

ELECTRICITY

Energy production in the Philippines is concentrated in the electricity sector. Geothermal power accounts for the country's largest share of indigenous energy production, followed by hydropower, natural gas, coal, and oil. The Philippine government has made shifting from reliance on imported oil a major goal, and is pushing the current boom in natural gas-fired electricity development.

The most significant event in the Philippine energy industry in recent years was the passage of RA 9136 or Electric Power Industry Reform Act (EPIRA) of 2001. After seven years of congressional debate and litigation, the Act came into force on June 26, 2001. The act has three main objectives: 1) to develop indigenous resources; 2) to cut the high cost of electric power in the Philippines; and 3) to encourage foreign investment. Passage of the Act set into motion the deregulation of the power industry and the breakup and eventual privatization of state-owned enterprises.

EPIRA required the state-owned utility National Power Corporation (Napocor) to break up its vertically integrated assets into smaller sub-sectors such as generation, transmission, distribution and supply in order to prepare for eventual privatization. The result will be a system in which privatized generators will sell directly to private distribution companies. Working with consultants from the law firm of Hunton and Williams (U.S.), the government has designated two new entities designed solely for the eventual privatization of state assets. These two concerns, the National Transmission Corporation (TransCo) and the Power Sector Assets and Liabilities Management (PSALM) Corporation, have assumed the state's high voltage transmission infrastructure, and power plants, respectively. The government also will sell off its share of Meralco, a vital distribution utility on the island of Luzon that serves Manila and the immediate surrounding area by buying power from various Independent Power Producers (IPPs).

Napocor will need to transfer its existing power purchase obligations to private distributors, and also to renegotiate high-priced contracts. The cost savings lie in the fact that private distributors will likely be unwilling to enter into agreements that are above market rates. There are other financial incentives for the government as well. Napocor's \$23 billion in debt and \$9 billion in power purchase agreements are unsustainable, and the government must already contribute \$300 million per year to keep Napocor afloat.

In order to make the sale of Napocor more attractive to investors, the government has absorbed a significant amount of Napocor's debt. In addition, the \$9 billion in power purchase agreements with IPPs also will be sold off. The transmission system has been transferred to an independent company, Transco, which is to be privatized. According to deregulation laws, no single potential buyer will be allowed to own more than 30% of the Philippines' generating assets. Privatization of Transco has been delayed, though, due to the fact that three bidding rounds in 2003 and 2004 resulted failed to yield an acceptable proposal. In October 2004, the Philippine government announced that it would make

modifications to the process, based on bidding a non-negotiable set of terms and conditions, and make another attempt later this year.

Electricity demand in the Philippines is expected to grow by around 9% per year through the end of the decade, necessitating as much as 10,000 MW of new installed electric capacity. Current contracts will provide about half that amount, with the remainder expected to be filled once the market deregulates. Medium-term increases in power demand are to be satisfied largely by the three gas-fired plants (Ilijan, Santa Rita, and San Lorenzo) that will be linked to the Malampaya natural gas field. The Korea Electric Power Corporation (KEPCO) began commercial operation of the 1,200-MW Ilijan plant in June 2002. KEPCO will run the plant under a build-operate-transfer scheme for 20 years, after which ownership will revert to Napocor. Minority stakeholders in the plant are Southern Energy of the United States (20%) plus Mitsubishi (21%) and Kyushu Power (8%) of Japan. First Gas Power completed a 1,020-MW plant at Santa Rita in August 2000; the plant switched from fuel oil to natural gas in January 2002.

There are two new power projects in Luzon. The CE Casecan Water and Energy Company (a subsidiary of California Energy International) is constructing a multipurpose irrigation and 150-MW hydroelectric facility. Also, the 350-MW San Roque multipurpose hydro project began commercial operation in May 2003.

Mirant is the Philippines' largest IPP, operating five power plants in the country. Mirant's coal-fired Sual plant began commercial operation in late 1999. The 1,218-MW plant is located about 130 miles north of Manila, and is the nation's largest and lowest-cost electricity producer. Napocor is the sole purchaser of power from Sual.

Several power-generating facilities also are under extensive rehabilitation. The 100-MW Binga hydroelectric plant has been under renovation since 1993 following damage from a 1990 earthquake. After years of delays, Binga resumed operation in July 2002. A larger project is the \$470 million contract with Argentine firm IMPSA (*Industrias Metalurgicas Pescarmona Sociedad Anonima*) to rehabilitate and operate the 750-MW Caliray-Botocan-Kalayaan (CBK) power complex in Laguna, south of Manila. The CBK complex is the grid regulator in Luzon, and as such is able to transmit power to other plants on the grid in the event of breakdowns. IMPSA, in conjunction with new partner Edison Mission Energy of the United States, was able to get a performance undertaking guarantee despite Napocor's and some government officials' objections, facilitating long-delayed financing of the project.

The Philippines, due to its geography, has problems linking all of its larger islands together into one grid and ensuring availability of electric power in rural areas. The government has set a target date of 2006 for full electrification, and also is taking steps to link together the country's three major power grids (Luzon, Visayas, and Mindanao). Where it is not economical to link small islands' grids into the national grid, separate local systems are being established around small generating plants.