

Centre on Regulation and Competition

WORKING PAPER SERIES

Paper No. 48

THE REGULATORY ENVIRONMENT OF THE ENERGY INDUSTRY IN THE PHILIPPINES

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December 2002

ISBN: 1-904056-47-4

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Abstract

This paper examines the regulatory environment of the two most important and contentious energy sectors in the Philippines, namely, the power sector and the downstream oil industry sector. These sectors also experienced recent deregulation initiatives that promise to radically reshape their industrial structures. We examine the laws that govern these initiatives, the cumulation of laws that they supersede and the counter attacks that were or are being mounted either directly or indirectly to reverse the laws.

INTRODUCTION

This paper surveys the two important energy industries and the regulatory environment in which they operate. These two industries are the electricity or power industry and the downstream oil industry. The paper first gives a brief historical account of the evolution of these industries' respective regulatory environments before the landmark reform and restructuring laws were passed. The various regulatory and competition policy dimensions of these new laws are singled out and examined. The corresponding regulatory watchdogs, their functions and the scope of their mandates are brought into focus. Where early outcomes are already available, these are discussed including the reversive challenges that are being mounted. Whether these laws are allowed enough time to take root and deliver the promised favorable outcomes remains to be seen. While the rules of the game as set down in the acts and the implementing rules and regulations appear clear, the actual application of these rules to particular cases still depend on the people appointed to critical positions, especially in the regulatory watchdogs and the attitude and actions of the political powers. Section II focuses on electricity and Section III focuses on downstream oil industry. Section IV contains the conclusions.

ELECTRICITY

Historical Overview^ψ

1930-1970: State as Regulator

Before the 1930s, the electric power industry was completely private and autonomous apart from the grant by the Commonwealth government of a fifty-year franchise to Manila Electric

^ψ This overview draws heavily from Aldaba, 01 June 2002.

Rail and Light Company (MERALCO) for the building and operation of an electric railway and light heat power system in Manila in 1905.

State involvement of the power sector commenced with the Commonwealth Act 120 in 1936, which created the state-owned National Power Corporation (NPC) to develop domestic power generation. The idea was to develop, own and manage generating facilities. In the same year, Commonwealth Act 146 created the first regulatory watchdog in Philippine history, Public Service Commission (PSC), which would oversee and regulate power and other public services. These developments reflected neatly the dominant thinking on state-industry relation in the USA of which, at that time, the Philippines was a territory.

1970 – 1986: State Ownership and Control

This state of affairs remained largely intact until 1971, when Republic Act 6137 in response to gasoline price increases due to the peso devaluation in the wake of the BOP crisis created the Oil Industry Commission. This commission took over the responsibility for the regulation of the oil industry from PSC and was further mandated to ensure the supply of oil-based products. Regulation was slowly becoming fragmented and specialized.

The PSC next lost the power to regulate water and electricity to the Board of Power and Waterworks (BPW) and was abolished in 1972 by Presidential Decree 40. The year 1972 was focal because martial law was then declared and the era of Presidential Decrees (PD) under Marcos started. The same decree declared NPC the sole player in generation and transmission of power and nationalized MERALCO. Another Presidential Decree, PD 269, created the National Electrification Administration (NEA) to support electric cooperatives in 1973. The nationalization of MERALCO had less to do with efficiency than with the fact that the Lopez family, a political opponent, owned it. Politics was becoming a more intrusive influence in the power sector.

Energy became a cabinet level concern with the creation of the Department of Energy (DOE) by PD 1206. The OIC, created in 1971, was replaced in the same PD by the Board of Energy (BOE), which now regulated energy products (electricity and oil products). In 1979, NPC raised its share of generated power from thirty percent to ninety percent when it acquired by the thermal power generation facilities of MERALCO. The PD era ended in 1986 with the overthrow of Marcos. MERALCO was returned to its previous owners at this time.

