

### VENEZUELA - Power Plant Fire

Date: December 19 - 22, 1982 (FY 83)

Location: Tacoa power plant, 32 km outside Caracas

No. Dead: 150 (unofficial count), 15 missing

No. Injured: 500

No. Affected: Approximately 40,000 evacuated; three million in metropolitan Caracas affected by power outage

Damage: Over 70 dwellings and more than 60 vehicles were destroyed by fire. Electrical blackout in Caracas disrupted water, medical, and transportation services.

#### The Disaster

Early in the morning of December 19, 1982, a fuel storage tank at the Tacoa electric plant exploded, killing two workers and shaking nearby houses. Firefighters and news media personnel rushed to the scene. By midday, the fire had been nearly contained when a second explosion occurred, spreading burning fuel over a 100 meter radius and igniting an adjacent tank containing 16,000 metric tons of residual fuel oil. The resulting blaze consumed surrounding buildings and blew over protective barriers and up a hillside, devastating many dwellings in its path. Most of the firefighters and a number of journalists on the scene perished in the fire. On December 20, a third tank of fuel oil was ignited; however, no loss of life occurred and firefighting efforts were successful in containing the blaze. By December 22, all the fires had been extinguished.

The Tacoa electric plant and its sister plant at Arrecife supply 1,700 MW of power to Caracas and the surrounding metropolitan area. This amounts to 96 percent of the power consumed in the region. After the second explosion, an order to evacuate the area led to the shutdown of both plants and resulted in a power blackout of Caracas and environs. The

power outage caused disruptions in the water supply and medical services; signal light failures caused traffic chaos; the international airport was closed for one day; and several high-rise buildings were abandoned after air conditioning and elevators failed.

Action Taken by the Government of Venezuela (GOV)

In response to the first explosion, local fire companies, a contingent of the National Guard, and officials of the electric company, C.A. La Electricidad de Caracas (EC), rushed to the scene to assist in the firefighting effort. Following the second explosion, the surviving fire department personnel on the scene ordered the immediate closing of the electric plant and evacuation of surrounding homes and industrial facilities.

To cover the power outage, EC asked the government electric company, CADAPE, to supply power to Caracas through the national interconnect grid from Guri Dam and Ciudad Guayana. CADAPE was able to make 700 MW available almost immediately and 800 MW later, allowing Caracas proper to receive close to 85 percent of its normal Sunday needs. The surrounding areas remained blacked out pending a damage assessment of transmission facilities.

In the aftermath of the disaster, Venezuelan President Herrera Campins declared three days of national mourning for the victims of the fire. In an effort to learn from the experience, EC asked the United States for assistance in obtaining technical consulting services from the National Fire Protection Association.

Assistance Provided by the United States Government (USG)

Upon learning of the fire at the Tocoa plant, U.S. Ambassador George W. Landau offered USG assistance to transport critically injured victims to burn treatment centers in the United States. However, after assessing the situation, Venezuelan authorities decided that the burn victims could be treated locally and declined the U.S. offer. The disaster was judged to be of sufficient magnitude to warrant USG assistance, however, and on December 23, a check for \$25,000 from the Disaster Assistance Account was presented to the president of the Venezuelan Red Cross to assist the victims of the fire.....\$25,000

In response to a request for technical assistance from the electric company, the Office of U.S. Foreign Disaster Assistance (OFDA) arranged for five experts from the National Fire Protection Association to conduct an investigation of the plant fire and its causes. EC paid for the travel and expenses of three of the team members; OFDA funded the other two..... \$2,800

TOTAL \$27,800

Assistance Provided by U.S. Voluntary Agencies

None reported.

Assistance Provided by the International Community

None reported.