

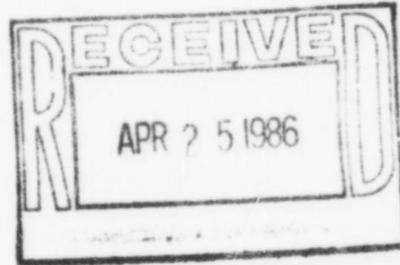


Nebraska Public Power District

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April 23, 1986

50-298



Mr. Robert D. Martin
Regional Administrator
U.S. Nuclear Regulatory Commission
Region IV
611 Ryan Plaza Drive
Suite 1000
Arlington, Texas 76011

Dear Mr. Martin:

Attached, please find a copy of a summary description of events/actions which have occurred in security at Cooper Nuclear Station. You will recall, I believe, that I told you some time ago that I would send you a copy when completed. I do apologize, however, inasmuch as I had hoped to have it sooner.

We are continuing to provide significant effort to our upgrade program and it will continue to receive management attention.

Should you have any questions or would like to discuss this activity further, please advise me.

Sincerely,

L. G. Kuncel
Vice President - Nuclear

LGK:JMP:rg

cc: D. E. Schaufelberger

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NEBRASKA PUBLIC POWER DISTRICT
SECURITY PROGRAM

Set forth below is a summation of the enhancements to the Nebraska Public Power District Security Program at Cooper Nuclear Station. These enhancements cover a period of time from March 1985 until the present.

During a March 1985 NRC inspection, a thorough review of the security management effectiveness was made. While the overall effectiveness of management at that time was considered to be less than ideal, the inspector did note a number of significant additions or improvements to the overall security program which had been made in the previous 12 months that resulted in an improved organization. Those enhancements were:

- o replacement of the single security computer with two computers to increase capability and reliability;
- o replacement of the security software program with an updated site specific software program;
- o replacement of the computer printers in the alarm stations and the addition of color graphic CRT terminals as well as replacing the operator consoles with CRT terminals;
- o an increase in the size of the access control area through the addition to the Security Building and the expansion of the window area for improved security observation;
- o addition of newly designed badge racks to obtain better control and accountability of badges;
- o the complete replacement of all personnel search equipment in the access entry area, which included upgrading from one access lane to two access lanes as well as the purchase of two new x-ray units, two new explosive detectors, and two metal detectors; total replacement of the identification badge system with color coded, heavy duty photo badges, as well as the expansion in the number of cards from 1,000 to 10,000 badge capacity;
- o the replacement of all existing two-channel radios with new four-channel capability radios, also ten additional new radios were added beyond our current commitment;
- o expansion of the protected area resulting in a total replacement of the fence on the north side of the protected area;
- o upgrade of the remaining sections of fence that were deficient through repair or replacement of poles, fabric gates, and/or barbed wire;
- o the increase in numbers of the contract security staff by approximately 37 percent;
- o and capital budget request for the purchase and replacement of cameras and microwave sensors.

- o The expansion of the Security Force included the addition of administrative staff positions such as the Assistant Contract Security Supervisor, the Operations Coordinator, a Training Coordinator, as well as an Administrative Clerk.

This inspection made note that the maintenance organizations at that time were outside the jurisdiction of the overall security organization and that response to problems with the intrusion detection systems had, in the past, not been timely or effective and this was noted as a weakness in the system. By May 1985, an engineer had been assigned specific responsibility for the coordination of the security equipment upgrade project. Specifically, instrument and control personnel had been identified to provide consistent and improved familiarity with security maintenance and repair.

Prior to this time, the Contract Guard Supervisor had three separate superiors to whom he directly reported. Those being the Station Superintendent, the Administrative Supervisor, and the guard company vice-president. This structure conflicted with the management principal of the unity of command and it appeared to contribute to past conflicting instructions to the security organization. At that time the Administrative Services Manager of CNS had taken direct control of the security operation.

In regard to satisfying the commitments contained in the guard training qualification plan, that is the emotional instability examination, the contractor had implemented a series of copyrighted survey paper instruments utilized to evaluate the background and emotional stability of security officer applicants. Individuals not scoring within the established norms may be referred to a clinical psychologist for clarification or further examination. This was a step beyond our committed level of emotional stability being confirmed by a physician during a physical examination.

