualifications of a Mr. David Comey. Some of the evidence as to his qualifications tended to show that Mr. Comey 1) had conducted on-site inspections of ten nuclear plants (both BWR and PWR), 2) had reviewed nuclear plant security plans, 3) was familiar with nuclear plant layout, operations, and systems, 4) had served on a review group, with well-respected consultants, on physical security at nuclear facilities, and 5) had consulted with the N.R.C. and others on reactor sabotage. Pacific Gas & Electric Co. (Diablo Canyon Nuclear Power Plant, Units 1 and 2), ALAB-504, 8 N.R.C. 406, 408-09 (1978).<sup>3</sup> Nevertheless, the Licensing Board found Mr. Comey to be unqualified.

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<sup>3</sup>The Appeal Board in this case remanded the earlier decision of the Diablo Canyon Licensing Board denying qualification of Mr. Comey, requiring the Licensing Board to provide a "reasoned basis" for its decision. The Licensing Board reconsidered its previous decision, reached the same conclusion, and provided the specific "reasoned basis" therefor in LBP-78-36.

The Licensing Board did find Mr. Comey had a general knowledge of plant layout and operations, but said "[t]his familiarity with reactor plant systems and layouts is, we must add, a necessary but not sufficient condition to qualify as an expert on security." LBP-78-36, 8 N.R.C. at 573. That Board found that Mr. Comey had no formal course work in physical security, no educational background in electronics, and the relevance of his studies to nuclear plant security was not shown. Id. at 571. Further, the Licensing Board reviewed the transcript of Mr. Comey's deposition (taken as in this proceeding by Applicants and the NRC Staff) and concluded that "no depth of knowledge sufficient for expert qualification was revealed." Id. at 573. Mr. Comey was found to have "broad general knowledge of the field," but not the "requisite depth of knowledge in any specific aspect identified in ALAB-410 (and adopted by this Board) to qualify as an expert." Id. at 573-74.

From the decisions in ALAB-410 and LBP-78-36, the standard for qualification as an expert to review an Applicant's security plan which emerges may be stated as follows: That person must be shown to possess specific technical competence necessary to evaluate the portions of the plan as to which disclosure is sought. To make such a showing the proposed expert must have actual practical knowledge, or its equivalent, of the particular area of the plan as established by either academic training or relevant experience, or a combination of the two. This specific technical competence must also include familiarity with reactor plant systems and layouts. None of the experts proffered by the Intervenor in this case has met this high standard.

Prior to discussing the deposition testimony of each of the proffered experts, Applicants wish to observe that most of the gentlemen had read at least some of the relevant regulations and NUREGs in preparation for the depositions or at some more distant time in the hope of obtaining employment with the NRC or a nuclear facility. A mere reading of such material, while necessary, cannot be deemed to provide the degree of educational preparation and level of comprehension of security related issues that must be possessed before one can be considered qualified to review and evaluate a document so complex and sensitive as a commercial nuclear power plant security plan.

JOHN R. MAPLES

When asked during his deposition which aspects of a commercial nuclear power plant's security plan he felt qualified to review, Mr. Maples answered as follows: "Physical intrusion detection systems, records review, the guard training, and transportation." (Maples deposition (hereinafter "M.") at 68). Thus, though proffered by Intervenor as a "generalist," Mr. Maples apparently recognizes his own limitations and has restricted the areas in which he feels qualified to perform a review to the four above listed. Certainly no one is a better judge of Mr. Maples' limitations as a security plan expert than Mr. Maples himself. At the very least, therefore, Mr. Maples should not be considered qualified in, and should not be allowed to review, any parts of the Harris security plan other than those as to which he has limited himself. Because, however,

transportation is not included in the NRC's regulations or guidance documents as an aspect of a commercial nuclear power plant site security plan, Mr. Maples' professed fields of expertise are reduced to three.

Mr. Maples' educational background in areas relevant to security planning has been limited. He did study or instruct in the areas of ordinance disposal and bomb disposal (M. at 45-46) and is currently taking college courses in criminal justice. (M. at 4). Applicants do not believe that this is sufficient to constitute Mr. Maples as an expert qualified to assess the provisions of a civilian commercial nuclear plant security plan relating to physical intrusion detection systems, records review or guard training. Similarly, Mr. Maples has not had the kind of practical experience which would provide him with sufficient expertise to meet the standards of Diablo Canyon. Mr. Maples' lack of requisite expertise in each of these areas becomes apparent in the review of the deposition transcript set forth below.

