

TVA EMPLOYEE CONCERNS  
SPECIAL PROGRAM

REPORT NUMBER: 31200

REPORT TYPE: Subcategory

REVISION NUMBER: 1

TITLE: Security

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REASON FOR REVISION:

Reformat to conform with Revision 4 of ECTG Program Manual and incorporation of SRP comments and inclusion of final corrective action plans.

PREPARATION

PREPARED BY:

Patrick Hooks

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DATE

(NOTE: Evaluator List in Attachment I)

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PEER:

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TAS:

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DATE

CONCURRENCES

SIGNATURE

DATE

SRP:

SIGNATURE

DATE

APPROVED BY:

ECSP MANAGER

DATE

N/A

MANAGER OF NUCLEAR POWER  
CONCURRENCE (FINAL REPORT ONLY)

DATE

\*SRP Secretary's signature denotes SRP concurrences are in files.

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### **Preface**

This subcategory report is one of a series of reports prepared for the Employee Concerns Special Program (ECSP) of the Tennessee Valley Authority (TVA). The ECSP and the organization which carried out the program, the Employee Concerns Task Group (ECTG), were established by TVA's Manager of Nuclear Power to evaluate and report on those Office of Nuclear Power (ONP) employee concerns filed before February 1, 1986. Concerns filed after that date are handled by the ongoing ONP Employee Concerns Program (ECP).

The ECSP addressed over 5800 employee concerns. Each of the concerns was a formal, written description of a circumstance or circumstances that an employee thought was unsafe, unjust, inefficient, or inappropriate. The mission of the Employee Concerns Special Program was to thoroughly investigate all issues presented in the concerns and to report the results of those investigations in a form accessible to ONP employees, the NRC, and the general public. The results of these investigations are communicated by four levels of ECSP reports: element, subcategory, category, and final.

Element reports, the lowest reporting level, will be published only for those concerns directly affecting the restart of Sequoyah Nuclear Plant's reactor unit 2. An element consists of one or more closely related issues. An issue is a potential problem identified by ECTG during the evaluation process as having been raised in one or more concerns. For efficient handling, what appeared to be similar concerns were grouped into elements early in the program, but issue definitions emerged from the evaluation process itself. Consequently, some elements did include only one issue, but often the ECTG evaluation found more than one issue per element.

Subcategory reports summarize the evaluation of a number of elements. However, the subcategory report does more than collect element level evaluations. The subcategory level overview of element findings leads to an integration of information that cannot take place at the element level. This integration of information reveals the extent to which problems overlap more than one element and will therefore require corrective action for underlying causes not fully apparent at the element level.

To make the subcategory reports easier to understand, three items have been placed at the front of each report: a preface, a glossary of the terminology unique to ECSP reports, and a list of acronyms (terms formed from the first letters of a series of words).

Additionally, at the end of each subcategory report the reader will find at least two attachments. The first is a Subcategory Summary Table that includes the following information: the concern number, a brief statement of the concern, and a designation of nuclear safety-related concerns. The second attachment is a listing of the concerns included in each issue evaluated in the subcategory.



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The subcategories are themselves summarized in a series of eight category reports. Each category report reviews the major findings and collective significance of the subcategory reports in one of the following areas:

- management and personnel relations
- industrial safety
- construction
- material control
- operations
- quality assurance/quality control
- welding
- engineering

A separate report on employee concerns dealing with specific contentions of intimidation, harassment, and wrongdoing will be released by the TVA Office of the Inspector General.

Just as the subcategory reports integrate the information collected at the element level, the category reports integrate the information assembled in all the subcategory reports within the category, addressing particularly the underlying causes of those problems that run across more than one subcategory.

A final report will integrate and assess the information collected by all of the lower level reports prepared for the ECSP, including the Inspector General's report.

For more detail on the methods by which ECTG employee concerns were evaluated and reported, consult the Tennessee Valley Authority Employee Concerns Task Group Program Manual. The Manual spells out the program's objectives, scope, organization, and responsibilities. It also specifies the procedures that were followed in the investigation, reporting, and closeout of the issues raised by employee concerns.

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ECSP GLOSSARY OF REPORT TERMS\*

classification of evaluated issues the evaluation of an issue leads to one of the following determinations:

Class A: Issue cannot be verified as factual

Class B: Issue is factually accurate, but what is described is not a problem (i.e., not a condition requiring corrective action)

Class C: Issue is factual and identifies a problem, but corrective action for the problem was initiated before the evaluation of the issue was undertaken

Class D: Issue is factual and presents a problem for which corrective action has been, or is being, taken as a result of an evaluation

Class E: A problem, requiring corrective action, which was not identified by an employee concern, but was revealed during the ECTG evaluation of an issue raised by an employee concern.

collective significance an analysis which determines the importance and consequences of the findings in a particular ECSP report by putting those findings in the proper perspective.

concern (see "employee concern")

corrective action steps taken to fix specific deficiencies or discrepancies revealed by a negative finding and, when necessary, to correct causes in order to prevent recurrence..

criterion (plural: criteria) a basis for defining a performance, behavior, or quality which ONP imposes on itself (see also "requirement").

element or element report an optional level of ECSP report, below the subcategory level, that deals with one or more issues.

employee concern a formal, written description of a circumstance or circumstances that an employee thinks unsafe, unjust, inefficient or inappropriate; usually documented on a K-form or a form equivalent to the K-form.

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evaluator(s) the individual(s) assigned the responsibility to assess a specific grouping of employee concerns.

findings includes both statements of fact and the judgments made about those facts during the evaluation process; negative findings require corrective action.

issue a potential problem, as interpreted by the ECTG during the evaluation process, raised in one or more concerns.

K-form (see "employee concern")

requirement a standard of performance, behavior, or quality on which an evaluation judgment or decision may be based.

root cause the underlying reason for a problem.

\*Terms essential to the program but which require detailed definition have been defined in the ECTG Procedure Manual (e.g., generic, specific, nuclear safety-related, unreviewed safety-significant question).

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**Acronyms**

<b>AI</b>	<b>Administrative Instruction</b>
<b>AISC</b>	<b>American Institute of Steel Construction</b>
<b>ALARA</b>	<b>As Low As Reasonably Achievable</b>
<b>ANS</b>	<b>American Nuclear Society</b>
<b>ANSI</b>	<b>American National Standards Institute</b>
<b>ASME</b>	<b>American Society of Mechanical Engineers</b>
<b>ASTM</b>	<b>American Society for Testing and Materials</b>
<b>AWS</b>	<b>American Welding Society</b>
<b>BFN</b>	<b>Browns Ferry Nuclear Plant</b>
<b>BLN</b>	<b>Bellefonte Nuclear Plant</b>
<b>CAQ</b>	<b>Condition Adverse to Quality</b>
<b>CAR</b>	<b>Corrective Action Report</b>
<b>CATD</b>	<b>Corrective Action Tracking Document</b>
<b>CCTS</b>	<b>Corporate Commitment Tracking System</b>
<b>CEG-H</b>	<b>Category Evaluation Group Head</b>
<b>CFR</b>	<b>Code of Federal Regulations</b>
<b>CI</b>	<b>Concerned Individual</b>
<b>CMTR</b>	<b>Certified Material Test Report</b>
<b>COC</b>	<b>Certificate of Conformance/Compliance</b>
<b>DCR</b>	<b>Design Change Request</b>
<b>DNC</b>	<b>Division of Nuclear Construction (see also NU CON)</b>

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DNE	Division of Nuclear Engineering
DNQA	Division of Nuclear Quality Assurance
DNT	Division of Nuclear Training
DOE	Department of Energy
DPO	Division Personnel Officer
DR	Discrepancy Report or Deviation Report
ECN	Engineering Change Notice
ECP	Employee Concerns Program
ECP-SR	Employee Concerns Program-Site Representative
ECSP	Employee Concerns Special Program
ECTG	Employee Concerns Task Group
EEOC	Equal Employment Opportunity Commission
EQ	Environmental Qualification
EMRT	Emergency Medical Response Team
EN DES	Engineering Design
ERT	Employee Response Team or Emergency Response Team
FCR	Field Change Request
FSAR	Final Safety Analysis Report
FY	Fiscal Year
GET	General Employee Training
HCI	Hazard Control Instruction
HVAC	Heating, Ventilating, Air Conditioning
II	Installation Instruction
INPO	Institute of Nuclear Power Operations
IRN	Inspection Rejection Notice

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L/R	Labor Relations Staff
M&AI	Modifications and Additions Instruction
MI	Maintenance Instruction
MSPB	Merit Systems Protection Board
MT	Magnetic Particle Testing
NCR	Nonconforming Condition Report
NDE	Nondestructive Examination
NPP	Nuclear Performance Plan
NPS	Non-plant Specific or Nuclear Procedures System
NQAM	Nuclear Quality Assurance Manual
NRC	Nuclear Regulatory Commission
NSB	Nuclear Services Branch
NSRS	Nuclear Safety Review Staff
NU CON	Division of Nuclear Construction (obsolete abbreviation, see DNC)
NUMARC	Nuclear Utility Management and Resources Committee
OSHA	Occupational Safety and Health Administration (or Act)
ONP	Office of Nuclear Power
OWCP	Office of Workers Compensation Program
PHR	Personal History Record
PT	Liquid Penetrant Testing
QA	Quality Assurance
QAP	Quality Assurance Procedures
QC	Quality Control
QCI	Quality Control Instruction

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<b>QCP</b>	<b>Quality Control Procedure</b>
<b>QTC</b>	<b>Quality Technology Company</b>
<b>RIF</b>	<b>Reduction in Force</b>
<b>RT</b>	<b>Radiographic Testing</b>
<b>SQN</b>	<b>Sequoyah Nuclear Plant</b>
<b>SI</b>	<b>Surveillance Instruction</b>
<b>SOP</b>	<b>Standard Operating Procedure</b>
<b>SRP</b>	<b>Senior Review Panel</b>
<b>SWEC</b>	<b>Stone and Webster Engineering Corporation</b>
<b>TAS</b>	<b>Technical Assistance Staff</b>
<b>T&amp;L</b>	<b>Trades and Labor</b>
<b>TVA</b>	<b>Tennessee Valley Authority</b>
<b>TVTLC</b>	<b>Tennessee Valley Trades and Labor Council</b>
<b>UT</b>	<b>Ultrasonic Testing</b>
<b>VT</b>	<b>Visual Testing</b>
<b>WBECSF</b>	<b>Watts Bar Employee Concern Special Program</b>
<b>WBN</b>	<b>Watts Bar Nuclear Plant</b>
<b>WR</b>	<b>Work Request or Work Rules</b>
<b>WP</b>	<b>Workplans</b>



Subcategory Report 31200  
Executive Summary

I. Summary of Issues

The security subcategory is comprised of 148 employee concerns addressing 61 issues relating to the adequacy of uniforms, discrimination, management attitudes, security programs and procedures, entry requirements, guard towers and security equipment. Twenty-nine of these issues were not verified as factual. Twenty were factual but did not require corrective action. Seven were factual but corrective action was initiated prior to the evaluations. Five were factual and corrective action is being taken as a result of these evaluations.

II. Summary of Findings

Through this evaluation process, several conditions were found to exist in violation of a design, construction, or operating requirement. Each of these conditions, called specific deficiencies, was noted as requiring short-term corrective measures. At WBN, deficiencies were found in regard to the implementation of the Security Degradation Disposition/Corrective Action Request (SDD/CAR) Program, the incompleteness of a Design Change Request (DCR) in reference to the Security computer system, and inadequate performance of pat-down searches. The deficiencies related to pat-down searches were considered non-plant specific (NPS) and are applicable to all TVA sites. Sequoyah had deficiencies with respect to key control and the follow-up of a Licensee Event Report (LER) in reference to loss of power or memory to their computer system. The deficiency at BFN dealt with the lack of as-constructed drawings for outside security lighting and incompleteness of work packages. Corrective Action Tracking Documents (CATDs) were submitted to the various plant's line management on these deficiencies as they were found.

R1

III. Summary of Collective Significance

A collective assessment of the element level findings (sect. 3.0) led to the identification of no subcategory level findings for this subcategory. All deficiencies were determined to be adequately addressed at the element level.

IV. Summary of Root Cause

An analysis of the element-level findings found that no shared symptoms or root causes exist that identify programmatic problem areas. Therefore, no subcategory level root causes are identified for the Security subcategory.

V. Summary of Corrective Action

Corrective action responses have been received from line management at WBN, SQN, and BFN, and corporate management for deficiencies noted during element evaluations.

NO1A 9-OP312 (CATD 31207-WBN-01)

WBN line management reported that a revision to WB 10.9 had been made to require the return of the SDD form back to PSS and to identify selective routing of SDDs to the Superintendent, Operation and Training (O&T)

CATD 31211-WBN-01

WBN line management responded that DCR 0696 will be approved with the exception of one item. The completion of this DCR will provide an uninterruptible power supply (UPS) for each alarm station which will interface with the security diesel.

CATD 31211-SQN-01

SQN line management responded that no additional corrective action was warranted over what had already been accomplished for LER 1-86024 for distribution and control of keys upon loss of the MAC-540.

CATD 31211-SQN-02

SQN line management stated that no additional corrective action was required beyond what had already been accomplished for LER 1-86024 concerning the loss of memory for the MAC-540 computer due to power transients.