In August 1985, a management assessment team named by the Assistant General Manager - Nuclear was to examine the current management practices in relation to security at Cooper Nuclear Station. Since personnel communications and reportability were identified as requiring immediate action, an improved system for reporting of security incidents was concurrently developed by site management and a procedure was published to clarify the reporting and notification of the NRC of events in accordance with the requirements of 10 CFR 73.71.

The management assessment team developed four general findings which are set forth below with their associated recommendations and resulting actions on the part of the District.

Security Management Practices

The first finding was that the CNS security management function was operating in a mode outside of the approved organizational structure. This operating mode had caused extreme confusion within the CNS and contractor security groups and it led to a 'deterioration of moral' condition, therefore effectiveness within the total CNS security organization suffered. It was recommended that the organization responsibilities in lines of authority for the CNS organization be immediately clarified. As a result of this, the CNS and safeguards plan was revised to clarify these lines of responsibility and authority for the direction of the guard force within the current

organization. The second recommendation was that the Administrative Services Manager be reassigned other duties outside the Administrative Services Department. This recommendation was based on two major management flaws; that is, his purposeful subversion of the approved organizational structure of the CNS security organization, and his observed lack of management judgement in placing the District in a potentially embarrassing position which could result in a 10 CFR 4.45 violation. The resultant action on the part of the District was that the Administrative Services Manager's employment was terminated and the acting Administrative Services Manager's position description was rewritten to fully define the security responsibilities. At the same time the current security supervisor was reassigned other duties within the CNS organization and his position filled by the Security Specialist.

Contractor Organizational Identity

The second finding indicated that the contract security organization's corporate identity within the CNS guard force was very weak. The contract security organization had made attempts to provide more of a management presence in the CNS security function, however, misuse, by certain District management personnel, of the contract agreement preemptory dismissal clause, had inhibited that growth. The District immediately issued written instructions to the contract Security Force that if the preemptory dismissal clause was to be invoked, it would require need the concurrence of the Security Supervisor, Administrative Services Manager, and the approval of the Division Manager of Nuclear Operations. The District further requested the contract security force provide the District a security force management plan detailing what steps would be carried out to upgrade the performance of the CNS guard force. It was further recommended that the District conduct a cost benefit analysis to explore the advisability of converting the Contract Security Force into a District employee guard force. As a result of this recommendation, the District created a "hybrid" organization where in the extension of the District organization extended to the senior guard position on each shift. Five shift supervisors, District employed, have been added to provide 24-hour guidance and supervision of the contract guard force. In addition, the District has employed a security training specialist, a security administrative specialist, and a security systems analyst to augment our management function and to provide guidance over the contract force. At this time the District is preparing to hire a Security Operations Supervisor to complete this management staff.

Security Training

The management assessment team further found that the security training program was deficient in insuring that station and security force personnel were able to perform their security related responsibilities in an effective manner. As a result, the District committed to revisions of the security plan and guard training qualification plan which were complete by December 1, 1985. The development of the training program was under the direction of an outside security consultant and implementation of this plan took place on March 3, 1986. The five crew rotating shift concept, for which the training had been developed, began on March 16, 1986. The critical task training, contingency drills, weapons training and documentation is emphasized in this training program. The formalized training program is now the responsibility of the Security Supervisor rather than the contract guard company. This enhances the new training program for content and effectiveness for a period of time to

insure its adequacy. Concurrently, the contract guard force has implemented a supervisory training program on their own under the direction of a well qualified security consultant. Additionally, the professional services agreement between the District and the guard force contractor was revised to more specifically describe the training responsibilities on the part of the contractor.

Allegations Relative To Security Personnel

In addition to the functions of the management assessment team discussed above, the scope of the team activities was expanded to include a follow-up and analysis of certain allegations made during an NRC security inspection the week of July 29, through August 2, 1985. The follow-up investigation analysis was conducted by the District's Corporate Security Specialist. The results were, that of the initial 16 concerns expressed by this NRC inspector and the one concern developed during the NPPD investigation, three concerns were considered to be significant. These concerns were evaluated to be classified as moderate losses of physical security effectiveness which had been properly compensated for.