#### Physical Intrusion Detection Systems

Mr. Maples testified that he has read Regulatory Guide 5.44 dated May 1980. (M. at 62, 74). Regulatory Guide 5.44, however, deals only with perimeter intrusion alarm systems; yet Mr. Maples claims to be expert in "physical intrusion detection systems"

which is a much broader subject than that covered by the Regulatory Guide.<sup>4</sup> He has read no other relevant documents other than a SPER workbook.<sup>5</sup> Id. He has not read, for example, "Intrusion Detection Systems Handbook" prepared by Sandia Laboratories for the Department of Energy (SAND 76-0554) or Regulatory Guide 5.61 both of which are recommended in Regulatory Guide 5.44 (N : Regulatory Guide 5.44 at 5.44-2, May 1980).

With respect to his experience, Mr. Maples admitted that he knows very little to nothing about the workings of a commercial nuclear power plant (M. at 29-30). He has had some experience with security plans at a maintenance facility for nuclear weapons during his military service in Europe. (M. at 10). This military facility had physical intrusion detection systems consisting of a guard force and alarmed doors (M. at 11), ground sensors, E-fields, and microwave (M. at 18). At that time, Mr. Maples was not an expert in closed circuit television (CCTV) (M. at 19), but did have experience from military training regarding E-fields. (M. at 20).

A fully integrated perimeter detection system at a commercial nuclear power plant will consist of appropriate

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<sup>4</sup>Mr. Maples testified that he read this Regulatory Guide with the hope of "someday getting involved in security consulting on a nuclear power plant level" because some of his associates are involved in such and "it struck [his] fancy." (M. at 61).

<sup>5</sup>The SPER (Security Plan Evaluation Report) workbook is an NRC document (NUREG 0416) which dates from 1978. It was never formally transmitted by the NRC to utilities or interested parties. The document is essentially outdated and superseded by NUREG 0903, Acceptance Criteria for the Evaluation of Nuclear Power Security Plans, which has been in publication since August 1982 but with which Mr. Maples apparently was unfamiliar.

lighting, constant surveillance (both visual by guard patrol and through CCTV) of protective barriers and isolation zones, alarm/intrusion detection systems with tamper indicating or self-checking capabilities, and monitoring of all of the above through the central alarm and secondary alarm stations. (See NUREG 0908 at 29-36, August 1982). Mr. Maples stated, however, that his familiarity with perimeter detection systems included E-fields, infrared systems, "terminous seismic sensors for fences, ground sensors, pressure sensitive, microwave," and CCTV. (M. at 50-51). He did not mention Ferrous Metal Detector Perimeter Alarm Systems referred to in Regulatory Guide 5.44 -- the one document which he read in preparation for the deposition.

Moreover, Mr. Maples testimony does not permit the conclusion that he is particularly knowledgeable about the systems he mentioned. Mr. Maples stated, for example, that ground sensors can be used on any kind of terrain. Ground sensors, however, should not be installed on rocky terrain due to damage that may be caused to pressure transducers. (Regulatory Guide 5.44 at 5.44-3).

Mr. Maples has failed to display on this record a requisite practical knowledge of physical intrusion detection systems which would qualify him as an expert in this area.

#### Records Review

Mr. Maples displayed some knowledge of the regulations in 10 C.F.R. §73.70 concerning records that must be kept by a licensee. He has not read NUREG 0908 on the subject. (M. at 26

and 36). The record is devoid, however, of any evidence that Mr. Maples has any practical experience with regard to records review. There are statements contained in his resume, previously filed by Intervenor, to the effect that he has performed several security assessments of "sensitive facilities" and security programs which protected those facilities -- including, apparently, "Records." There is nothing in Mr. Maples' testimony, however, to support these statements.