CATD 31211-BFN-01

BFN line management stated that the lack of as constructed drawings for security lighting was resolved by the completion of Work Plan 8521 and transmitting the data to the Document Control Center for preparation of the as constructed drawings. Any Backlog Workplan will be closed before start up of the applicable unit as a measure of recurrence prevention.

CATD 31212-NPS-001

Corporate security management responded by providing data for retraining and evaluation of the conduct of pat-down searches by PSS. This will be done at SQN and WBN before restart and fuel load, respectively.

R1

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1.0 CHARACTERIZATION OF ISSUES

1.1 Introduction

The Security Subcategory is comprised of 148 employee concerns addressing 61 issues relating to the adequacy of uniforms, discrimination, training programs, management attitudes, security programs and procedures, entrance and badging requirements, guard tower facilities and design, and security systems and equipment.

1.2 Description of Issues

1.2.1 Element 312.01 - Adequacy of PSO Uniform in Nuclear Plant Environment

Issue 312.01-1 - Synthetic Uniform Material - Radiation

Concerns: XX-86-111-001; IN-86-137-002; IN-86-214-002;  
XX-85-048-001.

These four WBN concerns were that the synthetic double knit uniform material would attract airborne radiation.

| R1

Issue 312.01-2 - Synthetic Uniform Material - Fire

Concerns: XX-85-048-001; IN-86-187-001

| R1

These two concerns, one each at WBN and SQN, were that the synthetic double knit material could be hazardous from melting when performing fire fighting duties.

Issue 312.01-3 - Wearing Neckties and Long Sleeves Around Rotating Equipment

Concern: IN-86-137-004

| R1

This WBN concern was about the potential hazard of wearing neckties and long sleeves around rotating equipment.

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1.2.2 Element 312.02 - Discrimination Within the Security Organization

The nine concerns in this element were all shared with the Management and Personnel Category, Report 70500.

Issue 312.02-1 - Cross-Gender Pat-Down Searches

Concerns: IN-85-191-001; IN-86-187-003; IN-86-214-006

|R1

Three WBN concerns identified discriminatory practices since the TVA policy disallows hands-on, pat-down searches by cross-gender combinations.

Issue 312.02-2 - Ineffective Searches

Concern: IN-86-107-001

|R1

A single concern at WBN alleged that searches of personnel were not effectively conducted.

Issue 312.02-3 - Preferential Treatment of Females

Concerns: EX-85-043-001; IN-85-843-002; IN-85-311-010;  
IN-86-137-008

|R1  
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Four WBN concerns stated that female PSOs were being treated preferentially since they were not allowed to perform hands-on, pat-down searches of male employees.

Issue 312.02-4 - Schedule Changes for Females

Concern: IN-85-309-001

|R1

One WBN concern stated that the PSO schedules had to be changed frequently since females were not allowed to perform hands-on pat-down searches of male employees.

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1.2.3 Element 312.03 - Security Personnel Training Program

Issue 312.03-1 - Designated Emergency Response Team

Concerns: IN-85-747-001; IN-86-107-007; IN-86-196-001;  
IN-85-938-003; IN-86-187-002; IN-86-048-004;  
IN-86-193-001

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|R1  
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Seven WBN concerns had the perception that the Emergency Response Team (ERT) should be a designated unit and receive more intensive training than other PSOs.

Issue 312.03-2 - Additional Emergency Medical Technicians (EMT's)

Concerns: IN-85-921-001; IN-85-921-002

|R1

Two WBN CIs thought that Public Safety Service (PSS) should have more officers trained as EMT's.

Issue 312.03-3 - Training for Emergency Response Team (ERT)

Concerns: IN-85-311-012; IN-85-989-001; IN-85-826-001;  
IN-85-892-002

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|R1

Four WBN concerns alleged that additional training should be accomplished for the ERT in order to satisfactorily defend a terrorist attack.

Issue 312.03-4 - Firearms Proficiency

Concerns: IN-85-353-001; IN-86-107-008

|R1

Two WBN concerns expressed a doubt as to the maintained proficiency in the use of firearms.

1.2.4 Element 312.04 - Management and Personnel Issues

Issue 312.04-1 - Schedule Changes and Overtime Assignments

Concerns: IN-85-309-002; IN-85-751-001; IN-86-213-002

|R1

Three concerns at WBN questioned the practice of shift schedule changes at a moments notice and how the overtime assignments were made.

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Issue 312.04-2 - Interpretations of Instructions and Procedures

Concerns: IN-86-213-004; IN-86-224-001; IN-86-246-004

|R1

At WBN, three concerns alleged that PSS management had different interpretations of the implementation of security instructions and procedures.

Issue 312.04-3 - Regulation Changes

Concern: XX-85-043-003

|R1

One SQN concern states that PSS supervisors change the regulations at their own discretion.

1.2.5 Element 312.05 - Security Interfaces U1/U2

Issue 312.05-1 - Inadequate Separation, U1/U2

Concerns: EX-85-049-001; IN-85-311-009; IN-85-990-002;  
EX-85-057-002; IN-85-521-002 IN-86-107-004;  
IN-85-233-001; IN-85-691-001.

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|R1  
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At WBN, eight concerns alleged that the separation fence between unit 1 and unit 2 had been or could be breached.

Issue 312.05-2 - Overly Difficult Access to Unit 1

Concerns: IN-85-436-003; IN-85-805-001; IN-85-463-010;  
WBN-0058; IN-85-732-002

|R1  
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Five WBN concerns expressed the perception that it was overly difficult to gain access, obtain badges or bring materials into the secure area of unit 1.

1.2.6 Element 312.06 - Management Attitudes Towards Security Efforts

Issue 312.06-1 - Perception of Security by WBN Management

Concern: In-85-938-004

|R1

One WBN concern alleged that plant management did not take security seriously and considered it a requirement that need be met only minimally.

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Issue 312.06-2 - Handling of Security Badges in an Emergency

Concern: IN-86-214-001

|R1

A WBN CI did not think that the PSS clerk-monitors should be utilized in handling badges in an emergency situation.

Issue 312.06-3 - Security Barriers Breached

Concern: IN-86-214-008

|R1

One concern at WBN stated that security barriers were breached for the movement of materials and equipment.

1.2.7 Element 312.07 - Security Procedure/Violations

Issue 312.07-1 - Application of Security Degradation  
Determination/Corrective Action Request (SDD/CAR)

Concern: IN-86-074-001

|R1

A concern at WBN was that the SDD/CAR process was inconsistently applied by PSS and plant management.

Issue 312.07-2 - Inconsistent Application of Procedures

Concerns: IN-86-101-001; IN-86-213-005

|R1

Two concerns at WBN reported that security supervisors were inconsistent in their interpretation of post orders and implementing procedures for daily work activities.

Issue 312.07-3 - PSS Authority Off of TVA Property

Concern: IN-85-846-004

|R1

One WBN concern alleged that an officer tried to exercise his authority off of the TVA property.

1.2.8 Element 312.08 - Security at Plant Entrances

Issue 312.08-1 - Inadequate Control of Site Area

Concerns: EX-85-040-002; EX-85-185-001; IN-85-166-001;  
IN-85-427-002; IN-86-244-X01; EX-85-162-002;  
IN-85-149-001; IN-85-229-001; IN-85-678-007;  
IN-86-271-002; EX-85-167-001; IN-85-167-001;  
IN-85-287-001; IN-85-893-001; WBN-0076

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|R1  
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At WBN, fifteen concerns were lodged stating there was inadequate search and identification of personnel entering/exiting the site controlled area.



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Issue 312.08-2 - Insufficient "No-Entry" Signs at Perimeter  
of Owner-Controlled Area

Concern: IN-85-678-003

|R1

At WBN there was a single concern that there may not be enough "No-Entry" signs around the perimeter of the Owner-Controlled Area.

Issue 312.08-3 - Security Screening for Site-Controlled Area

Concern: IN-86-294-001

|R1

There was a single WBN concern that the security screening process should be applicable for access to the site-controlled area.

Issue 312.08-4 - Unauthorized Access to Owner-Controlled Area

Concern: WI-85-051-002

|R1

One concern was lodged at WBN identifying the perception of unauthorized access to the owner-controlled area.

Issue 312.08-5 - Granting Unescorted Access Without  
Acceptable Fingerprints

Concern: BFN-85-048-001

|R1

A single concern was made at BFN alleging that an individual had been granted unescorted access and their fingerprints were unacceptable.

Issue 312.08-6 - Inadequate Visitor Control

Concern XX-85-040-003

|R1

BFN had a single concern that there was inadequate escort control of visitors.

Issue 312.08-7 - Failure to Search Purses

Concern: SQN-86-010-001

|R1

A single concern from SQN indicates there had been a failure to search female employees purses.

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1.2.9 Element 312.09 - Security Guard Towers

Issue 312.09-1 - Guard Tower Gun Ports

Concerns: IN-85-311-013; IN-85-678-002; IN-85-938-005

|R1

Three WBN concerns perceived that the gun ports were not at a convenient height and that they would funnel bullets into the guard towers.

Issue 312.09-2 - Guard Tower Facilities

Concern: IN-85-938-005

|R1

A WBN concern identified that the guard towers do not have water or restrooms.

Issue 312.09-3 - Guard Tower Support Systems Unprotected

Concern: IN-85-678-004

|R1

A single WBN concern alleged that the electrical and ventilation systems in the guard towers were unprotected.

Issue 312.09-4 - Cracked Windows in Guard Towers

Concern: IN-86-107-006

|R1

A concern at WBN states that a cracked window in a guard tower could affect bullet resisting capabilities.

Issue 312.09-5 - Monitored Communications in Guard Towers

Concern: IN-86-137-006

|R1

One WBN concern alleged that it was an invasion of privacy for the communications circuits in the guard towers to be monitored.

Issue 312.09-6 - Guard Towers and Emergency Medical Team

Concern: IN-86-272-002

|R1

This WBN concern expressed a vague problem about the guard towers and the Emergency Medical Team; not enough data to evaluate.

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1.2.10 Element 312.10 - Control Alarm Station (CAS)

Issue 312.10-1 - CAS Facilities

Concerns: IN-85-892-003; IN-85-970-001.

|R1

Two WBN concerns stated it was a hardship that the CAS was not equipped with restrooms and drinking fountain.

Issue 312.10-2 - CAS Not Self-Sufficient

Concerns: IN-85-873-001; IN-85-938-001; IN-86-048-002.

|R1

Three concerns at WBN alleged that the CAS was not self sufficient in an emergency since it had no restroom or drinking water.

1.2.11 Element 312.11 - Security Design and Hardware

Issue 312.11-01 - Power Block Security Concept

Concerns: IN-86-107-005; IN-86-295-002; IN-86-136-002;  
XX-85-032-001; IN-86-193-003; XX-85-099-001.

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|R1

A total of six concerns, four from WBN and two from SQN felt that the power block concept for security was inadequate.

Issue 312.11-02 - Response to False Alarms

Concerns: IN-85-619-001; IN-86-214-003.

|R1

Two WBN concerns perceived a laxity in response to false security alarms.

Issue 312.11-3 - Unreliable Card Readers

Concern: IN-85-619-002

|R1

A WBN concern depicted the card readers in the security system as unreliable.

Issue 312.11-4 - Loss of Power in CAS

Concern: IN-85-955-001

|R1

This WBN concern identified a problem with loss of power to the CAS.

Issue 312.11-5 - Emergency Access to the Intake Pumping Station

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Concern: IN-86-291-007

|R1

A WBN concern alleged that there was a delay in access to the intake pumping station under an emergency condition due to the power block concept.

Issue 312.11-6 - Inadequate Key Control Program

Concern: RII-86-A-0095

|R1

This BFN concern stated that there was poor identification and control of keys for emergency access to locked areas.

Issue 312.11-7 - No Air Conditioning in PSS Vehicles

Concerns: IN-86-048-003; IN-86-137-003

|R1

Two WBN concerns stated there should be air conditioning in the security patrol vehicles.

Issue 312.11-8 - Security Equipment Maintenance

Concerns: IN-86-056-001; IN-86-070-006

|R1

Two WBN concerns identified a need for improved maintenance on security equipment.

Issue 312.11-9 - Inconsistent Labels on Card Readers

Concern: WBP-85-016-004

|R1

A single WBN concern stated that the labels on the card readers were inconsistent.

Issue 312.11-10 - Equipment Malfunction Causing A Security Breach

Concern: IN-86-070-004

|R1

A single WBN concern stated that a malfunction of security equipment was causing a breach of the security program.

Issue 312.11-11 - Security Systems Powered Down

Concern: IN-86-070-005

|R1

A single concern at WBN alleged that security systems were powered down (secured electrically) when they should not be.

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Issue 312.11-12 - Reliability and Calibration of X-Ray  
Machines and Explosive Detectors

Concerns: IN-85-311-001; IN-86-295-001; IN-85-311-002;  
IN-85-956-X01.

|R1  
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Four WBN concerns challenged the reliability and calibration practices of the X-ray machine and explosives detectors.

Issue 312.11-13 - Security Gate Won't Stop A Vehicle

Concern: IN-85-678-006

|R1

A single concern at WBN identified that a traffic control gate was not designed to stop a motor vehicle.

Issue 312.11-14 - Excess Time to Travel Between Areas

Concern: IN-85-590-001

|R1

One WBN concern perceived that the security program caused excessive time to be spent to get from one part of the plant to another.