The problems of the largely state-run power industry began to glare in the early 1980s. The average production of electricity per one thousand people went from 0.35 kwh in 1977-1980 to 0.39 kwh in 1981-1984 to 0,39 kwh in 1985-1988. The contrast with other developing countries was stark (Table 1). At the same time, the number of new households electrified fell from the peak of 330 thousand in 1982 to 100 thousand in 1986 to –30 thousand in 1988 (Table 2). The Philippine government wrestled throughout the 1980s with a devastating debt crisis which decimated maintenance investment and resulted in the financing for new power projects, largely borrowed from abroad, to dry up throughout the decade. In 1986, the Bataan Nuclear Power Plant that was programmed to come on-stream in the mid-1980s was mothballed for safety and political reasons. The Chernobyl disaster decided the outcome of the debate. The crippling power crisis in the early 1990s was a logical outcome. Table 3 shows the number of days with some brownout, the energy sales and megawatt per day lost. Apart from this, the average tariff was relatively high for the Asean region (Table 4). MERALCO tariff was \$0.03 higher than PLN (Indonesia) and TNB (Malaysia), and \$0.04 higher than EGAT (Thailand). Note as well that the MERALCO rate was about \$0.03-\$0.04 above the NPC rate, representing up to eighty percent margin. By contrast, the margin was \$0.02 in Malaysia. While NPC was thus accumulating losses, MERALCO was not. The pricing structure, especially of NPC, was increasingly politicized and, thus, mounting state subsidy was the regular financial resort. The situation was desperate.

Table 1: Average Production of Electricity (in million kilowatt hours per 1000 people)

| <i>Country</i> | <i>1977-1980</i> | <i>1981-1984</i> | <i>1985-1988</i> |
|----------------|------------------|------------------|------------------|
| Philippines | 0.35 | 0.39 | 0.39 |
| Brazil | 1.01 | 1.23 | 1.44 |
| Chile | 0.99 | 1.07 | 1.23 |
| India | 0.17 | 0.20 | 0.27 |
| Indonesia | 0.06 | 0.12 | 0.20 |
| South Korea | 0.93 | 1.30 | 1.77 |
| Malaysia | 0.64 | 0.83 | 1.50 |
| Mexico | 0.86 | 1.08 | 1.25 |
| Thailand | 0.30 | 0.38 | 0.54 |
| Turkey | 0.51 | 0.57 | 0.79 |

Source: UN Yearbook of Energy Statistics as cited in The World Bank Country Report, April 1993; Aldaba, 2002.

Table 2: New Households Electrified Outside Manila (in millions)

| Year | New Households Electrified | Year | New Households Electrified |
|------|----------------------------|------|----------------------------|
| 1975 | 120 | 1983 | 250 |
| 1976 | 170 | 1984 | 210 |
| 1977 | 180 | 1985 | 160 |
| 1978 | 200 | 1986 | 100 |
| 1979 | 270 | 1987 | 110 |
| 1980 | 320 | 1988 | -30 |
| 1981 | 260 | 1989 | 180 |
| 1982 | 330 | 1990 | 180 |

Source: *The World Bank Country Report, April 1993; Aldaba, 2002*

Table 3: Power Outages in the Luzon Grid

| Year | Days With Brownouts | Energy Sales Lost (Gwh) | Megawatt per day |
|------|---------------------|-------------------------|------------------|
| 1980 | 145 | 125 | 862 |
| 1981 | 90 | 66 | 733 |
| 1982 | 148 | 156 | 1054 |
| 1983 | 70 | 130 | 1857 |
| 1984 | 16 | 42 | 2625 |
| 1985 | 8 | 11 | 1375 |
| 1986 | 16 | 18 | 1125 |
| 1987 | 28 | 27 | 954 |
| 1988 | 12 | 6 | 500 |
| 1989 | 41 | 91 | 2220 |
| 1990 | 103 | 251 | 2437 |

Source: *National Power Corporation as cited in The World Bank Country Report, April 1993; Aldaba, 2002.*

Table 4: Average Tariffs (in US\$ per kilowatt hour)

D -- distribution, GT – generation and transmission, GTD – generation, transmission, and distribution.