In Exhibit 2 attached to the deposition, in a letter to Wells Eddleman, dated March 22, 1983, Mr. Maples claims to have "performed record audits in conjunction with physical security surveys of nuclear facilities" and "administered to daily records of a nuclear facility."<sup>6</sup> An "audit," as typically understood, however, simply entails an examination and verification of records. There is no evidence that Mr. Maples analyzed records to determine their adequacy.

#### Guard Training

Mr. Maples stated that he has never developed an organizational structure for deployment and procedures by security forces at a commercial nuclear power plant (M. at 58), but that he did have some input in such while stationed in Europe. (M. at 59). He also stated that he participated to some

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<sup>6</sup>By "nuclear facility" Mr. Maples apparently is referring to the nuclear weapons maintenance and storage facility where he was stationed during military service in Europe. He has no experience relating to commercial nuclear power plants except as to instructing on bomb threats. (M. at 29).

extent in the updating of a guard training manual there. (M. at 27). Yet he is not knowledgeable even as to the threat which the NRC requires protection against at a commercial nuclear power plant. (M. at 56, 83).

Mr. Maples resume indicates that at a Vepco nuclear power plant, while still in the Army, he gave some instruction to the security force there in "Counter-terrorist Operations and Explosives Protective Measures." Further information provided by Mr. Maples as contained in Deposition Exhibit 2 indicates, however, that Mr. Maples merely supervised others who gave guard training at military installations, and periodically inspected specific and limited operations there for compliance with guard training and qualification. Thus, the subjects of guard training and qualification as addressed by the regulations contained in Part 73, Appendix B are far beyond Mr. Maples limited experience in these areas and are subjects as to which the record does not establish him as an expert.

#### General Considerations

Mr. Maples' testimony as to his responsibilities in designing and implementing the security plan at a U. S. nuclear weapons facility in Europe is of virtually no value in assessing his qualifications to conduct a review of a security plan for a civilian commercial nuclear plant. His testimony in this area is vague and unspecific and, despite repeated questions by counsel for Applicants and Staff, Mr. Maples failed to provide any hard facts upon which an accurate judgment as to his experience could

be drawn. Mr. Maples claims, for example, to have participated as a Staff Sergeant in the design of the facility security plan system (M. at 15-16), yet he admits that there were nine layers of command between himself and final approval of the plan. (M. at 21 and 33-34). (The plan was still incomplete when Mr. Maples left the facility. M. at 33.)

Mr. Maples apparently assumes, inappropriately, that there is a significant similarity between a military installation and a commercial nuclear power plant. He stated, for example, that the weapons grade material that he had contact with in the military is equivalent to the special nuclear material found at commercial nuclear power plants. (M. at 49).

Mr. Maples has evidenced in the record that he lacks the requisite knowledge and experience to be considered an expert under the standards of Diablo Canyon.

EARL ROY BLEACHER

Mr. Bleacher has been proffered by the Intervenor as a "generalist" to assess the entire Harris security plan. The deposition record, however, fails to establish that Mr. Bleacher has the academic or practical background which would qualify him sufficiently to evaluate any part of the plan.

Mr. Bleacher's educational background does not qualify him to review Applicants' security plan. He has no undergraduate or graduate degrees and has taken no physics or electronics courses. (B. at 36). He has had no courses concerning protection or security of nuclear fuel cycle facilities,

commercial nuclear power plants, or protection for special nuclear material. (B. at 23-24). The extent of any arguably relevant education he has had appears to be two one-week courses given by the military in 1967 regarding physical security and industrial security. (B. at 22).

Further, Mr. Bleacher has virtually no knowledge of the workings of a commercial nuclear power plant. The only such facility he has even visited was the Three Mile Island plant, where he was given a brief "tour" of the grounds. (B. at 29). He does not possess sufficient knowledge to discuss a fault tree analysis focusing on the spent fuel pool. (B. at 41). What little knowledge Mr. Bleacher does have on the subject appears to have been obtained through the reading of general materials which he obtained from the Fayetteville, North Carolina, public library a few weeks prior to his deposition. (B. at 32).