Issue 312.11-15 - Security System Inadequate to Have New Fuel  
Delivered On-Site

Concern: ECTG-5

|R1

A single WBN concern challenged the adequacy of the security system in place at the time fuel was received on-site.

Issue 312.11-16 - Alternate Power for PSS Radio Communications

Concern: IN-85-438-001

|R1

A single WBN concern specified that there was no alternate battery power source for PSS radio communications equipment.

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Issue 312.11-17 - Loss of Power Alarm in CAS/SAS

Concern: IN-85-438-002

|R1

One concern at WBN identified that there was no alarm indication in either CAS or SAS for a loss of power to the remote control communications units.

Issue 312.11-18 - Entrance Portal Too Small

Concern: IN-85-191-002

|R1

One WBN concern stated that the entrance portal for security was too small for checking personnel and equipment.

Issue 312.11-19 - Improper Functioning of Security Equipment

Concern: IN-86-070-007

|R1

At WBN, there was a single concern indicating that security equipment was not functioning properly.

Issue 312.11-20 - Lack of As-Controlled Prints

Concern: BFN-TESC-85-01

|R1

A single concern at BFN indicated there was a lack of as-constructed prints for security.

1.2.12 Element 312.12 - Security Programs and Procedures

Issue 312.12-01 - Access Control Points

Concerns: EX-85-048-008, IN-85-369-002; IN-86-107-003;  
IN-85-311-003; IN-86-022-001; WBP-5-016-001;  
IN-85-311-004; IN-86-107-002

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|R1  
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Eight WBN concerns alleged that there were problems of inadequacy with security access.

Issue 312.12-02 - Background Investigations and Badging Process

Concerns: Ex-85-015-009; IN-85-427-001; IN-85-204-001;  
IN-86-241-001; IN-85-238-003

|R1  
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Five WBN concerns challenged the security background investigation and badging process.

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Issue 312.12-03 - Site Physical Protection

Concerns: IN-85-311-011; IN-85-678-005; IN-85-843-004;  
IN-86-213-003; IN-85-333-03; IN-85-700-001;  
IN-86-191-001; PH-85-029-001; IN-85-552-001;  
IN-85-843-001

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|R1  
|  
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WBN had ten concerns related to the overall physical protection of the job site.

Issue 312.12-04 - Authority of PSS

Concerns: IN-85-094-001; IN-86-214-004; IN-85-456-001;  
IN-86-074-X05

|R1  
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Four concerns at WBN questioned the authority of security at the job site.

To locate the issue in which a particular concern is evaluated, consult the following attachments:

Attachment A, Subcategory Summary Table

Attachment B, List of Concerns by Element/Issue

2.0 EVALUATION PROCESS

2.1 General Methodology

The evaluation of this subcategory was conducted according to the Evaluation Plan for the Employee Concerns Task Group and the Evaluation Plan for the Operations Group. The concern case files were reviewed. Source documents were researched and interviews conducted in order to identify the requirements and criteria which applied to the issues raised by the concerns. The issues were evaluated against the identified requirements and criteria to determine findings. A collective significance analysis was conducted; causes were indicated for negative findings; and corrective action for the negative findings was initiated or determined to have already been initiated.

|R1

2.2 Specific Methodology

During the element evaluations, the evaluators reviewed applicable sections from the following baseline requirements documents: Physical Security Plans at WBN and SQN, ANSI N18.7, NRC Regulatory Guide 5.7, and Title 10, Code of Federal Regulations, Part 73 (10 CFR 73).



To ensure consistency and implementation of the requirements found in these documents, the evaluators reviewed applicable Standard Practices, Administrative Instructions (AI), Surveillance Instructions (SI), Physical Security Instructions (PHYSI) and procedures, data packages, and records. In addition, the evaluators reviewed files which had been expurgated by NRC, NQAD Audit Reports at WBN and SQN, NRC Systematic Assessment of Licensee Performance (SALP) Reports for WBN, NRC Security Inspection Reports at SQN and WBN, Licensee Event Reports at SQN, and Nuclear Safety Review Staff (NSRS) reports of concerns previously investigated.

|R1

The evaluators conducted informal interviews with cognizant personnel when required either to verify document-based findings or to provide nondocument-based evaluation input. Interviews were conducted with personnel in Public Safety Service (PSS) including management, training and public safety officers. Individuals from maintenance and modifications were also interviewed.

### 3.0 FINDINGS

Generic Applicability statements are included only for concerns which are classified as being potentially Safety Related or Safety Significant as denoted on Attachment A.

|R1

#### 3.1 Element 312.01 - Adequacy of PSO Uniform in Nuclear Plant Environment

##### Issue 312.01-1 Synthetic Uniform Material - Contamination

###### WBN and SQN

|R1

The issue that the synthetic double knit uniform material attracts airborne contamination was evaluated at WBN and SQN and was factual but did not require corrective action.

In relation to the Public Safety Officer (PSO) uniform, the airborne contamination issue considered the additional risks of internal deposition of radionuclides as well as the external radiation exposure risk from the airborne cloud. The additional hazard of internal deposition was discounted based on the PSO being subject to the same preventive measures as any individual in an "Airborne Contamination Area". The measures include requirements for:

1. Changing into Anti-C's (removal of the uniform) prior to entry into a C zone
2. Entry control by RWP
3. Use of respirators under appropriate conditions

These controls are fully explained to PSOs in General Employee Training and in addition, controls are in place to detect accidental releases of airborne contamination. Discussions relating to the function of continuous air monitors and actions to be taken in the event a PSO is in the area when an alarm sounds provide these controls for detection of airborne contamination.

Additionally, the adequate training and controls are in effect at WBN to ensure that airborne contamination attracted to PSO uniforms would represent only a small fraction of the radiological hazard to an individual exposed to radioactive gaseous releases even though double-knit trousers may attract airborne contamination more than would cotton trousers. This conclusion was partially based on the fact that the noble gases that are attracted to synthetic material are short-lived and therefore would not pose a substantial increase in the individual's radiation exposure.

Conclusion

This issue regarding synthetic uniform material contamination for WBN and SQN was factual but did not require corrective action. |R1

Issue 312.01-2 - Synthetic Uniform Material - Fire

WBN and SQN

|R1

The issue pertaining to the effects of high heat on PSO uniform trousers stems from the generally recognized concern that polyester double-knit materials are susceptible to melting and burning at high temperatures was evaluated at WBN and SQN. The CIs considered this issue pertinent based on requirements in a Physical Security Instruction for the PSO to assist the ONP fire brigade in fighting plant fires. Plant implementation procedures define the PSO role in fighting fires only as a support function. PSOs do not have a primary fire brigade membership responsibility and therefore their uniform should not be a problem. The issue was considered factual but did not require corrective action. |R1

Conclusion

This issue regarding synthetic uniform material-fire for WBN and SQN was factual but did not require corrective action. |R1

Issue 312.01-3 Wearing Neckties and Long Sleeves Around Rotating Equipment

WBN

|R1

The hazard of rotating equipment with respect to the PSO uniform involves the wearing of neckties and long sleeves that can present a hazard when an officer is required to stand post near rotating equipment. There are no permanent post assignments where rotating equipment is in close enough proximity to present a danger. All rotating equipment is required to have safety shields in place when such equipment is operable and PSOs do not operate equipment. The issue was not substantiated.

Conclusion

This issue regarding PSOs wearing neckties and long sleeves around rotating equipment for WBN was not verified as factual.

3.2 Element 312.02 - Discrimination Within the Security Organization

Issue 312.02-1 - Cross-Gender Pat-Down Searches

WBN

|R1

Cross-gender pat-down searches at TVA nuclear plants are prohibited except when emergency conditions dictate otherwise. This limitation is a TVA policy and is not a regulatory or licensing requirement. While WBN follows the instructions and regulatory requirements without reference to gender, it is not reflected in actual practice. The evaluator also noted that this TVA policy is not unique; other utilities also do not make cross-gender pat down searches a standard practice. Therefore, the issue that TVA disallows cross-gender pat-down searches is factual and does not require corrective action.

Conclusion

This issue regarding cross-gender pat down searches for WBN was factual but does not require corrective action.

|R1

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Issue 312.02-2 - Ineffective Searches

WBN

|R1

Although training requires PSOs to demonstrate proficiency in hands-on searches and recent QA audits verified the search controls to be adequate, the evaluator found evidence to validate the issue of ineffective searches. As an independent verification, the evaluator subjected himself to processing as a visitor into WBN unit 1. A pat-down search was conducted as required by visitor status. The search was conducted by a male PSO. The evaluator found several deficiencies in the search technique including

inadequate coverage of bodily areas and a carried article was not searched. The search process itself, when it includes the use of detection equipment, was adequate and does pass acceptance criteria as stated in regulatory requirements. However, the pat-down search received by the evaluator substantiated employee concerns that pat-down search functions are not conducted in a thorough manner. This concern was also addressed in Element 312.12. CATD 31212 NPS-01 was issued under element 31212-1.

| R1

Conclusion

This issue regarding ineffective searches for WBN is factual and correction action is being taken as a result of an evaluation.

| R1

Issue 312.02-3 Preferential Treatment of Females

WBN

| R1

The issue that female PSOs were being treated preferentially was not substantiated. No overt attempt by the PSS management or first-line supervision to give the female PSO preferential treatment in regard to post assignments at WBN was found. The evaluations into female PSO preferential treatment confirmed that under certain conditions, the TVA policy against cross-gender pat-down searches does preclude a female officer from rotating through certain posts during her shift. These conditions can exist for extended periods whenever a high level of activity occurs; and concurrently, a male clerk/monitor is not available for a post assignment with the female officer. Therefore, whenever a female officer is utilized at another post assignment because of the TVA pat-down search policy, the appearance is that of preferential treatment.

Conclusion

The issue regarding preferential treatment of females for WBN was not verified as factual.

| R1

Issue 312.02-4 Schedule Changes for Females

WBN

With regard to the issue of frequent shift schedule changes, the concerns were validated at WBN, but are a problem not at all unique to WBN or TVA in general. Examples of things that contribute to unplanned changes in schedules include PSO absenteeism, visitor escort requirements, changes to maintenance activity schedules, and changing weather conditions; these circumstances are not always under the control of PSS management. The evaluator determined that PSOs are trained and prepared to perform each job task within their

classification. This ensures that PSS is able to respond to each contingency with a security force that is responsive to the variety of activities that may occur during any given day. Specifically, schedules are disrupted on a frequent basis because of pat-down search limitations placed on female PSOs at five post assignments. Public Safety has recognized this situation and minimizes it, to the extent possible, by reviewing effects on the master schedule whenever advance information on specific activities and locations become known. Despite this, situations will continue to occur that cannot be anticipated and planned for. For this reason, post assignments for individuals must remain flexible to plant conditions.

Conclusion

This issue regarding schedule changes for females at WBN was factual but does not require corrective action.

|R1  
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3.3 Element 12.03 - Security Personnel Training Program

Issue 312.03-1 Designated Emergency Response Team

WBN

|R1

No grounds were found to substantiate the perceived need for the Emergency Response Team (ERT) to be a designated unit. The number of responders required is based on site physical layout and other plant specific considerations. Without revealing safeguards information, PSS does meet or exceed regulatory requirements for on-shift, armed, and fully qualified ERT members. There is no intent or requirement to create an elite group of specialists to serve in this capacity to the exclusion of other post assignments. PSS Officers serve in a wide variety of related activities with each activity important to the overall success of the operation. The most effective utilization of Security personnel dictates that PSS Officers be prepared to perform at each level of task assignment consistent with their training and classification.

Conclusion

This issue regarding the need of a designated emergency response team for WBN was not verified as factual.

|R1  
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Issue 312.03-2 Additional Emergency Medical Technicians (EMT's)

WBN

|R1

The issue of training to support additional on-shift EMT's was not substantiated. The decision to provide EMTs is not based on a nuclear plant licensing requirement, but is TVA policy. A review of a PSS two-week schedule showed that from 9 to 18 certified EMTs were available to each shift for service on the Emergency Medical Response Team (EMRT) at WBN. Discussions with onsite management personnel confirmed that emphasis is placed on this program to ensure that adequate numbers of EMTs are maintained for shift assignments at WBN.

Conclusion

This issue regarding the need of additional medical technicians (EMTs) for WBN was not verified as factual.

|R1

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Issue 312.03-3 Training for Emergency Response Teams

WBN

|R1

No validity was found in the issue regarding the inadequacy of ERT Training. ERT training (and PSS Officer Training in general) requirements are specifically defined in 10 CFR 73. The requirements address physical and mental suitability, weapons qualifications, physical fitness qualifications, equipment and equipment specifications, training and documentation, and qualification requirements. TVA is required to develop and implement an NRC-approved, Training and Qualification (T&Q) Plan that specifically addresses how TVA will meet those regulatory requirements. The regulatory requirements also state specific acceptance criteria for PSS Officer training and performance, and the T&Q Plan must reflect these acceptance criteria. To measure the adequacy of this plan, recent audits were reviewed. Two QA audits of the WBN Security Program concluded that the PSS effectively implements the T&Q Plan through a T&Q implementing document that contains procedures, lesson plans, test and practical evaluation forms. Additionally, the NRC Systematic Assessment of Licensee Performance (SALP) Report rated WBN Security as category 2 and improving. This report and other NRC assessments mentioned in the WBN SALP Report indicate that training has been effective at WBN. Management reviews of emergency medical drills and drill critiques identified an interface problem among the disciplines serving as EMRT members. Additional training was completed to resolve that issue. A shortage of EMTs has not been a problem identified in drill critiques reviewed for this evaluation.