In the area of physical security, the alarm assessment equipment as it relates to the protected area has been the subject of observations as well as several apparent violations. The security equipment, which in many cases is the original equipment installed at the time the physical security plan was implemented, is tested on a regular basis. Observed failures to detect are promptly reported for corrective maintenance to the I&C group. This corrective maintenance appeared to be timely and adequate but in many instances was limited in its effectiveness. These limitations were due to problems in engineering design, installation, and deterioration of equipment performance due to aging. The improper offsets and overlaps in design left areas of detection vulnerability. The I&C technicians attempts to compensate, by increasing the sensitivity and realignment of the microwave system components, had become more difficult to accomplish due to the equipment aging thereby resulting in an increasing number of false alarms. This chronic nature of the maintenance problems of the security equipment was recognized in the planned capital additions budget prepared as early as March 1985.

To compensate for the decreased effectiveness of microwave and camera coverage in various locations, an additional 24 hour perimeter post was established and, at this time, is still in effect. This guard is solely dedicated to patrolling the perimeter microwave zones. In April, 1985, an independent microwave consultant was retained to perform a thorough review and evaluation of the intrusion detection systems. This review was conducted from April 8 through April 10, 1985. A significant outcome of this review was the initial purchase and installation of an additional microwave unit which corrected that zone which was most deficient. Additional microwave heads were installed in several other zones correcting the deficiencies addressed in previous inspections. The I&C group at that time received training from the microwave consulting engineer on testing methods, maintenance requirements, and adjustment and test procedures for the microwave system. Additionally, an equipment data file had been established at the site to identify security system components so that an equipment history can be maintained and used to assist in identifying and correcting equipment failures. At that time

corrective action was also taken by the I&C group to improve camera coverage where possible and practical. Several cameras were adjusted and repositioned to improve clarity and operability.

Currently, weekly crawl tests are being performed on the intrusion detection system to bring to light any decreased effectiveness that may need compensatory measures until corrective action can be implemented. Each security shift conducts operational tests of all microwave zones. Additionally, a formalized and upgraded preventive maintenance program was implemented in November 1985.

In January 1986, a security task force was created to evaluate the potential problem areas related to the physical security systems and to provide recommendations to management regarding required resolution. The task force membership included representatives from both on site and off site, Engineering, Security, Quality Assurance, and Construction Management, with the CNS Technical Manager assigned as the task force chairman. It is anticipated that this task force will provide an integrated approach to solving existing problems.

Specifically, this task force reviewed the security fence in isolation zones, the closed circuit television system, lighting, and the microwave protection system. The existing fence routing has been established as permanent in order to provide a basis for required upgrades to the lighting, closed circuit television system, and microwave system. To further augment this effort the District has obtained the services of a qualified consultant to perform an indepth review and provide recommendations concerning the necessary upgrades. A preliminary review by this consultant has been performed although. Upgrades in fence height and isolation zone adequacy are being pursued through a contractor by our Construction Management group and work will begin on the security fence in the near future. Work will begin on isolation zone when weather permits. The District is committed to continuing a program of equipment upgrade and maintenance.

Severe weather conditions and flooding had caused erosion along the fence line. Corrections of fence damage due to the severe weather and flooding was completed and stone based berms were installed in the appropriate areas on the fence line.

As a result of the March 1985, inspection, several vital area physical barriers were found not to meet the current criteria. The first area involved the air intake grills of the Diesel Generator Building which were modified by the installation of additional pipe type barriers which adequately addressed the concern of penetrability. The second area of concern was the interior bullet resistant barrier of the Control Room. There were several possible solutions to this deficiency and while reviewing/planning for other Control Room modifications were considered, an interim measure of increased guard patrol was established to compensate for this deficiency. Final modifications on this barrier were completed in March of 1986.

In response to the barrier concern, an independent consultant of the Stone and Webster Engineering Corporation conducted a vital area barrier walk down for the purpose of identifying any other such deficiencies in the vital area physical barriers. The consultant made several findings with recommendations

to correct each of these deficiencies. The consultant was well qualified in, and familiar with 10 CFR 73, but was not fully familiar with the CNS security plan.