Although proffered as a generalist, Mr. Bleacher admits that he has no expertise in the area of communications (B. at 24) or weapons. (B. at 25). The record demonstrates that he is similarly unexpert concerning detection systems. For example, regarding closed circuit television, Mr. Bleacher has no specialized background in the use of television cameras (B. at 19). Moreover, he does not realize that using CCTV cameras on one side of a physical barrier (fence) impedes one's ability to

observe the other side of the barrier. (B. at 38).<sup>7</sup> Although somewhat familiar with E-fields (B. at 19), microwaves (B. at 20), and explosives detectors (B. at 30), Mr. Bleacher does not know what an H-field is (B. at 20) nor is he familiar with the term transmission line supervision (B. at 40). Further, he incorrectly stated that an uninterruptable power source (which is key to maintaining continuous electronic security system operability) is sufficient if the backup system comes on line within a minute of down time. (B. at 46). Also, he initially described the computer's role in nuclear power plant security as simply monitoring plant functions within the control room. (B. at 58).

Mr. Bleacher does have some limited experience in the area of guard response to an intruding force, which he gained working for a few months for a subcontractor to Sandia Laboratories with regard to a study of nuclear fuel cycle facilities. This experience is, however, of limited value in establishing his expertise to evaluate the Harris plan in that a fuel cycle facility is very different from a commercial nuclear power plant. Moreover, the Sandia study utilized MILES (Multiple Integrated Laser Engagement System involving laser transmitters and receivers) for guard training -- a system which Mr. Bleacher states is not used in commercial nuclear power plants. (B. at 35).

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<sup>7</sup>This is because sighting along a length of chain link fence will make the mesh appear as if it "is closing in" and will prevent a view of the other side thereof.

Mr. Bleacher's own testimony minimizes the value of his experience with respect to the Sandia study. He emphasized that site specificity is key to proper design of a security plan (B. at 7-8), but admitted that the Sandia study was done with regard to a "generic" fuel cycle facility. (B. at 17-18). While the study was to have addressed certain items pertaining to 10 CFR Part 73, Appendix B, Mr. Bleacher admitted that: "We never got to this portion of the project."<sup>8</sup> (B. at 14).

Except for the Sandia study, Mr. Bleacher has no experience with the design of guard training procedures, and he has done no review of such a design. (B. at 48). Further, he is not familiar with the minimum guard force size as described in the Regulations at Section 73.55(h)(3) (B. at 57-58, 63); nor is he familiar with the B-27 target which is described in Appendix B relative to weapons training for guards. (B. 43). Finally, his admitted lack of expertise as to communications and weapons, (both of which are certainly essential to guard training), substantially diminish the value of his limited experience in the area of guard training.

The record demonstrates therefore that Mr. Bleacher is not qualified to review any aspect of Applicants' security plan. His educational background does not provide him any relevant qualifications; he admits a lack of expertise in communications and weapons; he has virtually no knowledge of detection systems;

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<sup>8</sup>In his deposition, Mr. Stevens stated that Mr. Bleacher did nothing more than work from a historical perspective (i.e., research of regulations) on the Sandia study. (S. at 9).

his knowledge and experience with regard to guard training is limited; he has only recently learned a bit about the operation of a nuclear plant through materials from a public library; and he has never designed or reviewed a commercial nuclear power plant security plan or program.<sup>9</sup>

LOWELL WESLEY STEVENS

There is no evidence in the record that Mr. Stevens has academic credentials which would provide him with qualifications to evaluate the Harris security plan.

Mr. Stevens has very little knowledge of the operation or layout of a commercial nuclear power plant. He has been to only one plant (S. at 11) but he learned little from that visit about plant operations or layout. (S. at 22).

Mr. Stevens demonstrated a very limited knowledge of intrusion detection systems. He has had only "minor electronic courses" (S. at 48), which lasted only two to five days. (S. at 49). Mr. Stevens mentioned that he is familiar with motion sensors, infared, microwave, and CCTV (S. at 49), as well as buried lines (S. at 51); but he incorrectly stated the scope of transmission line supervision (S. at 52).

Mr. Stevens testified that he was "involved in training of" and "set up the security for" the Blue Light operations near Fayetteville. (B. at 56). That facility, however, utilized no

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<sup>9</sup>While he stated that he had designed a security plan for the military (Blue Light) (B. at 56), he admits that such a security plan at such a military installation is different from what would be in place at a commercial nuclear power plant because "all we had to do was to place the guards, and . . . put up restricted area signs." (B. at 60).