Conclusion

This issue regarding inadequate training for emergency response teams for WBN was not verified as factual.

|R1

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Issue 312.03-4 Firearms Proficiency

WBN

|R1

Interviews with Security Training personnel indicated satisfaction with the quality of training provided PSS Officers at the Cleveland, Tennessee facility and with the onsite portion of officer training. This satisfaction was based on results from frequent response drills conducted by PSS Shift Supervisors and contingency drills conducted to meet Security plan commitments. Despite this, the opinion was voiced that the onsite training section would like to see more stringent physical fitness requirements and some improvements made related to proficiency maintenance for firearms qualifications. The statements were not made in reference to the adequacy of existing standards to meet regulatory requirements, but expressed a desire to set higher standards than those currently required.

The issue of maintenance of firearms proficiency centers on the lack of a structured program for proficiency training and requalification. A program does exist; however, it is self directed by the individual PSS Officer. Firearms proficiency acceptance criteria are stated in 10 CFR 73. In general, proficiency includes the manner in which a security officer carries, handles, or maintains a weapon. Firing proficiency is demonstrated under controlled range conditions and against measured acceptance criteria. The individual PSS Officer, as a condition of employment, has the responsibility to maintain firearms proficiency and to demonstrate proficiency annually during firearms requalification. TVA provides adequate practice ammunition, training in the use of weapons, the firing range facility and instructors. Adequate range time is available or will be made available anytime two officers take the initiative to practice. The identified weakness in the program is that the individual PSS Officer must take the initiative to practice and that practice time is not compensated time. Despite this, the evaluator determined that the program works. Results from the most recent firearms requalification indicated that in all cases less than six percent of the total number of officers failed to qualify on their first attempt. The overall failure rate for all weapons on the first requalification attempt is just over four percent and all those that at the time of this evaluation failed on the first attempt qualified with additional training. At the time of this evaluation, WBN had not lost a single officer because of a failure during firearms requalification.

No concerns in this element were found to be symptomatic of program deficiencies in PSS Training. The concerns were symptomatic of the individuals' desire to raise performance standards and thereby, to stimulate the professional esteem that results from meeting those higher standards.

|R1



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Conclusion

This issue regarding fire arm proficiency for WBN was factual but does not require corrective action.

|R1

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3.4 Element 312.04 - Management and Personnel Issues

Issue 312.04-1 Schedule Changes and Overtime Assignments

WBN

|R1

Three concerns focused on unfair scheduling of PSS personnel, sometimes resulting in excessive overtime or interrupted weekends. The issue presented by these concerns was judged to be factual but did not require corrective action. Interviews with PSS personnel verified that in a six-month period in 1985, new watchstanding requirements and a four-month lead time to train and qualify new PSS officers led to a requirement that PSS personnel work mandatory overtime. This overtime was assigned and worked in accordance with the "Article of Agreement Between the Tennessee Valley Authority and the Salary Policy Employee Panel." Since this period, manning levels have been achieved that greatly decreased required overtime.

PSS personnel are aware that utility days, scheduled at the beginning or end of a four-day weekend, are subject to rescheduling during the four days off. This shifting of utility days is in accordance with the "Articles of Agreement" and is done in reaction to changing security conditions and personnel shortages. PSS officers are cautioned not to make prior commitments for four day weekends with a utility day at the beginning or end of the four day period.

Scheduled changes can occur for a variety of reasons, including: (1) a utility post filling in for another post, (2) shifting a female officer away from a post requiring pat down searches, (3) two officers swapping posts voluntarily, and (4) two officers swapping days voluntarily. Since all officers are required to wear the same uniforms, schedule changes do not affect the type of clothing to be worn.

Conclusion

This issue regarding unfair schedule changes and overtime assignments for WBN was factual but does not require corrective action.

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|R1

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Issue 312.04-2 Interpretations of Instructions & Procedures

WBN

|R1

Three WBN concerns focused on the adequacy of post scheduling with respect to NRC requirements. The issue presented by these concerns was judged to be factual but did not require corrective action. PSS SIL's (Post Orders) leave some discretion to the shift supervisor in the conduct of his shift as long as he does not violate security procedures, the plant Physical Security Plan, or NRC regulatory requirements. These changes are documented on the post logs and are reviewed by PSS management. An example of a discretionary change made by the PSS shift supervisor that does not degrade security would be the securing of an access gate during periods of low traffic to more effectively utilize on shift personnel.

Conclusion

This issue regarding interpretations of instructions and procedures for WBN was factual but does not require corrective action.

|R1  
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Issue 312.04-3 Regulation Changes

SQN

|R1

The SQN concern that Public Safety supervision changes regulations at their own discretion was not validated. A review of selected PSC SILs determined that Post Orders allow shift supervisors some flexibility to change the requirements of an individual post station, as long as such changes do not violate the SQN Security Plan or NRC commitments. These changes are documented on the post logs by the individual assigned to that post and are subject to review by Public Safety management on a daily basis.

A review of security-related NRC audit reports identified previous instances of regulatory noncompliance; some of these were indicative of programmatic problems, but none were representative of actions resulting from PSS supervisors directing changes that resulted in instances of noncompliance. A review of QA security-related audit reports also provided no objective evidence to support this concern.

Interviews with Public Safety line management documented their concurrence that Post Order changes occur frequently, but they are reviewed by management to ensure they do not violate regulatory requirements.

Conclusion

This issue regarding regulation changes for SQN was not verified as factual.

|R1  
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Generic Applicability

This concern was evaluated at the site of concern (SQN) and found to be not valid. No other site evaluations are necessary.

|R1  
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3.5 Element 312.05 - Security Interfaces, U1/U2

Issue 312.05-1 Inadequate Separation, U1/U2

WBN

Of the eight concerns comprising the issue of separation fence discrepancies, five valid concerns (IN-85-691-001, EX-85-049-001, EX-85-057-002, IN-85-233-001, and IN-85-990-002) were found for which sufficient corrective action had already been taken to address the problems. The other three concerns (IN-85-521-002, IN-85-311-009, and IN-86-107-004) were either not substantiated or did not identify problems requiring corrective action. It was determined that the unit 1/unit 2 separation fence meets the specified requirements in 10 CFR 73 and is equipped with a vibration detection system which provides intrusion alarms to security. At the suggestion of the NRC, the fence was enhanced to clearly identify the demarcation between units to prevent unintentional crossings like those expressed by the CIs. There was no requirement or commitment to install an alarm system on this enhancement portion. Security door A205 between units 1 and 2 at the 786' elevation was found to meet the requirements for a protected area door, was secured and appropriately protected by an alarm system, and under surveillance by PSS patrols. Additionally, the separation fence is routinely patrolled by PSOs. The separation fence points of weakness, including those identified by the concerns, have been identified and corrected. As further independent verification, a detailed walkdown of the fence was made at several elevations. No areas were found where an inadvertent crossing might be made.

|R1  
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Conclusion

This issue regarding inadequate separation U1/U2 for WBN was factual but corrective action was initiated before the evaluation of this issue.

Generic Applicability

These concerns are unique to WBN due to U1/U2 security barrier. Therefore, other site evaluations were not conducted.

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Issue 312.05-2 - Overly Difficult Access to Unit 1

WBN

|R1

Concern IN-85-436-003 regarding excessive delays in the badging process was not validated to be a problem based on the existence of appropriate procedures to control the issuance of badges. Procedure WB 10.5 was found to implement the requirements of 10CFR73 and the procedure delineates the necessary steps for initiating the badging process for either escorted or unescorted access. Interviews with PSS officers and a review of other implementing documents revealed no discrepancies in meeting the specified requirements for badging of personnel. Nonetheless, the badging delays encountered by the CI were caused by a specialized limitation on access detailed in Temporary Post Orders for Workplan Authorization. This Temporary Post Order was prepared based on an agreement between plant management and Construction to specify, on a daily basis, how many personnel would be allowed in the secured area predicated on the types and amounts of work being performed. This control would prohibit an individual, even with appropriate badging, from entering a secured area in the event that his name was not on the authorized list for the workplans being implemented in the secured area. To gain access the individual would have to be added to the authorized list for the workplan by his/her supervisor.

Employee concerns IN-85-805-001 and IN-85-463-010 stating that materials were difficult to bring into the plant were found to be valid concerns but not problems warranting corrective action. Each access portal has associated instructions specific to that location governing the access for materials. These security procedures (safeguards information) as a whole, enforce the basic precept that any and all materials brought into the protected area will be searched in some manner. Excessive delays in accessing these materials have been addressed by management and eliminated through the acquisition and training of PSS personnel and increased familiarity with security procedure requirements by plant personnel.

To evaluate the employee concerns WBN-0058 and IN -85-732-002 that access to the protected area for the Emergency Medical Response Team (EMRT) was hampered, the duties and responsibilities of the EMRT were reviewed. Interviews were held with PSS officers that have been involved with both drill and actual medical emergency situations. These interviews indicate that PSS officers are well versed in their responsibilities. These responsibilities are

defined in a memorandum which requires that security functions, normally relaxed in the event of a declared emergency, would be fully carried out during a drill. The directions contained in the memorandum will be incorporated into a PSS SIL. In conclusion, this issue of EMRT access was not validated based on a misconception that EMRT personnel should be provided expedited access to protected areas during drills as well as during actual medical emergencies.

Conclusion

This issue regarding overly difficult access to unit 1 for WBN was factual but does not require corrective action.

|R1

3.6 Element 312.06 - Management Attitudes Toward Security Efforts

Issue 312.06-1 Management Attitudes Towards Security Efforts

WBN

|R1

The concern, that management at WBN does not take security seriously and that security drills are inadequate, was not validated. The security program at WBN was determined to be aptly designed to meet 10 CFR 73 requirements and the perceived threats for a facility of this type. The Contingency Plan was developed to reflect the commitments made in the Plant Security Plan (PSP) and includes drills to test the ability for meeting those identified contingencies. A review of drill scenarios and critiques indicate that drills include realistic situations that conclude with the apprehension of an intruder.

To evaluate the issue of management's commitment to security, interviews were conducted with both PSS and plant management to assess their attitudes toward the security function at WBN. These interviews revealed that management fully recognizes and accepts the seriousness of the security program. Plant management readily endorses the fact that security is an integral, functioning entity and a necessity to the overall success of WBN and that a less than acceptable security program could jeopardize the successful licensing of WBN just as quickly as could maintenance, operations, training or any other department. When violations of established security procedures occur, PSS may initiate a Security Degradation Disposition (SDD). This document identifies various types of violations and proposes levels of disciplinary action based on severity. The content of this procedure exemplifies management's degree of commitment to correcting violations of the security program.

Conclusion

This issue regarding management attitudes towards security efforts for WBN was not verified as factual.

|R1  
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Issue 312.06-2 Handling of Security Badges in an Emergency

WBN

|R1

The concern of non-security clerks performing badge checks was not validated. Badging requirements of the Physical Security Plan (PSP) are implemented by WBN Standard Practice WB 10.5 and clarified by a memorandum of October 15, 1985 by Mr. Richard Thigpen which covers protected area access during emergencies and drills. During a declared emergency, the emergency response personnel will receive their badges from PSS clerk-monitors assigned this task. This evolution is in accordance with established policy and procedure and is recognized by the NRC as an acceptable provision for meeting actual emergency needs.

Conclusion

This issue regarding the handling of security badges in an emergency for WBN was not verified as factual.

|R1  
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Issue 312.06-3 Security Barriers Breached

WBN

|R1

The concern which involves an incident of Public Safety being asked to open security doors just for the passage of coffee was found to be factual, but corrective action had taken place prior to the current evaluation. Line management acknowledged that the incident did occur. Before this evaluation, a meeting had been held with the responsible sections to discuss the circumstances of this incident. There is now a general understanding concerning which situations do and do not warrant the breaching of security barriers for movement of materials and equipment. Situations requiring the breaching of a security barrier are coordinated with PSS.

Conclusion

This issue regarding security barriers breached for WBN was factual but corrective action was initiated before the evaluation of this issue.

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|R1  
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3.7 Element 312.07 - Security Procedure Violations (WBN)

Issue 312.07-1 Application of Security Degradation Determination/  
Corrective Action Request (SDD/CAR)

| R1  
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WBN

To research a concern lodged solely at WBN of certain employees being exempt from security regulations, the evaluator reviewed the SDD program for evidence of inconsistent treatment. The SDD program addresses occurrences involving violations of security program requirements. There were no instances identified of overt favoritism toward management or of other individuals who may have violated a security requirement. Problems were identified, however, with the mechanics of the SDD/CAR system. There was no formal corrective action follow-up system, missing reviews by the Superintendent of Operations and Engineering, and the lack of feedback to the SDD originator. A sample of 30 SDDs from 1985 and 1986 indicated that plant management had not responded to PSS in 53% of the issues. These program inconsistencies lend sufficient credence to support the perception that security violations were not consistently documented and that the concern was valid. CATD 31207-WBN-01 was issued to line management.

| R1  
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Conclusion

This issue regarding the application of Security Degradation Determination/Corrective Action Request (SDD/CAR) for WBN was factual and corrective action is being taken as a result of an evaluation.

| R1  
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Issue 312.07-2 Inconsistent Application of Procedures

WBN

| R1

The concern pertaining to the issue of Post Order interpretations was not validated. There is no requirement that PSS must post a copy of post orders at each permanent post for PSOs. This is based on the non-applicability of ANSI N18.7 to security activities and the fact that some post orders are safeguards information. Post orders were found to be available at permanent post locations such as CAS, SAS, and the access control portal. Post assignments that require an officer to move about the site are not placed in the officer's possession; however, those orders are available for review at specified locations.

