



Attachment I

Physical Protection Plan for the Protection of Special Nuclear Material of Low Strategic Significance

Draft

**EnergySolutions
Clive Processing Facility (CPF)**

**Physical Protection Plan for the Protection of Special
Nuclear Material of Low Strategic Significance**

April 9, 2009

1. Security Organization at the Clive Processing Facility

A contract security organization will be assigned to the Clive Processing Facility (CPF) in order to provide detection, deterrence, and response capabilities for the protection against theft and unauthorized penetrations.

1.1 Security Organization Responsibilities

All security personnel will be trained/certified, uniformed guards armed with a firearm. CPF guard's duties will include:

- Alarm room monitoring (Central Alarm Station – CAS)
- Access authorization (badge validation)
- Armed alarm response/assessment
- Conducting random patrols of Controlled Access Areas located within the CPF
- Conducting periodic vehicle inspections
- Searching personnel and packages
- Escorting personnel and controlling vehicles

1.2 Security Organization Training

All contract security guards will be trained, equipped, and qualified as appropriate to their assigned security related jobs/duties. Training of the site security organization will be conducted by the contractor, and at a minimum, include:

- Initial and annual firearms (handgun) training and qualification.
- Authority of nuclear security guards at a fixed site.
- Use of non-lethal weapons (chemical spray).
- The use of deadly force.
- Legal issues related to the arrest and detainment of individuals.
- Alarm response and assessment procedures.
- Alarm response station (CAS) operations and procedures.
- Types of physical barriers
- Controlled Access Area security
- Communication systems operation
- Fixed post operations
- Conducting inspections of motor vehicles
- Contraband detection
- Communication with local law enforcement
- Contingency plans/operations

1.3 Security Organization Equipment (Duty Essential)

All security force personnel must be equipped and provided with the necessary resources to effectively, efficiently, and safely conduct site protection operations. At a minimum, all security personnel will be assigned the following equipment:

- Handgun and ammunition
- Holster
- Duty belt
- Ammunition carrying device
- Portable radio with carrier
- Batteries
- Intermediate force weapon (chemical spray with carrier, baton)
- Handcuffs with case
- Flashlight
- Uniforms
- Boots
- Cold and wet weather gear

1.4 Security Personnel and Supervision

The site security organization for the Clive Processing Facility will be managed by an on-site licensee (Energy Solutions) Security Manager. Day to day supervision of all security personnel will be conducted by a contract security manager and a contract security supervisor.

2. Use and Storage of Special Nuclear Material of Low Strategic Significance

Energy Solutions will possess, use, and transport amounts of Special Nuclear Material of Low Strategic Significance that exceed more than 10 kg. All material will be stored and processed in Permanently Established Controlled Access Areas (CAA). All Permanently Controlled Access Areas will be isolated by the appropriate physical barriers and be capable of controlling, impeding, or denying access into the area. Appropriate physical barriers will include:

1. Fences (constructed of a minimum of No. 11 American wire gauge topped with three or more strands of barbed or concertina wire angled inward/outward between 30 and 45 degrees from the vertical, with an overall height of no less than 8 feet).
2. Walls (constructed of steel, brick, concrete or stone with a height of no less than 8 feet; designed to prevent unauthorized persons from gaining access to the material).
3. Locked Doors (configured to prevent persons from gaining access to the material and to prevent physical access).

2.1 Access Controls

In addition to the barriers listed above, access control measures will be implemented to assist in detecting any unauthorized entry into the secured area (CAA). Access control measures will include:

1. Licensee approved access authorization program: electronic entry control/identification system (security badges); automated badge identification system; and a security key and lock control program.
2. Controlling all secured access doors by remote systems: Central Alarm Station Operator.
3. Providing armed security personnel at access control points for the purpose of personal recognition, and to monitor any electronic entry procedures.
4. Contraband/prohibited items control procedures that include inspections of personnel and hand carried items entering the CAA.

3. Detection Devices and Procedures

Energy Solutions will monitor all Controlled Access Areas with an intrusion alarm or other device/procedures in order to detect unauthorized penetration or activity. Procedures for monitoring will be designed to provide early detection for the protection from multiple thefts of SNM of Low Strategic Significance (other than LEU).

3.1 Intrusion Alarm Systems

All Controlled Access Areas will have both interior and exterior sensor systems that will assist in the detection of unauthorized movement/intrusion. These systems will include motion detectors (rooms located inside CAA), balanced magnetic switches (doors), and electromagnetic field sensors (fence).

3.2 Means of Detecting Unauthorized Intrusion

The Clive Processing Facility (CPF) will have a Central Alarm Station (CAS) that will be monitored 24 a day by security personnel. A security computer system will be located inside CAS. The computer will monitor the intrusion detection and access control process, including the relaying of information from a sensor to security personnel. Armed security personnel will provide alarm response/assessment once CAS communicates the point of alarm/intrusion.

3.3 Communication Systems Related to Security

All security related communications will be initiated from the Central Alarm Station. This communication will be conducted on a dedicated phone system, and the security organization's radio system. The radio system is the organization's most effective way to contact outside response forces (local law enforcement) and security personnel dedicated to alarm response/assessment.

4. Arrangements with Local Law Enforcement

For the purpose of transferring information and responsibility from the on-site security force to local law enforcement responders during a contingency event, Energy Solutions will update the Clive Processing Facility's existing LLEA arrangement with the Utah Department of Public Safety, and the Tooele County Sheriff's Department.

Response Procedures

For the purpose of this procedure, a contingency event may be defined as:

- Any situation that may lead to the theft of Special Nuclear Material (SNM);
- Discovery of a vulnerability or breach in the site security system;
- Discovery that SNM is missing

Once a contingency event has occurred, the Licensee Security Manager (or his/her designee) will:

- Initiate security force call outs directing off duty personnel to report to the CPS.
- Request additional resources from local law enforcement.
- Establish an Incident Command System (ICS). The Project Security Manager (or most senior security official on scene) will assume Incident Commander Role until responsibility is transferred to the most senior official from the first responding agency.
- Establish a staging area and command center location
- Notify the NRC of the contingency event.

Transfer of Responsibility During a Contingency Event:

Site Security
Tooele County Sheriff's Department
Utah Department of Public Safety
Federal Bureau of Investigation