CCTV, E-fields, or other commonly used commercially available exterior intrusion detection systems (S. at 24), and Mr. Stevens readily admitted that he cannot answer detailed questions about the technical aspects of any E-field (or other security system). (S. at 25-26). In addition, he does not know what the role of the computer is with regard to security (S. at 69-70), and he is not familiar with the threat that the NRC requires Applicants to protect against at the Harris plant. (S. at 65).

Mr. Stevens has never designed a security plan for a private facility (S. at 43), but said that he did design the security plan for the Blue Light operation (S. at 27).<sup>10</sup>

Finally, while Mr. Stevens performed NRC related work while in the army, it was only with regard to the transportation of special nuclear materials (his unit assisted the NRC in evaluating vulnerabilities to overt attack (S. at 17) which is not involved in a commercial nuclear power plant security plan. He prepared some papers regarding guard training for the NRC but they applied only to nuclear fuel cycle facilities. (S. at 55).

As pointed out in the review of Mr. Bleacher's testimony, any experience that either gentlemen may have gained while working in connection with the preparation of the Sandia study is of little relevance to this proceeding. The MILES System which was the primary device used for guard training in the Sandia Study has not been used, to Mr. Stevens knowledge, at commercial

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<sup>10</sup>Interestingly, Mr. Stevens stated that he designed the Blue Light security plan (S. at 27) while he was under Mr. Bleacher's command. (S. at 47). Mr. Bleacher testified that he had designed that plan. (B. at 56).

nuclear power plants. (S. at 13 and 44). Moreover, the Sandia study was generic in nature (S. at 10) and related to fuel cycle facilities, not commercial nuclear power plants. (S. at 16).

The record demonstrates, therefore, that Mr. Stevens does not possess the level of knowledge and experience necessary to meet the standards set forth in ALAB-410.

BOBBY J. TUGGLE

While Mr. Tuggle appears to have been relatively well educated and experienced in the field of communications, which he considers his area of specialization (Tuggle deposition (hereinafter "T.") at 4), his qualifications fall short of the high standards established by both the Appeal Board in ALAB-410 and the Licensing Board in ALAB-78-36 which must be satisfied by one seeking qualification as a security plan expert. Mr. Tuggle is not familiar with the operations of a commercial nuclear power plant. (T. at 16-17, 9; see also ALAB-78-36, 8 N.R.C. at 573). Mr. Tuggle has taken no courses (T. at 11) and has done no reading (T. at 17) which would provide him with even a basic background regarding the layout and operation of a commercial nuclear power plant. He has done no work for the NRC (T. at 13); has never designed communications systems for either industrial or commercial facilities (T. at 8); and has never reviewed a security plan for either of those types of facilities. (T. 18).

Mr. Tuggle stated that he received all of his experience in reviewing and designing the communications portion of security plans while in the military (T. at 18); but it has been sixteen

years since he designed a comprehensive plan that involved massive structures (such as ones that will be found at Shearon Harris and other commercial nuclear power plants). (T. at 19).

Mr. Tuggle, therefore, fails to meet the standard of expertise established in ALAB-410 and related cases which would qualify him to evaluate the specific portion of the Harris plan relating to communications.

JAMES MACKIE

As set forth in the Introduction above and the Motion filed by Applicants on this date, Applicants contend that James MacKie, by the fact of (1) his leaving his deposition prior to Applicants' examination of him, and (2) the failure of Intervenor to reschedule the said deposition, should be deemed to have been voluntarily withdrawn by the Intervenor as a proposed expert. Applicants Motion of this date requests a Board ruling to this effect. To the extent, however, that Mr. MacKie has been questioned by the NRC Staff and his responses thereto are a matter of record, Applicants will address the issue of Mr. MacKie's qualifications.

The record reveals that Mr. MacKie is unqualified to review any portion of the Harris security plan. He has no knowledge whatsoever of the workings of a nuclear power plant (MK. at 15, 58, 64, and 75-77). He testified that the threat which the NRC requires Applicants to protect against at the Harris plant is that posed by demonstrators. (MK. at 72). He defined a vital area as that where "strategic special nuclear materials" are

stored (MK. at 64). His education, which he completed in 1979 as a sociology major (MK. at 5), did not include any relevant course work that would provide him with any level of expertise regarding security planning. While Mr. MacKie has taught some courses which could be considered security related, he devoted very little instruction time to anything that would be relevant to the security plan of a commercial nuclear power plant. Mr. MacKie admitted that the courses on military intelligence which he taught contained only a brief two-hour segment on industrial security (MK. at 13).