The second concern pertaining to the issue of Post Order interpretations was validated based on previously documented instances where supervision has been inconsistent in interpretation of post orders and procedures. As a result, PSS has implemented a "Post Check Program" and a "Unit Continuity Program" to ensure that post instructions and procedures are interpreted in a consistent manner; these programs adequately addressed the concern.

Conclusion

This issue in regards to inconsistent application of procedures for WBN was factual but corrective action was initiated before the evaluation of this issue.

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|R1  
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Issue 312.07-3 PSS Authority Off of TVA Property

WBN

|R1

A concern in this element deals with a PSO attempting to regulate laws off TVA property. Insufficient details were provided in the confidential file to substantiate this concern. PSO action of this nature would require the involvement and cooperation of local law enforcement officials and PSS management. The evaluator could not validate this concern and interviews with line management determined that they have not received requests for this type of assistance in the past.

Conclusion

This issue regarding PSS authority off of TVA property for WBN was not verified as factual.

|R1  
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3.8 Element 312.08 - Security at Plant Entrance

Issue 312.08-1 - Inadequate Control of Site Area

WBN

|R1

None of the 15 concerns for the issue of inadequate search and identification of personnel entering/exiting the site controlled area were substantiated.



Searches are only required for entry into protected/vital areas. The searches use metal detectors, explosive detectors, X-Ray machines, and pat down searches to ensure that unauthorized materials are not taken into the protected/vital areas. There are no regulatory requirements to search personnel entering the site or owner-controlled areas or personnel exiting vital areas, protected areas, or the site area. Individuals exiting the protected area do so through radiation monitors to ensure radioactive materials are not removed from the protected areas. As a deterrent to theft of TVA property, PSS can conduct unannounced searches of personal packages and vehicles exiting the site area.

No regulatory requirements were found for searches of hand-carried items or checking for security badges at the entrance to the site-controlled area. Nevertheless, plant procedures require the display of badges within the site boundary and the display to a member of the security force before entering the site boundary. Employees not displaying their badges may be denied entry to the site-controlled area.

Post 6 controls access to the Unit 2 site-controlled area at the Nuclear Power parking lot. The evaluator observed security personnel at that post during shift change and found that they were performing their duties in accordance with plant procedures. PSS personnel positioned themselves to check that incoming WBN workers properly displayed their site picture badges. Personnel who had forgotten their picture badge were issued a visitor badge.

The investigation could not determine directly whether or not an occurrence of an employee entrance into the site-controlled area without a picture badge had actually taken place. PSS procedures and training of security personnel in the performance of their duties are adequate to provide the required level of security for the site-controlled area.

#### Conclusion

This issue regarding inadequate control of site area for WBN was not verified as factual.

|R1  
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Issue 312.08-2 Insufficient "No-Entry" Signs at Perimeter of  
Owner Controlled Area

|R1  
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WBN

| R1

The Physical Security Instructions, which describe the signs to be posted at the boundary of the owner-controlled area meet regulatory requirements. The purpose of these signs is to provide reasonable assurance that persons entering the area are aware they are on TVA property. There are no requirements for these signs to prevent access to the owner controlled area. Therefore, the issue that non-employees are not prevented from entering the site property was factual but did not require corrective action.

Conclusion

This issue regarding insufficient "No Entry" signs at perimeter of owner-controlled area for WBN was factual but does not require corrective action.

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| R1  
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Issue 312.08-3 Security Screening for Site Controlled Area

WBN

| R1

Based on review of security screening requirements, the issue for a lack of security screening was not validated. Watts Bar Standard Practice WB-2.2.12 provides instructions to process and badge new personnel for unescorted access to the site-controlled area. No requirements were found for security screening before unescorted access to the site-controlled area. The only requirement is supervisory approval indicating that personnel are working at WBN and have a need for entry into the site area. Security background screening requirements do apply for entry into the protected area.

Conclusion

This issue regarding the security screening for site-controlled area for WBN was not verified as factual.

| R1  
|

Issue 312.08-4 Unauthorized Access to Owner Controlled Area

WBN

| R1

The issue that a security screening process is needed for any person entering TVA Facilities is factual but does not present a problem requiring corrective action.

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Physical Security Instructions limit access into the Owner Controlled Area (OCA) to authorized personnel and vehicles with a site badge or parking decal. Enforcement of these access controls is provided by administrative controls and procedures. The Joint Security Plan requires that the OCA be under general surveillance by the Public Safety patrolman. These controls meet the minimal regulatory requirements of 10 CFR 73 and Regulatory Guide 5.7 for access to the OCA.

Conclusion

This issue regarding unauthorized access to owner-controlled area for WBN was factual but does not require corrective action. |R1  
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Issue 312.08-5 Granting Unescorted Access Without Acceptable Fingerprints

BFN

|R1

This issue, site-specific to BFN, pertains to one concern of an individual being granted unescorted access based on unacceptable fingerprint records. Discussions with security personnel revealed that the FBI sometimes requests a new set of fingerprints even after completion of a security investigation which includes positive identification of the individual using the existing fingerprints. This request would be made by the FBI to replace the original prints, which may have had minor smudges, insufficient to affect the positive identification of the individual, but not of a high enough quality for FBI permanent fingerprint files. The fact that these requests are made after the plant grants unescorted access may lead to the misconception expressed by the CI. Because the fingerprints did not affect the positive identification of the individual, the security investigation was not adversely affected, and the concern therefore was not validated.

Conclusion

This issue regarding granting unescorted access without acceptable fingerprints for BFN was not verified as factual. |R1  
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Issue 312.08-6 Inadequate Visitor Control

BFN

|R1

A BFN concern was submitted regarding inadequate control of escorted personnel who have a need to enter the controlled area. This issue was not validated based on adequate procedures, instructions for the proper escort of visitors and by employee concerns personnel having been escorted while performing evaluations at BFN. BFN Standard Practice BF-11-15 requires that escorts be instructed in their responsibilities, including ensuring that visitors do not enter vital areas for which they are not cleared. A review of the procedure and escort orientation found that escorts are adequately instructed in their responsibilities. Discussions with security personnel revealed that there have been isolated instances of escorts taking visitors into areas for which they were not cleared. However, no programmatic deficiencies were found because escorts were provided for the visitor at all times while in the protected area.

Conclusion

This issue regarding inadequate visitor control for BFN was not verified as factual.

|R1  
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Generic Applicability

The BFN evaluation of this concern found isolated cases of procedure non-compliance. No programmatic or safety related deficiencies were identified. No other site evaluations are necessary.

|R1  
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Issue 312.08-7 - Failure to Search Purses

SQN

|R1

This issue pertains to a SQN site-specific concern that female employee purses were not being searched and contributing to the theft of TVA property. SQN conducts unannounced searches of personal packages and vehicles exiting the site area as a deterrent to theft of TVA property. These random searches are conducted by each shift at least once per week in accordance with Physical Security Instruction PHYSI-6, "Searches," Surveillance Instruction SI-684, "Weekly Lunch Box and Vehicle Searches," and PSS SIL 3P.O, "Searches - Personnel Packages, Vehicles, and Gate Access."

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Security personnel informed the interviewer that small, inexpensive items such as the portable calculators identified by the CI are usually not labeled as TVA material. Unless an easily identifiable calculator is reported stolen, PSS Officers would not inspect each calculator taken out of the site area. PSS Officers interviewed reported that they inspected all hand-carried items during the random searches. These officers also reported that they knew of no members of the security force who failed to inspect purses during searches of hand-carried items. The interviewer observed security personnel inspecting purses during a random search of hand-carried items and determined that this policy is carried out as defined in the site procedure. The issue of failure to search purses was not substantiated.

Conclusion

This issue regarding the failure to search purses at SQN was not verified as factual.

|R1  
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3.9 Element 312.09 - Security Guard Towers

Issue 312.09-1 Guard Tower Gun Ports

WBN

|R1

No problem could be found which pertained to gun port design. A review of NRC regulations found no requirements for the optimum height or shape of the gun ports. An individual's height would determine the position and associated angle of firing at which he is most comfortable. Security management personnel stated that all guard tower watchstanders perform qualification firings from a tower "mock-up" to ensure their familiarity with required firing positions.

Engineering design personnel interviewed knew of no tests or reports on the "bullet funneling effect." However, engineering design calculations have been done on the internal configuration of the gun ports which determined that a bullet striking any of the interior side sections of the gun port would ricochet out of the gun port and that the only way a bullet could enter the firing slot would be if the bullet failed to strike the interior sides of the gun port. Since there is no requirement for specific dimensions in the design of the gun ports and design personnel have evaluated the "bullet funneling effect," this issue is not validated.

Conclusion

This issue regarding the design of guard tower gun ports at WBN was not verified as factual.

|R1  
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Issue 312.09-2 Guard Tower Facilities

WBN

|R1

The lack of restroom and water facilities was determined to not be a regulatory issue. There are no requirements in either the WBN Physical Security Plan nor NRC regulations for the guard towers to be self-sufficient. Interviews with Security management personnel revealed that there is a dedicated relief for guards needing to go to the restroom. Also, guards are rotated from the towers to other duties every 2 hours. Since there is no requirement for guard towers to have restroom or water facilities and there is a dedicated relief for tower guards, this issue is validated but has no adverse effects on the WBN security program.

Conclusion

This issue regarding guard tower facilities for WBN was factual but does not require corrective action.

|R1  
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Issue 312.09-3 Guard Tower Support Systems Unprotected

WBN

|R1

No deficiency was found which pertains to the unprotected utility support systems on the guard towers. The guard towers have an unrestricted view of the surrounding area, and the guards could detect an individual approaching the tower before he could damage the support system. In the event of successful damage to the support systems, a PSS SIL covers the contingency of evacuating the towers and manning continuous ground patrols of the protected area boundary. Since there is compensatory action if the guard towers have to be evacuated, this issue was validated but has no adverse effects on the WBN security program.

Conclusion

This issue regarding the guard tower support systems being unprotected for WBN was factual but does not require corrective action.

|R1

Issue 312.09-4 Cracked Windows in Guard Towers

WBN

|R1

This issue was not validated based on testing performed to verify the integrity of cracked bullet proof glass. On March 28, 1985, the TVA Office of Engineering performed a ballistic test on three pieces of cracked glass similar to the glass in the WBN guard towers. This test determined that the cracked glass retained its bullet proof characteristics per UL 752 and met the bullet proof requirements of 10 CFR 73.

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Conclusion

This issue regarding cracked windows in guard towers for WBN was not verified as factual.

|R1  
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Issue 312.09-5 Monitored Communications in Guard Towers

WBN

|R1

The issue that communications circuits in the guard towers are monitored was found to be factual and to not require corrective action. No adverse programmatic aspects could be found as a result of the evaluation of monitoring of guard tower communications. Interviews with security management personnel determined that guard towers communications can be monitored at the Central Alarm Station (CAS), Secondary Alarm Station (SAS), and Shift Captain's office. The system exists for the purpose of detecting guard towers potentially under duress. CAS and SAS personnel are instructed that monitoring conversations for any other purpose is a violation of TVA policy which would result in disciplinary action. Guard tower personnel are also instructed that personal phone calls are not to be made while on guard tower watch.

Conclusion

This issue regarding monitored communications in guard towers for WBN was factual but does not require corrective action.

|R1  
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Issue 312.09-6 Guard Towers and the Emergency Medical Team

WBN

|R1

This issue did not contain sufficient data at the concern level to investigate. It pertained, generally, to a concern about the guard towers and the Emergency Medical Team. No additional details could be found.

Conclusion

This issue regarding guard towers and the emergency medical team for WBN was not verified as factual.

|R1  
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3.10 Element 312.10 - Central Alarm Station Problems

Issue 312.10-1 CAS Facilities

WBN

|R1

The issue that the CAS has no restrooms or drinking fountain was found to be factual but no problem requiring corrective action was identified. PSS has adequate relief officer coverage to ensure that a CAS operator can leave his post for a trip to the restroom as the need arises.

Conclusion

This issue in regards to CAS Facilities for WBN was factual but does not require corrective action.

|R1  
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Issue 312.10-2 CAS Not Self Sufficient

WBN

|R1

The issue that the CAS was not self sufficient was found to be factual but no problem requiring corrective action was identified. The regulatory requirements for the CAS did not include making the area self-sufficient nor does the WBN Physical Security Plan include such a requirement.

With regard to issues 312.10-1 and 312.10-2, the evaluator found that TVA has done a feasibility study on the installation of a bathroom for the CAS. The costs involved for such a modification were found to be prohibitive. The decision was made to continue the relief officer concept as an acceptable alternative to the physical modification of the area. Public Safety Services has also resolved the drinking water problem on an interim basis and a water fountain is scheduled for installation by plant mechanical maintenance. Neither issue impacted on the adequacy of the WBN Security Program to protect the facility against radiological sabotage.