| Country/ Utility | Function | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 |
|---------------------|----------|------|------|------|------|------|------|------|------|------|------|-------|------|
| Philippines/ NPC | GT | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 |
| MERALCO | D | 0.07 | 0.07 | 0.08 | 0.07 | 0.08 | 0.09 | 0.08 | 0.08 | 0.08 | 0.07 | 0.08 | 0.09 |
| Indonesia/ PLN | GTD | 0.07 | 0.07 | 0.08 | 0.08 | 0.09 | 0.09 | 0.07 | 0.06 | 0.05 | 0.07 | 0.06 | 0.06 |
| Malaysia/ TNB | GTD | 0.06 | 0.09 | 0.07 | 0.1 | 0.09 | 0.09 | 0.98 | 0.08 | 0.07 | 0.07 | 0.067 | 0.06 |
| Singapore/ PUB | GTD | 0.08 | 0.08 | 0.09 | 0.09 | 0.08 | 0.08 | 0.07 | 0.07 | 0.06 | 0.06 | 0.07 | 0.07 |
| Thailand/ EGAT | GTD | 0.05 | 0.07 | 0.07 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| MEA | D | 0.05 | 0.07 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.07 | 0.07 | 0.07 | 0.07 |

Source: *The World Bank Country Report, April 1993; Aldaba, 2002.*

The price regulation approach throughout the 1930-2000 used by PSC and its successors was the rate of return on rate base (RORB). A reasonable rate of return on asset investment was pegged at twelve percent. Utilities were allowed tariff adjustments to recover NPC rates plus

operating costs including system losses. The incentive drawback of this strategy was evident with utilities happily incurring inefficiency costs and passing them on.

1987-2000: First Deregulation Era

In 1987, EO 215 abolished the monopoly of NPC in power generation and allowed the entry of private players but the uptake by private players was next to nil. The state, strapped for cash, unable to borrow and determined to honor foreign debt obligation, could not alter the generation picture. Likewise, the rules for participation of private players were unclear. The incentives on offer were paltry, given the overall state of macroeconomic and political uncertainty. More had to be done.

This came in the form of the Build-Operate-Transfer (BOT) Law (RA 6957) of 1990. With the rules on entry and government intervention set in clearer terms, the uptake improved but the delivery lag allowed the power crisis to reach crippling proportions. In 1992, RA 7638 re-created the Department of Energy (which was abolished by the Aquino Administration) for the same purpose it was created earlier: to plan and manage the development of the energy sector. The years 1993 and 1994 were banner years for private sector participation in the power sector. The Emergency Power Crisis Act (RA 7648) gave President Ramos the authority to speedily approve power procurement contracts with private suppliers, also known as independent power producers (IPP). In 1994, the BOT law was amended to accommodate the growing variants of build-operate-transfer. The generous incentives embodied in the power purchase contracts, together with the emerging attraction of East Asia as a DFI destination, created a surge of entrants. Table 5 lists the IPP contracts, the BOT type, the capacity and cost that were inked in the 1990s.

Table 5: Market Shares (in percent)

| Corporation | 1998 | 1999 | Aug 2000 |
|-------------|------|------|----------|
| Petron | 39.1 | 35.7 | 35.4 |
| Shell | 34.5 | 34.6 | 33.3 |
| Caltex | 22.0 | 21.0 | 21.4 |
| Others | 4.3 | 8.7 | 9.9 |

Source: DOE; Aldaba, 2002.

In the typical power purchase contract, the Philippine government shouldered risks associated with market demand, exchange rate, fuel cost, retail tariff and sovereign risks (see Box 1). In effect, IPPs were risk-less investments.

While the increase in PPA-mediated power generation capacity effectively ended the power crisis by 1995, the contingent liabilities embodied in these contracts became a fiscal minefield in the next five years. The PPA stipulated that NPC purchase power from IPPs regardless of level of dispatch (the “take-or-pay” feature). NPC must pay between 25% to 80% of the agreed-upon generated power even if it took up none of this. This resulted in power cost up to 25% more costly than the power NPC generated in its own facilities (Tuaño, 2001; Reside, 2001). When excess power capacity came on stream, this became a fiscal nightmare. NPC’s loss was ₱5.9-b in 1999 and ₱ 9.9-b in 2000 and counting. When NPC tried to recoup the cost by raising NPC tariff, it stoked a political firestorm (more later).