Further, Mr. MacKie has extremely limited knowledge of intrusion detection systems (sonic and infrared alarms and buzzer gates, MK. at 18; infrared and CCTV, MK. at 39; CCTV, MK. at 54; and motion detection and magnetic switches on doors, MK. at 57). The one detection system which Mr. MacKie claims to have helped install himself was a DEMCO System in a small retail establishment in Myrtle Beach. (MK. at 10). It appears from the record that Mr. MacKie has served as a document custodian during his military career and since his retirement from military service. (MK. at 6, 14, 17, 21, 30, 32, 43 and 46). He also has protected residences and vehicles in connection with his embassy duties. (MK. at 33 and 51). What he states to be his input into security plan design is very limited and covers no more than papers, vehicles, and people. (MK. at 23, 46 and 53).

Mr. MacKie's own testimony underscores his lack of qualification as a security plan expert. He is neither experienced nor schooled sufficiently in any area such that he

should be deemed qualified, but he believes this could be overcome by being able to sit down with the regulations and interpret them as best he can. (MK. at 62-63). This is, of course, wholly inadequate to qualify one as a security plan expert. What is required is that a proffered expert have the requisite qualifications required under Diablo Canyon at the time of the proffer. Mr. MacKie fails on this point as do all the other individuals proposed as experts by the Intervenors.

#### CONCLUSION

Of the five proposed experts still proffered by the Intervenors in this proceeding, four, Messrs. Maples, Mackie, Bleacher and Stevens, were proposed as generalists (i.e., they were to be experts on all aspects of security plan review) and one, Mr. Tuggle, was offered as a specialist in the area of communications.

Applicants believe that Mr. MacKie should be considered withdrawn, and if not, should be deemed unqualified in all areas due to his lack of education and experience with regard to any aspect of security plan review.

Mr. Maples has decided to limit his asserted areas of expertise to three -- physical intrusion detection systems, guard training, and records review -- but the record demonstrates that he is not qualified with respect to any of these subjects.

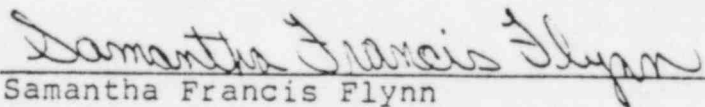
Mr. Stevens has indicated his area of expertise, if any, is related to guard training (S. at 53), Mr. Bleacher's testimony indicates a similar area of specialization. Even in the area of

guard training, however, both gentlemen have performed only limited work, and that was with guards responding to an intruding force for nuclear fuel cycle facilities, which facilities are completely different from commercial nuclear power plants. These two gentlemen should be deemed to be unqualified to review any aspect of the Harris plan.

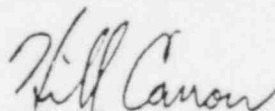
Finally, Mr. Tuggle does appear to have both educational background and experience in the area of communication. He has, however, no idea of the operations and layout of a commercial nuclear power plant, and this lack of knowledge renders him unqualified as an expert to review Applicants' security plan. (LBP-78-36, 8 N.R.C. at 573).

Applicants respectfully request, therefore, that the Board rule that Intervenors have not proffered any individuals who have displayed sufficient expertise to be qualified as experts to review the security plan of the Applicants for the Shearon Harris plant.

This the 17th day of May 1983.



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CERTIFICATE OF SERVICE

DOCKETED  
USNRC

I hereby certify that a copy of the Applicants' Brief (As to the Qualifications Of Persons Proffered By Intervenor As Experts to Evaluate the Shearon Harris Nuclear Power Plant Security Plan) has been served by deposit in the United States Mail, first class prepaid, addressed to the parties listed below this the 17th day of May, 1983.

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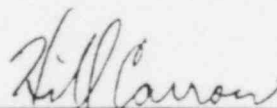
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