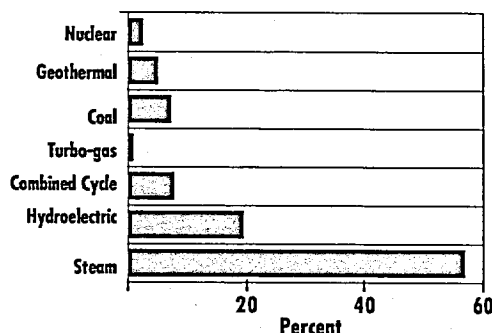


Pemex currently has 19 plants under construction. The projects were undertaken in two phases. The first was the design phase. Pemex invited tenders from companies that possessed state-of-the-art technologies to prepare basic engineering and then to provide technical support as the project developed. The second phase was an international tender for detailed engineering, equipment purchase, construction and commissioning of the plant. Each project is being handled on a turnkey basis where the builder assumes responsibility for financing the construction. It is expected that more and more Pemex contracts will be handled in this manner.

## COMISIÓN FEDERAL DE ELECTRICIDAD (CFE)

Fig. 5.1  
CFE Generation by Type of Plant



Source: Federal Electricity Commission (CFE)

The Federal Electricity Commission (CFE) is the state corporation responsible for generating and distributing electricity to the Mexican public. It is undergoing an accelerated modernization program to improve the country's infrastructure and to extend electricity to over 700,000 new users per year. The *parastatal's* annual procurement budget is approximately U.S. \$2 billion, a large portion of which goes towards the construction of new generating plants and extension of its transmission network. In 1991 CFE's investment in construction was U.S. \$1.6 billion.

The National Development Plan specifies an increase in generating capacity from 24,000 Megawatts (MW) in 1988 to 71,000 MW by the year 2010. To accomplish this goal, the first phase of investment (1989-1994) was expected to reach U.S. \$14.5 billion.

At the end of 1993, generating capacity was 28,450 MW and twenty-six plants were under construction. These will increase generation capacity by 5,675 MW. They include five hydroelectric plants, ten oil-fired, six coal burning and one nuclear plant. In 1994 CFE is planning construction of additional plants to generate a further 4,000 MW.

In addition to increasing its generating capacity, CFE is also investing in construction to expand its transmission network and the coal handling infrastructure at various ports.

## SUPPLYING TO CFE

CFE has implemented a build-lease-transfer (BLT) scheme in many of its large construction projects. Typically, a consortia of financiers, construction companies, operators, and equipment suppliers finance, design, build and operate a facility which is leased back to CFE. Canadian companies can consider bidding independently on a turnkey project, participating in a consortium, or acting as a sub-contractor.

### BUFETE INDUSTRIAL

Today, turnkey construction or "*llave a mano*" is in vogue. Bufete Industrial is considered to be the Mexican firm most capable of taking on large turnkey projects in the energy sector. In response to the changes in the contracting environment, Bufete has had to introduce new operating methods. These include CAD design and drawing, simulation systems, computer and administration networks, and sophisticated cost control systems. Bufete has used strategic alliances to acquire these skills. They have worked with C. Itoh and Hitachi on the building of thermoelectric plants, and Lyonnaise des Eaux Dumez on the Mexico City water renewal project. In addition, the U.S. engineering giant Kellogg has taken an equity position in Bufete.