Box 1: Risk Allocation in the Typical Energy Conservation Agreement

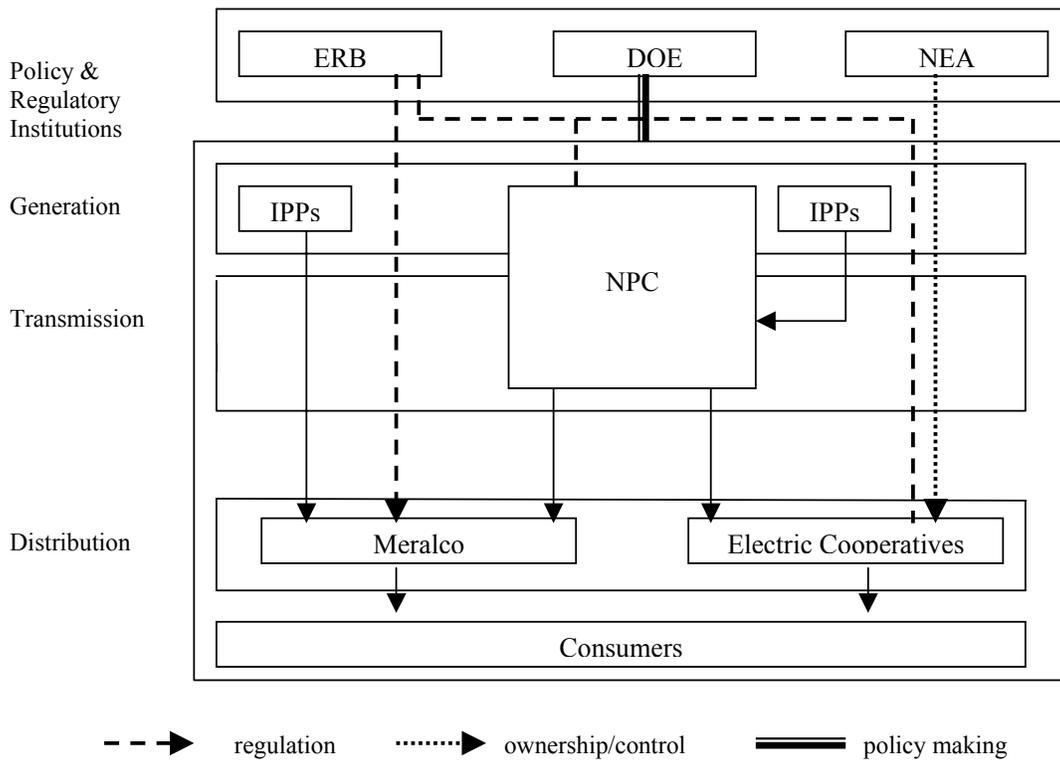
| <i>Category of risk</i> | <i>Risk borne by government</i> | <i>Risk borne by others</i> |
|---|---------------------------------|-----------------------------|
| Construction cost | | ✓ |
| Interest rate | | ✓ |
| Operation and maintenance cost | | ✓ |
| Plant efficiency | | ✓ |
| Change in cost equity | | ✓ |
| Demand | ✓ | |
| Exchange rate | ✓ | |
| Fuel cost | ✓ | |
| Availability, convertibility, transferability | ✓ | |
| Retail tariff | ✓ | |
| Sovereign | ✓ | |

Sources: *The World Bank Country Framework Report for Private Participation in Infrastructure, 2000; Aldaba 2002.*

The industry profile in the period 1987-2000 is reflected in Figure 1. The regulatory and policy sector consisted of the Energy Regulatory Board (ERB), the Department of Energy (DOE), and the National Electrification Administration (NEA). The ERB regulated MERALCO and other private utilities, the Electric Cooperatives and the state-owned National Power Corporation (NPC). The DOE formulated development projects and policies for the whole industry; the NEA either owned or supervised the Electric Cooperatives (which

were partly government-owned). The Generation Sector consisted of the IPPs and NPC, which owned generation facilities. The IPPs either sold power directly to MERALCO, or the distribution utilities or to the NPC, which in turn, re-sold it to distribution utilities. NPC completely owned the transmission grid and auxiliary facilities. The distribution utilities, MERALCO and electric cooperatives retailed electricity to consumers at tariffs approved by the ERB.