Conclusion

This issue in regards to CAS not self sufficient for WBN was factual but does not require corrective action.

|R1  
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3.11 Element 312.11 - Security Design and Hardware

Issue 312.11-1 Power Block Security Concept

WBN

The concern in this issue are generally based on perceptions that the Power Block is too small and does not enclose the Shift Captain's command post. None of these concerns were substantiated. The original concept and design of physical security systems for nuclear power plants was to enclose all buildings and personnel at the job site within the protected area. This concept necessitated a large protected area, numerous alarm systems, many administrative requirements, and a large staff of security personnel. The requirements of 10 CFR 73 have been more effectively met by adopting the Power Block concept. This concept reduces the protected area to the smallest feasible size and encompasses only the vital functions for safe operation of the plant inside security. The risk of the insider threat is greatly reduced with the Power Block concept since considerably fewer personnel are inside the protected/vital areas on a routine basis. This concept has been endorsed by NRC and has proven to be effective in application and operation. Therefore, the issue regarding inadequacy of the Power Block security concept was not substantiated.

SQN

Concerns XX-85-032-001 and XX-85-099-001 pertained to perceived deficiencies stemming from SQN's implementation of the Power Block Concept (PBC). An NSRS Investigation Report adequately evaluates concerns with the PBC at SQN. The objectives of the PBC are to decrease the size of the physical protected area, reduce the total number of personnel requiring access to the protected area, and to focus more concentrated security efforts in a smaller protected area and vital areas. The NSRS investigation found that the employee concerns with the security boundaries to be not valid. The Power Block concept of reducing the size of the protected area was thoroughly reviewed by TVA and endorsed by NRC. This evaluation concurred with the findings of the NSRS investigation.

Conclusion

This issue regarding power block security concept for WBN and SQN was not verified as factual. |R1  
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Generic Applicability

Concern XX-85-032-001 was not substantiated at the site of concern (SQN). No other site evaluations are necessary. |R1  
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Issue 312.11-2 Response to False Alarms

WBN

|R1

Two concerns relating to excessive false alarms in security alarm systems were not validated. Line management previously responded to this issue and found that just because the cause of an alarm is not found does not mean that the alarm is a "false alarm." There could be an explanation for the alarm that was not obvious to the responding PSS officer. While all electronic security systems have some instance of false alarms, the security systems at WBN meet all NRC requirements. In addition, PSS officers are trained to respond to all security alarms as if they were valid. This issue was adequately addressed by the line management response.

Conclusion

This issue regarding response to false alarms for WBN was not verified as factual.

|R1  
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Generic Applicability

Concern IN-85-619-001 was not substantiated at the site of concern (WBN). No other site evaluations are necessary.

|R1  
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Issue 312.11-3 Unreliable Card Readers

WBN

One concern pertained to unreliable card readers which often present false readouts. This concern was not validated at WBN. The card readers at WBN meet NRC requirements and are the same card readers that were evaluated at SQN. Card reader unreliability was not validated at SQN. A review of WBN security MR's in the recent 22-month period found that of 94 MR's for card readers, only 43 required maintenance. This evaluation finds that 43 MR's written on the 102 WBN card readers in a 22-month period is within industry performance expectations. No corrective action was necessary.

SQN

A concern for card readers being unreliable and presenting false readouts was not valid. In evaluating the aspect of reliability, interviews with maintenance personnel at SQN determined that between 1 and 2 Work Requests (WRs) are written on card readers per day.

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From these WRs, maintenance personnel have had to replace or repair approximately one card reader per week. A review of WRs on the card reader system indicates that although a WR may be written as a card reader problem, the card reader system was not at fault in the majority of cases. In evaluating the aspect of false readouts, a review of a RUSCO printout of card reader operation indicated a failure rate of .063% for misreading cards. Based upon this evaluation of card reader maintenance records and instances of card reader failure (.063%), corrective maintenance requirements on the card reader system are not at an unacceptable level.

Conclusion

This issue regarding unreliable card readers for WBN and SQN was not verified as factual.

|R1  
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Generic Applicability

This concern was not substantiated at SQN or WBN. No other site evaluations are necessary.

|R1  
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Issue 312.11-4 Loss of Power in CAS

WBN

One concern stated that all CAS security systems have been frequently rendered inoperable by power fluctuations caused by plant power switching operations. An NSRS Investigation Report adequately evaluated the factors in this concern. The requirements of 10 CFR 73 do not specify that there be an uninterruptible power supply (UPS) to either the central alarm station (CAS) or the secondary alarm station (SAS). The performance objectives for alarms and other circuitry, however, generally require this to be the case. No evidence was found to support there ever having been a total loss of power to CAS or SAS that affected all security related equipment as was described in the concern. Prior to August 1985, there had been an infrequent problem with a security computer that was caused by power fluctuations which were attributed to plant power switching operations. However, in August 1985, a UPS was added to the computer system which solved the voltage fluctuation problem. Further modifications have been initiated via WBN DCR WB-DCR-0696 to solve a power interruption problem with the Vital Area Access Control System (VAACS) computers in CAS and SAS. These corrective actions adequately address the problem.

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SQN

The issue dealing with loss of power to the CAS was substantiated, but corrective action was found to be in progress prior to the current evaluation. The Security Plan for SQN requires that the intrusion alarm system have an uninterruptible power supply (UPS) capability. The intrusion alarm system fulfills this requirement with a battery system; this was verified through interviews with security and engineering personnel. The Security Plan also requires back up power to the card reader computer (MAC 540). The present power supply to the MAC 540 has the possibility for both short power interruptions and voltage spikes. This situation causes loss of memory on the MAC 540. It was determined that a design change is being prepared to change the power supply for the MAC 540 to a UPS backed up by a diesel powered source. The UPS will filter out the voltage spikes and supply power until the diesel is on-line. This modification is not in response to the concern, is not yet scheduled, and is not a security regulatory requirement; it is an enhancement to mitigate the loss of memory on the MAC 540 card reader computer.

BFN

The issue dealing with loss of power to the CAS was not substantiated at BFN. Interviews determined that the intrusion alarm system, MAC 540 card reader computer, and card readers have UPS at BFN. No instances of loss of power to required CAS systems are known to have occurred.

Conclusion

This issue regarding loss of power in CAS was evaluated at WBN and SQN and was factual, but corrective action was initiated before the evaluation of this issue. However, CATD 31211-WBN-01 was written to track completeness of DCR WB-DCR-0696. At BFN, this issue was not verified as factual.

Generic Applicability

This concern was not generically applicable to BLN because BLN is still in construction phase. Security is handled by construction PSS. Protected area, CAS, card readers are not energized.

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| R1  
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| R1  
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Issue 312.11-5 Emergency Access to the Intake Pumping Station

WBN

This concern alleged that Security hindered access for personnel responding to a flooding incident at the Intake Pumping Station (IPS). By the design criteria at WBN, the IPS is a vital area. As such, access to the IPS is described in procedures and control is implemented by appropriate PSS functions. An NSRS report reviewed the adequacy and implementation of procedures and instructions governing access to the IPS. An assessment was also made to determine if there had been a verifiable history of access delays and reasons for them. The NSRS report was responded to by WBN PSS line management. The overall findings indicate that, while there were acknowledged brief delays for access into the IPS, there was no confirmation of a 40 minute delay caused by PSS during an alarm condition as was alleged. NSRS recommended that procedures be clarified concerning immediate/emergency access to the IPS. This evaluation confirmed that these revisions have been accomplished and specifics on emergency access to the IPS are found in procedures. This evaluation concurs with the NSRS report and the corrective actions taken by WBN.

SQN

This concern resulted from a WBN incident and was evaluated for generic applicability to SQN. This concern involves emergency access to the Intake Pumping Station; a protected/vital area requiring security access controls. A review of SQN site procedures revealed that access control in emergency situations is addressed and includes the dispatch of PSOs with badges for emergency response personnel. No vehicle or personnel searches are required for protected or vital area entry under emergency conditions. These procedures are adequate to prevent a similar problem from occurring at SQN. Therefore, the issue was not substantiated for SQN.

Conclusion

This issue regarding emergency access to the intake pumping station was evaluated at WBN and SQN and was not verified as factual.

|R1  
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Generic Applicability

This concern was not substantiated at SQN or WBN. No other site evaluations are necessary.

|R1  
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Issue 312.11-6 Inadequate Key Control Program

WBN

The concern for inadequate key control potentially hindering access to safety-related equipment during emergencies was not validated. The WBN evaluation was based on the plant's implementation of security requirements for lock and key control and considered the fact that WBN was not committed to the security requirements of an operating licensee, but was in a modified stage of security. The evaluator determined that the plant's key control procedures and their implementation met the requirements for an adequate key control program. The program ensures adequate control of security keys while providing plant personnel with required keys in the event of a plant emergency.

SQN

This issue pertains to Inadequate Key Control. Although the evaluator found SQN procedures to adequately administer a key control program which meets the requirements of 10 CFR 73 and Regulatory Guide 5.12, one particular incident substantiated the concern as a SQN problem. In this instance (LER 1-86024), keys were not issued when plant access doors were locked upon loss of memory to the MAC 540 card reader system. This instance was one example that keys are not always provided to personnel requiring entry to locked rooms.

BFN

The BFN specific concern pertaining to key control had generic application to SQN and WBN, but was not validated at BFN. A review was made of Standard Practice BF-19.26, "Key Control and Accountability" which delineates the overall responsibilities for key control in both Operations and PSS. Subtier documents from Operations and PSS further specify the detailed instructions for appropriately administering a key control program which meets the NRC Regulatory requirements. Additionally, the BFN response to NRC I&E Information Notice 86-55 provided credence that an acceptable key control program is in place and functioning

BLN

The only concern in this element evaluated at BLN pertained to the key control issue. This issue was not validated at BLN, partly because this plant is still in the construction phase and only a limited number of rooms have been turned over to Plant Operations. Additionally, BLN is adequately addressing this concern in the course of responding to NRC I&E Information Notice 85-55.

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**Conclusion**

This issue was not verified as factual for WBN, BFN, and BLM. However, at SQN CATD 31211-SQN-001 and 31211-SQN-002 were written because keys are not always provided to personnel requiring entry to locked rooms and to follow up on LER 1-86024 in reference to the loss of power on loss of memory to the security MAC 540 system, to determine corrective action. At SQN this issue was factual and corrective action is being taken as a result of an evaluation.

**Issue 312.11-7 No Air Conditioning in PSS Patrol Vehicles**

**WBN**

Two concerns pertaining to a lack of air conditioning (A/C) in PSS patrol vehicles were determined to not be a regulatory issue. The issue was determined to be factual but to not be a problem requiring corrective action. Nevertheless, attempts have been made by PSS to obtain A/C for patrol vehicles as is evidenced by written communications with TVA's Transportation Services Branch and summarized in the line management response to these concerns. It was agreed, however, to install A/C on the one patrol vehicle that is used for considerable highway travel. The remaining patrol vehicles have been equipped with cab vents and fans to improve comfort levels in the periods of hot weather. No instances were identified where a lack of A/C in patrol vehicles had resulted in a dust contamination problem with weapons and/or communication, as alleged.

**Conclusion**

This issue regarding no air conditioning in PSS patrol vehicles for WBN was factual but does not require corrective action.

**Issue 312.11-8 Security Equipment Maintenance**

**WBN**

Two concerns relate to the lack of expedience in completing maintenance requests (MR's) on security equipment. The issue was substantiated but corrective action was found to be underway prior to the current evaluation. In responding to an NRC I & E Information Notice, PSS had already compiled a list of MR's generated for security systems over a recent 22 month period. Findings and trends made from the data indicate there are areas that warrant review by line management to explore improvement of response time to security systems by maintenance. One potential improvement was identified in an interview with maintenance line management.

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The improvement being considered would be the formulation of a specialized maintenance crew, comprised of all disciplines, to concentrate specifically on MR's for security equipment. Other potential solutions may be available for consideration by line management.

Conclusion

This issue regarding security equipment maintenance for WBN was factual but corrective action was initiated before the evaluation of this issue.

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|R1  
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Issue 312.11-9 Inconsistent Labels on Card Readers

WBN

|R1

A WBN site specific concern that card readers are improperly labeled with the access levels authorized to use them was not validated. The evaluator concurred with the line management investigation of this issue which found only minor inconsistencies in the labeling of card readers. These inconsistencies were brought to the attention of PSS personnel and corrected. However, since using a key card in a card reader not authorized for the individual's access level would not unlock the security door; this issue does not constitute a security violation.

At the time of this evaluation, the card readers are not used to control access into security areas. Prior to licensing, when full security is implemented and the card readers will control security access, PSS should re-evaluate access levels on all card readers.

Conclusion

This issue regarding inconsistent labels on card readers for WBN was not verified as factual.

|R1  
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Issue 312.11-10 Equipment Malfunction Causing a Security Breach

WBN

|R1

One WBN concern in this element did not provide enough information to evaluate. It pertained, generally, to a security equipment malfunction that created a breach in security. No further details could be found.