Thus, apparently through a miscommunication, no compensatory measures were established for all of the deficiencies identified by the consultant. It was observed that the District had failed to take required compensatory measures when a vital area barrier deficiency inside the intake structure was identified. Upon discovery, immediate compensatory measures were established and work proceeded regarding the necessary modifications to correct this deficiency. All modifications were completed in March of 1986.

In the area of Security Force personnel training and qualification, several deficiencies were identified through the NRC inspection and corrective action was pursued in all instances. Although our performance in some areas has been less than acceptable, the District has put its full efforts behind correcting these deficiencies and reorganization of the Training Division to increase the long-range effectiveness of our Security Force.

An example of the District's immediate response and attention to a deficiency can be seen in the area of weapon's qualifications. During an inspection, four security guards failed to demonstrate adequate firing ability at the request of an NRC inspector, and they were promptly removed from the armed-responder status. In response, the District obtained the services of a certified NRA Instructor who immediately developed Training Instructions, performed a review of the course of fire, conducted weapons training, and made recommendations which were implemented to improve the range conditions. As stated above, these four guards were immediately removed from armed-responder duties and were retrained and requalified. A new course of fire was submitted to the NRC and placed in effect. The entire remaining Guard Force was retrained by the certified NRA Instructor and requalified on the new course. The recommendations of the Instructor for short-term firing range improvements were implemented, and free ammunition was provided to all guards for their use during the established practice days which are independent of qualification days. All guards are categorized according to qualifications scores and additional training and firing is required for those personnel who score in the lower categories. At the present time, Security Guards are required periodically to demonstrate weapons proficiency above and beyond normal requalification times. Any guard failing to demonstrate the ability to achieve a minimum score is removed from armed-responder duties and placed in retraining. New shotguns and hand guns have been purchased for all Security Force personnel.

A second area wherein the District took immediate response to an NRC concern involved an allegation that a member(s) in the Guard Force had been involved in certain activities of substance abuse. In response to this allegation, all members of the Guard Force underwent urinalysis testing for the presence of drugs and/or alcohol. Three individuals showed positive results for marijuana and one individual for amphetamine. All three individuals who showed positive results for marijuana were terminated; however, two individuals, on appeal, requested reexamination, and those reexaminations showed negative results. Appropriate disciplinary action was taken in all of the above cases. The positive amphetamine proved to be a false positive caused by hay fever medication. As a result, the Guard Force is now subject to an annual

urinalysis examination as a condition of continued employment of the Security Force. In addition, the District implemented a Drug and Alcohol Screening Procedure for its own employees in the Nuclear Division; a Drug and Alcohol Screening for new hires, transfers; as well as testing for "for cause" situations for all employees of the Nuclear Division. Annual urinalysis examinations are currently a condition of Unescorted Access through the protected area by District personnel. The District has also incorporated "For Cause" language into its agreements with contractors who perform work at the site. This in an instance wherein response to a deficiency noted by the NRC, the District has gone far beyond a minimal effort, thereby demonstrating the District's continuing concern to correct areas of deficiency which may be identified through inspection.

The District has made a strong commitment toward improving the overall effectiveness of the Security Force operation at Cooper Nuclear Station. Existing security procedures have been revised and expanded into 28 new procedures. These procedures are grouped according to administrative, normal security, and emergency security responsibilities. These new procedures enhance clarity and direction to the security organization and are part of our overall plan for improved effectiveness. Additionally, the development of a New Guard Training Qualification Plan, as well as the implementation of a five-crew rotating shift, demonstrated our dedication to improving known deficiencies.

Changes in the overall Security Plan at Cooper Nuclear Station have occurred so rapidly that, in several instances, the Licensing Staff at the District's headquarters have been unable to process the 10 CFR 50.54(p) notices in a timely fashion. Although we acknowledge a great deal of work remains to be done in order to respond to all NRC concerns within our Security Program, we believe that you will agree that significant progress has been made to date. Nebraska Public Power District has recognized its shortcomings in the security area and wishes to assure the Nuclear Regulatory Commission, Region IV, that we fully intend, as a minimum, to comply with requirements of our Security Plan in accordance with federal regulations.