

Chapter 5 Physical Security

5-1. Protection Plan

For every hydropower installation a detailed, written protection plan shall be developed, which will use available resources in the most efficient manner. Although the primary area of concern should be protection from terrorist threats, all aspects of protection design should be addressed. (A recommended source of advice is the Missouri River Division (MRD), the Corps' Technical Center of Expertise for Protection Design.)

a. Type of protection. In determining the type and extent of physical protection required at an installation, the following pertinent factors should be taken into consideration in the indicated sequence.

(1) Importance of the power supply to National Security, to the regional power base, and project operational requirements.

(2) Definition and analysis of area to be protected, and other pertinent consideration inherent to the problem such as existing hazards, either natural or man-made. (Threats from the stored water in the reservoir, from landslide or avalanche, from forest or brush fire, etc.)

(3) Operation, maintenance, and other requirements which must be integrated into the security plan.

(4) Environment-political, economic, legal, surrounding terrain, weather and climate.

(5) Costs of material and equipment to be installed, as well as availability of funds to provide at least minimum protection for all critical areas.

(6) Feasibility, personnel and equipment costs, and the best method of providing adequate cost effective protection.

b. Architectural design. The architectural design of the structure should incorporate necessary security design features.

(1) A minimum of windows, particularly near ground level.

(2) Well anchored steel doors and frames.

(3) Transformers and power transmission lines located, or protected, to discourage threat activities.

c. Key elements in developing the protection plan. The response analysis should be assessed. The critical item to be estimated is the response time for security forces (project guards, local law enforcement agents, etc.) to reach the installation once they are alerted. The powerhouse operator should not be considered a part of the security forces. Once the response time is estimated, then a threat analysis should be performed. This would consider the most probable route of intruders to the most vulnerable areas of the hydropower installation. Then various delay zones (fences, walls, etc.) should be considered, each with its own intrusion detection system. The threat analysis should result in a series of delay zones so that the total time for the intruders to reach critical area of the hydropower installations, from first detection, exceeds the response time by security forces.