Conclusion

This issue regarding equipment malfunction causing a security breach for WBN was not verified as factual.

|R1  
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Generic Applicability

This concern was not substantiated at the site of concern (WBN). No other site evaluations are necessary.

|R1  
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Issue 312.11-11 Security Systems Powered Down

WBN

|R1

A concern that security systems should not be powered down when not in use could not be validated. The evaluation consisted of a review of the line management response which utilized additional information that was available at that time from QTC. The line management response concluded that the issue was directed towards the security card readers on the controlled access doors. Their evaluation further concluded, through contact with technical personnel, that, while there is a minor deleterious effect from removing power from card readers, it is unavoidable. The electrolytic capacitors in the card readers will, over a period of time, evidence diminished capability to perform their electrical function and, finally, fail to operate. Therefore, it is of no consequence whether a card reader is "powered down" in place or is removed from its location and placed in storage. Card readers used in the power block security concept are not "powered down," they are electrically energized. Plant P/Hs continue to be performed on all installed card readers which will identify and ensure repair of inoperable card readers.

|R1  
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Conclusion

This issue regarding security systems powered down for WBN was not verified as factual.

|R1  
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Issue 312.11-12 Reliability and Calibration of X-Ray Machine and Explosives Detectors

WBN

|R1

This issue addressing the reliability and calibration of x-ray machines and explosive detectors was substantiated, but corrective action was found to be underway prior to the current evaluation. Interviews with security and instrument maintenance personnel confirmed past problems with the performance of the explosive detectors. An FCR documented these problems and describes the improved performance of the newer model explosives detectors which are now installed. The line management response to a concern for the effectiveness of the calibration technique describes the calibration of the explosive detectors, which is the method approved

by the vendor. Security and instrument maintenance personnel also confirmed an interference problem between the x-ray machine and metal detectors. When the x-ray machine is turned on, the metal detectors alarm. As a result, the x-ray machine is normally secured whenever the metal detectors are in service and is made operable on an as needed basis. Instrument Maintenance is preparing a DCR to revise the physical layout of the 708' entry portal to alleviate this problem. No further corrective action was determined to be necessary.

Conclusion

This issue regarding reliability and calibration of X-ray machine and explosive detectors for WBN was not verified as factual.

|R1  
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Generic Applicability

No deficiencies were identified by the WBN evaluation for concerns IN-85-956-X01 and IN-86-295-001. The issue is perceived to be an enhancement or convenience. No other site evaluations are necessary.

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|R1  
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Issue 312.11-13 Security Gate Won't Stop a Vehicle

WBN

This issue dealing with the inability of plant security gate #7 to physically stop a vehicle was factual but did not require corrective action. The evaluator found this particular gate to provide vehicle access to the site and to be a traffic control mechanism for PSS. This gate is in the owner controlled area and, as such, is in the lowest level of protective classification. The requirements for the owner controlled area are, basically, that a person be made aware that they are on private property. There is no requirement or intention that these gates be designed to be physically capable of stopping a vehicle.

Conclusion

This issue regarding security gate would not stop a vehicle for WBN was factual but does not require corrective action.

|R1  
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Issue 312.11-14 Excess Time to Travel Between Areas

WBN

|R1

The issue regarding encumbered passage between the Turbine Bay and Control Building was substantiated. However, sufficient corrective action has been implemented to ensure this concern is not a recurring problem. The first issue is related to obtaining work approvals from the shift engineer in the control room for work to be done elsewhere, outside the security area. To alleviate much of this seemingly unnecessary travel, an Assistant Shift Engineer (ASE) is stationed on the 755' elevation of the Turbine Building adjacent to the elevator. The ASE is assigned anytime work is being conducted and is the appropriate individual to contact for permission, signatures, etc.

The second item, concerning the fire brigade having to follow the same route for emergency access to the protected area, is not true. In an actual emergency, (not a drill), fire brigade members who are outside security go to the emergency equipment cage, obtain their necessary equipment and proceed to the entrance portal. They are provided emergency access badges and are exempted from search so that their response is not impeded. Those fire brigade members who are inside security utilize the quickest egress from the protected area as described above. To alleviate this situation, an emergency equipment cage has been constructed in the Auxiliary Building. Once this addition is completed, fire brigade members who are inside security will no longer have to exit and re-enter as is presently done.

#### Conclusion

This issue regarding excess time to travel between areas for WBN was factual but corrective action was taken before the evaluation of this issue.

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|R1  
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#### Issue 312.11-15 Security System Inadequate to Have New Fuel Delivered On-Site

##### WBN

|R1

The issue pertaining to the existing security system being inadequate to support the early delivery of fuel on-site was not substantiated. This fuel is defined under 10 CFR 73 as "low strategic significance" and is required to be stored within a "controlled access area." With regard to these requirements, the new fuel is monitored with an intrusion alarm system, procedures control access to the fuel storage area, and a PSS post has been established with the responsibility to respond to unauthorized penetrations and to summon assistance from off-site. These control mechanisms adequately meet regulatory requirements for storage of unirradiated fuel.

Conclusion

This issue regarding security system inadequate to have new fuel delivered on site for WBN was not verified as factual.

|R1  
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Generic Applicability

This concern was not valid at the site of concern (WBN). No other site evaluations are necessary.

|R1  
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Issue 312.11-16 Alternate Power for PSS Radio Communications

WBN

|R1

The lack of alternate battery power for PSS radio communication equipment was not validated as a problem. The evaluator found 10 CFR 73 to require security's non-portable communications equipment to have an independent power source in the event of the loss of normal power. As alleged, there are no battery power supplies; the requirements are met by utilizing alternate sources of power. The power source for communications equipment is from a 480V AC shutdown board which has both train A and B power sources. Additionally, these boards are automatically switched to the diesel generators if train A and B are lost.

Conclusion

This issue regarding alternate power for PSS radio communications for WBN was factual but does not require corrective action.

|R1  
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Issue 312.11-17 Loss of Power Alarm in CAS/SAS

WBN

|R1

The issue pertaining to the lack of an alarm in the SAS or CAS for loss of power to remote control communications equipment was factual but did not require corrective action. There is neither a requirement nor a WBN intention to provide such an alarm. Communications equipment is provided with alternate power sources, plus backup from the emergency diesel generator bus.

Should there be a malfunction in the transfer to alternate power, it should be readily evident to CAS and SAS that their radios were not functioning. In this case, CAS and SAS could utilize their hand-held radios which are battery powered and are functional on all the PSS frequencies.

Conclusion

This issue regarding loss of power alarm is CAS/SAS for WBN was factual but does not require corrective action.

|R1  
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Generic Applicability

The WBN evaluation of this concern found no deficiencies. No other site evaluations are necessary.

|R1  
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Issue 312.11-18 Entrance Portal Too Small

WBN

|R1

A concern alleging that a certain security portal was too small to adequately support personnel pat-down searches and equipment inspections could not be validated. The evaluator found that the anticipated traffic was underestimated in the design of the portal. PSOs assigned to this post are responsible for control of personnel in processing through the portal. To aid in the flow control of personnel, footprints have been painted on the floor from the explosives detectors to the badge window. PSS allows only one individual to process through the window at a time. This control is to ensure the adequacy of pat down searches and prevent crowding. While confined, there have been no identified instances of PSS failing to maintain its commitments for conducting searches and controlling the badging process.

Conclusion

This issue regarding entrance portal too small for WBN was not verified as factual.

|R1  
|

Issue 312.11-19 Improper Functioning of Security Equipment

WBN

|R1

A concern made vague reference to improper functioning of security equipment. The evaluation consisted of a review of the line management response which utilized additional information obtained from QTC. The line management response indicates that the concern was with the Closed-Circuit Television (CCTV) video quality at the Intake Pumping Station (IPS). The response stated that there was an acknowledged problem with poor video quality for the CCTV at the IPS due to interferences, and it was being investigated. As a

follow-up, the evaluator reviewed the video quality of the CCTV coverage available in the secondary alarm station (SAS). It was found that while the CCTV quality was not perfect, it was at an acceptable quality level for the intended purpose of surveillance of the IPS. Therefore, the issue was substantiated but adequate corrective action had been taken prior to the current evaluation.

Conclusion

This issue regarding improper functioning of security equipment for WBN was factual but does not require corrective action.

|R1  
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Generic Applicability

No deficiencies were identified by the WBN evaluation. This issue is perceived to be an enhancement or convenience issue. No other site evaluations are necessary.

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|R1  
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Issue 312.11-20 Lack of As-Constructed Prints

BFN

|R1

One BFN concern was validated in that there is a lack of "As-Constructed" prints for security lighting equipment and that Standard Practices were not followed for incorporating a partially completed workplan into As-Constructed drawings. Marked up drawings were not sent to Drawing Control Center resulting in difficulty for maintenance personnel to maintain outside security lighting. However, this lack of drawings is not safety-related and does not violate 10CFR73 or the Physical Security Plan as long as compensatory action is taken in the event controlled area lighting is lost. CATD 31211-BFN-01 was issued to BFN line management.

|R1  
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Conclusion

This issue regarding lack of as-constructed prints for BFN is factual and corrective action is being taken as a result of an evaluation.

|R1  
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3.12 Element 312.12 - Security Programs and Procedures

Issue 312.12-1 Access Control Points

WBN and SQN

|R1

With regard to the issue of access control points, the access control requirements evaluated in this element pertain to the vital and protected areas, whereas Element 312.07 evaluated the owner and site-controlled areas. No programmatic problems were identified.

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When evaluating search policies at access control points, the evaluator found a Regulatory Guide 5.7 recommendation that ten percent of employees receive a hands-on pat down search before protected area entry and that the preferred search method is through the use of metal or explosive detectors. Requirements further state that when an in-depth background screening is conducted and the employee is under continued observation in the workplace, that a detailed physical search of personnel is unnecessary and that the search by metal detectors is adequate. TVA's current requirement for a 20 percent random search of employees and 100 percent search of all visitors more than meets regulatory requirements. These findings invalidated concerns IN-85-311-003, IN-86-022-001, WBP-5-016-001, and IN-86-107-002.

The issue of pat down searches being inadequate was investigated under Element 312.02. The evaluator subjected himself to processing as a visitor into a protected area. A pat down search was conducted as required. Several deficiencies in the search technique were identified. The search process itself, when it includes the use of detection equipment, is adequate and does pass acceptance criteria as stated in the regulatory requirements. However, the pat down search received by the evaluator substantiated employee concerns IN-85-311-004 and IN-86-107-003 that pat down search functions are not conducted in a thorough manner, especially if detection equipment is not in working condition or is otherwise unavailable. This issue was further evaluated at SQN and was validated there as well. As a result, a non-plant specific CATD was issued to the security branch in Knoxville, and further evaluation of BFN and BLN will not be conducted.

R1

No evidence was found that personnel have entered the protected area without a proper security badge as alleged in concern EX-85-048-008. The evaluator made random observations of security personnel and found that all plant personnel had to display their badge before being allowed access into the protected area. This concern was not validated.

Concern IN-85-369-002 regarding the lack of lunch box checks to deter theft was also investigated in Element 312.08. The requirements for searches of personnel and hand-carried items are adequately detailed in PSS documents. Specifically, there are no requirements for mandatory searches when entering or exiting the site controlled area. However, all personnel are subject to search while entering, remaining on, or exiting the site controlled area. There are no stated requirements for how often these searches are to be conducted. In view of this, this concern was not validated.

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Conclusion

This issue was factual and corrective action is being taken in regards to inadequate pat down search for WBN and SQN. CATD 31212-NPS-01 was issued to the security branch in Knoxville. Evaluation was not conducted at BFN and BLN. The concerns regarding search policies at access control points; personnel entering the protected area without a proper security badge; and the lack of lunch box checks were not verified as factual for WBN.

| R1

Generic Applicability

IN-86-107-003 and IN-85-311-004 are generic to Sequoyah, Browns Ferry, and Bellefonte plants because those plants are either operating plants or have fuel onsite which required implementation of the pat down search requirement. This issue was further evaluated at SQN and was validated there as well. As a result, a nonplant specific CATD was issued to the security branch in Knoxville and further evaluation at BFN and BLN will not be conducted.

| R1

Issue 312.12-2 Background Investigations and Badging Process

WBN

| R1

None of the five concerns pertaining to background investigations and badging were validated, due to CI misconceptions of the requirements for access to the varying levels of protection (e.g. owner-controlled, site-controlled, protected, vital). The CIs generally believed that all levels of personnel access required the same comprehensive background investigations. The evaluator found that background investigations are not required by Federal regulation for individuals that only require access to the owner-controlled or site-controlled areas. They are required for unescorted access to protected and vital areas only.

The Nuclear Plant Security Program Manual details TVA's background screening program. The program meets or exceeds all regulatory requirements for such a system. The necessary general employee training required for unescorted access to protected and vital areas is also specified by procedure, and procedures are in place for controlling escorted personnel who have not had a background screening or the required training.

One concern (IN-85-427-001) alleged that every employee could not be positively identified since badges were not issued to everyone. Based on a review of regulatory requirements, this concern was not validated. The evaluator found that PSS is only required to obtain reasonable assurance that an individual is identified and authorized to be onsite. Positive identification is only required in the protected area.



Badges issued for the owner-controlled and site-controlled areas are for identification purposes and are easily identifiable status indicators when properly displayed. Other means such as sign-in registers, hardhats, construction brass, etc., can, and do, serve the same purpose in the owner-controlled or site-controlled areas. In these cases a numbered visitor badge is assigned to uniquely identify an individual or a unique trade and labor number identifies the individual and his work unit (craft). This number is displayed on the individual's hardhat.

Individuals whose status indicator, either badge or unique number, allows entry into the owner-controlled or site-controlled areas cannot gain unescorted access into protected or vital areas of the plant. Individuals requiring access to vital and protected area zones are required by procedures to have completed additional training, to have had a satisfactory background screening, and to have completed a psychological evaluation before being allowed unescorted access to these areas. Provision has been made to accomplish entry into these areas as an escorted individual. This is consistent with regulatory requirements.

Concern EX-85-015-009 stating that employees who have failed Health Physics training and still work in positions requiring security badging was not validated. The line management response to this concern identified two individuals at WBN who have not passed specific General Employee Training (GET) classes. However, neither of these individuals were employed in positions which required badging for access into the protected area of the plant.

#### Conclusion

This issue regarding background investigations and badging process for WBN was not verified as factual.

|R1  
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#### Issue 312.12-3 Site Physical Protection

##### WBN

|R1

No programmatic problems were found in the ten concerns comprising the issue of Site Physical Security Requirements. Many of the employee concerns covered in this section are concerns that express an apprehension that TVA has not fully considered all the possible avenues for intrusion into plant protected areas and that certain administrative controls may not be adequate for this facility. Concerns related to single officer patrols in the owner-controlled area, the adequacy of the officer patrol function at the intake pump structure, and the possible use of ultralight aircraft to gain

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access to the protected area are examples of things that were considered in TVA's design of the power block concept. The original concept of physical security for nuclear power plants was to enclose the entire facility within a perimeter. By design, this concept required a large protected area with an attendant number of alarm systems, administrative policies and procedures and many security personnel to implement and enforce the design basis. The Power Block concept is the product of re-thinking the original design into the smallest feasible size and encompasses the protected and vital area for the safe operation of the plant. The concept has been thoroughly studied. The controlling documents were appropriately revised and were concurred with by the NRC. Concerns IN-86-191-001, IN-85-678-005, IN-85-311-011, IN-85-700-001, and IN-85-552-001 are, therefore, not valid.

Concerns PH-85-029-001 and IN-86-213-003 for PSS overtime limitations were not validated. Overtime limitations are not imposed on security officers by the NRC in the same manner as they are for plant operators. Excessive overtime is, however, a legitimate NRC concern because of its obvious effects on performance. As a consequence, WBN has committed to a target of no more than a ten-percent overtime factor under normal conditions at the time of licensing.

Concern IN-85-333-03 stating that HP personnel were standing a panel access watch which detracted from their regular duties was, although valid, determined not to be a problem. The CI believed this watch was a PSS responsibility. An NSRS report revealed evidence that manning this station was not a problem because HP personnel were only assigned to this task 1 to 2 hours per day. The concern was discussed with a member of the Preoperations Test Group who has required frequent access to these panels. It was determined that the area is a vital area with appropriate vital area access controls and that the responsibility for this activity had been transferred to the HP organization. Interviews with HP personnel determined that HP has since discontinued this activity with the decline of activity in the area. The shift engineer and Instrument Maintenance personnel now maintain the panel keys.

Concerns IN-85-843-001 and IN-85-843-004 for an inadequate TVA policy on the use of deadly force were not validated. The use of force is addressed in ANSI/ANS 3.3 which states that "a sufficient degree of force may include deadly force when there is a reasonable belief it is necessary in self-defense or in the defense of others against a threat of deadly force." TVA is required to establish an owner organization policy that is consistent with this requirement and that ensures conformance with any other Federal, state or local

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statutes regarding the use of force. Regulatory Guide 5.43 states the "members of the guard force should be prepared to use their firearms rather than permit the theft of Special Nuclear Material (SNM) or the sabotage of a nuclear facility." Regulatory requirements or statements regarding the use of deadly force always leave a question open as to the legalities involved when deadly force is used such that use is based on a decision making process depending on the specific circumstances involved. TVA clearly states that "firearms shall be discharged only as a last resort in defense of your life or another," in PSS SIL 1.3. Interviews with PSS management further clarified the TVA position such that the evaluator was satisfied that this includes the health and safety of the public in the event of sabotage of a nuclear facility or theft of SNM.

Conclusion

This issue regarding site physical protection for WBN was factual but does not require corrective action.

|R1  
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Issue 312.12-4 Authority of PSS

WBN

|R1

Concerns IN-86-214-004 and IN-86-074-X05 regarding lack of PSS authority to enforce security regulations were investigated under Element 312.07 where a review of the Security Degradation Determination/Corrective Action Reporting (SDD/CAR) program was conducted to ensure that PSS authority was supported by plant management. The evaluator found several deficiencies. SDD/CAR system weaknesses and a lack of responsiveness on the part of NUC PR supervision to the corrective action aspects of the system contribute to the perception that security violations are not effectively dealt with. From a sample of 30 SDDs, it was noted that plant management did not respond to the corrective action portion in 53% of the sample reviewed and the Superintendent of Operations and Engineering does not review SDD/CAR forms as required. Additionally, the evaluator found two weaknesses in the administration of the SDD/CAR system. The informal tracking system for SDD/CAR forms would allow deletion of a security degradation form from the system up to step three in the initiation process where the unique number is written on the form and entered into the log. Secondly, no feedback is provided to the originator. These inconsistencies validated the concerns.

Concern IN-85-094-001 pertained to the lack of a designated leader for the Emergency Medical Response Team (EMRT). The CI believed this led to confusion at the scene of medical emergencies. This concern was not validated; the Assistant Shift Engineer is designated as the emergency team leader, responsible for directing all aspects of the emergency and for limiting confusion by making specific assignments as necessary.

Concern IN-85-456-001 questioned PSS authority to search cars without the owner being present. Car searches in the owner-controlled and site-controlled areas are not covered by procedure; however, PSS policy requires the owner to be present. Interviews with security personnel found no instance of a vehicle search without the owner present. This concern was not validated.

#### Conclusion

This issue regarding authority of PSS for WBN was factual and corrective action is being taken in regard to the weakness in the administration of the SDD/CAR system. (CATD 31207-WBN-01 was issued under Issue 312.07-1)

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#### 4.0 COLLECTIVE SIGNIFICANCE

A collective assessment of the element-level findings (Section 3.0) led to the identification of no subcategory-level findings for this subcategory. All deficiencies were determined to be adequately addressed at the element level.

#### 5.0 ROOT CAUSE, PRELIMINARY ANALYSIS

Sections 3.0 and 4.0 discussed the specific findings for each of the element evaluations of this subcategory and their collective significance. This section presents the results of an independent review and analysis done on these specific element-level findings to identify the most frequently occurring and widespread root causes at the subcategory level. Patterns of recurring findings called symptoms were derived from the elements. These symptoms were tested for root causes, and the root causes for all elements were then analyzed collectively to identify which occurred most frequently and at the most sites. Details of the symptoms and root causes derived for each element are presented in Attachment D, "Summary of Symptoms and Root Causes."

An analysis of these element-level symptoms and root causes in the subcategory is depicted graphically in attachments E, F, and G. Observations were made in studying these attachments and the findings of section 3.0 of this report. The results of this analysis indicate that there are no shared symptoms or root causes that would identify programmatic problem areas. Therefore, no subcategory level root causes are identified for subcategory 31200.

## 6.0 CORRECTIVE ACTION

### 6.1 Element 312.07 - Security Procedure Violations

#### WBN

A Notice of Immediate Action (NOIA), number 9-OP312, was issued to WBN line management noting that the SDD/CAR program implementation requirements were not being followed. The acceptable response to this NOIA received from WBN line management was as follows:

"The following corrective actions shall be taken to satisfy immediate action No. 9-OP312:

1. A review of the return rate of SDD forms was conducted. |R1
2. A revision to WB 10.9 Section 4.0 shall be completed by September 19, 1986 to require the return of SDD forms to Public Safety Section (PSS) by the date on the form and failure to return the form shall require notification of the appropriate plant superintendent for action. |R1
3. A revision to WB 10.9 is in process to identify a selective routing of SDDs to the superintendent of O&T for review with check off on the DSS form by August 15, 1986. |

This NOIA was subsequently changed into CATD 31207-WBN-01 for tracking purposes.

### 6.2 Element 312.11 - Security Design and Hardware

#### WBN

CATD number 31211-WBN-01 was sent to WBN line management concerning the incompletion of a Design Change Request that could result in LER. An acceptable response to this CATD was received from WBN line management as follows:

"DNE will prepare a memo by March 1, 1987 to the Site Director approving DCR 0696 with the exception of item number three. Item number three requests a CRT located outside the Power Block and not in a controlled access area. DNE is concerned that the probability of illegal access to the VAACS computer software will increase. DNE will provide a UPS at each alarm station which will interface with the security diesel. ECN number 6793 has been assigned to implement this DCR.

Verbal concurrence obtained through meeting with Tom Huth, John Lyons, and Marvin Smith CATG 11 February 1987."

SQL

Two CATDs were issued to SQL line management. CATD 31211-001-SQN identified the problem of keys not being provided to personnel requiring entry to locked rooms. CATD 31211-002-SQN was in regard to the follow-up required for an LER in reference to the loss of power or loss of memory to the Security's computer system. An acceptable response to these CATDs has been received from SQL line management, as follows:

- "1. Corrective actions were identified in LER 1-86024 which were designed to prevent loss of memory in the MAC-540 due to power transients. The following are the actions taken and completed under the respective CCTS number.

NCO-86-0235-001 Replace the hard sector disks used for backup to internal memory with soft sector: This ensures a more reliable back up to the memory if it is lost.

NCO-86-0235-002 Implement a preventative maintenance (PM) procedure to periodically ensure that the MAC-540 disk drive system is clean and functioning properly: This ensures the availability of reliable drive to reload memory in the event it is lost.

NCO-86-0235-003 Implement a PM to periodically replace the backup battery to the MAC-540 memory system: This will ensure that for short-term power transients the battery will have a sufficient charge to maintain the memory.

These actions were identified and implemented to first add assurance that the MAC-540 memory would not be lost during short-term power transients, and secondly, if the memory is lost, the disk drive and appropriate backup disk are available for quick reloading. No additional corrective actions are considered appropriate at this time.

2. The security access keys are available to Operations Staff during emergency situations to ensure plant safety. Providing keys to fire watches to perform normal hourly rounds is not a correct action within the scope of plant security.

The security force is notified immediately of a loss of the MAC-540 and is aware of the fire watch requirement. They make every effort to supply a security officer to assist with rounds. This security interface, in conjunction with the corrective actions specified in LER 1-86024, is considered appropriate. No additional corrective actions are to be taken on this issue."

#### BFN

CATD 31211-BFN-01 was issued to BFN line management concerning the lack of "As-Constructed" drawings for outside security lighting and the incompleteness of the applicable workplan. The acceptable response to this CATD received from BFN line management was as follows:

"Workplan No. 8521 was field completed and transmitted to Operations on August 21, 1986, by the Workplan Coordinator. Operations has the workplan for a procedure change. Upon receipt of Workplan No. 8521 from the Operations Group the Workplan Coordinator will, by procedure BF-8.3, transmit it to Document Control Center for as-constructing the drawings.

Workplan No. 8644 will accompany Workplan No. 8521 as it has common drawings.

As recurrence control, all Backlog Workplans will be closed prior to applicable unit startup."

#### 6.3 Element 312.12 - Security Programs and Procedures

CATD 31212-NPS-001 was sent to WBN line management identifying the inadequate adherence to the acceptance criteria for pat downs during period of inoperative electronic search equipment and overall inadequacy of performing pat-down searches. An acceptable response has been received from corporate management as follows:

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"Proposed action plan that corrects this CATD is as follows:

- A. Action to be taken to identify similar instances of inadequate pat-downs will be through an established ongoing audit/evaluation program. The Nuclear Regulatory Commission (NRC) and the Division of Nuclear Quality Assurance (DNQA) will perform annual audits and/or unannounced inspections. Site

Security Managers and the Nuclear Security Branch (NSB) will perform ongoing evaluation of the program and officers. Shift supervisors will perform on-shift officer performance evaluations. All will be documented.

- At Watts Bar Nuclear Plant (WBN), the action to be taken will start when the security program reenters a schedule that completes training of individual officers and places the security program in an operational state for a fuel load license. The target date to complete the actions necessary to have the program in place is 30 days before a future established fuel load date for unit 1.
  - At Sequoyah Nuclear Plant (SQN), the target date to complete the action necessary to have the program in place before a future established restart date of unit 2. This plan is already being performed at SQN preparatory to restart. The Site Security Manager has already performed an operational readiness test. NRC is completing its second preparatory inspection in four months (March 6, 1987). DNQA completed its annual audit on February 6, 1987.
- B. Action to be taken or planned that corrects identified instances of inadequate pat-downs will be through remedial training and/or disciplinary action. Each case will be judged on its own merits. Additionally, action completion dates will be assigned according to each case need.
- C. Actions to be taken or planned and dates of completion that will preclude recurrence of inadequate pat-downs will be as provided in the above paragraphs. It is noted that individual inaction or willful poor performance are not factors that can always be controlled. However, experience has shown the plan will provide management with the best tool available.
- D. For actions completed to date, see the above paragraphs. The results of the plan will be evidence when a fuel load license is received at WBN and restart of SQN has occurred.



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**7.0 ATTACHMENTS**

Attachment A - Subcategory Summary Table  
Attachment B - Listing of Concerns by Issue  
Attachment C - Checklist for Root Cause Analysis  
Attachment D - Summary of Symptoms and Root Causes  
Attachment E - Graph of Symptoms Versus Root Causes  
Attachment F - Bar Charts of Symptoms  
Attachment G - Bar Charts of Root Causes  
Attachment H - CATDs  
Attachment I - List of Evaluators by Element/Plant

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