Figure 1: Structure of the Philippine Electricity Industry After First Deregulation Attempt



The return-on-rate base (RORB) approach continued to be employed by ERB through the 1990s. The lack of incentive to reduce cost and inefficiency continued to plague the regulatory landscape.

Box 2 gives a chronology of laws that were adopted for the energy industry in the last seventy years.

| Box 2: Chronology of Legislations, 1936-2001 | | |
|---|--------------------------|--|
| <i>Year</i> | <i>Law</i> | |
| 1936 | Commonwealth Act 120 | Creation of National Power Corporation (NPC) |
| | Commonwealth Act 146 | Creation of Public Service Commission (PSC) |
| 1971 | Republic Act 6173 | Establishment of Oil Industry Commission (OIC) |
| 1972 | Presidential Decree 40 | NPC monopoly in generation and transmission Abolition of PSC and transfer of electricity and water regulation to Board of Power and Waterworks (BPW) Government expropriation of MERALCO |
| 1973 | Presidential Decree 269 | Creation of National Electrification Administration (NEA) |
| 1977 | Presidential Decree 1206 | Creation of Department of Energy (DOE) Abolition of OIC and creation of Board of Energy (BOE) |
| 1979 | Executive Order 172 | Acquisition of MERALCO by NPC |
| 1986 | | MERALCO's return to the Lopezes |
| 1987 | | Reorganization of BOE into Energy Regulatory Board |
| 1987 | Executive Order 215 | Abolition of NPC's monopoly in generation and granting of incentives to private investors to enter the generation sector |
| 1990 | Republic Act 6957 | Build-operate-transfer (BOT) Law |
| 1992 | Republic Act 7638 | Creation of Department of Energy |
| 1993 | Republic Act 7648 | Emergency Power Crisis Act |
| 1994 | Republic Act 7718 | Expanded BOT Law |
| 2001 | Republic Act 9136 | Electric Power Industry Reform Act (EPIRA) |

Source: Aldaba, 2002.

The Electric Power Sector: Pre-Reform Profile

The Sectors

The electric power industry traditionally consists of three subsectors (Figure 1): the *generation sector*, which consists of generation companies and their power generation facilities; the *transmission sector*, which conveys electric power through high voltage power backbone or grids; and the *distribution sector*, which consists of distribution utilities that convey electricity from the high voltage transmission to end-users via the subtransmission assets. The pre-reform rules did not allow pure suppliers or aggregators who, while not owning subtransmission assets, nevertheless, also supply electricity to end-users using, for a fee, the subtransmission assets of existing distribution utilities. This implies the unbundling

of the distribution business into *wire*, i.e., involving subtransmission assets, and *non-wire*, involving pure electricity trading and supply business. This industry structure is dictated by the special features of electricity, which are not possessed by other commodities. Box 3 lists these features.

Box 3: Major Characteristics of the Electricity Industry

- essential to most productive processes and is an element in final demand
- cannot be stored
- has strong externalities
- investment is specific and cannot be divided
- needs close coordination because supply and demand must be balanced continuously throughout the system
- economies of scale and scope are present
- network takes a long time to build
- demand and supply fluctuate randomly (demand fluctuates by day and season and with variations in the weather, power outages cannot be predicted)
- demand is highly inelastic to price changes
- represents a captive market

Source: Guasch and Spiller.

The Generation Sector

In the Philippines, power generation consists largely of coal- or diesel-fired generation, hydroelectric generation and geothermal generation. In the recent past, power generation was done either by the state via the National Power Corporation (NPC) or by private companies, the so-called *Independent Power Producers (IPP)*, which came into existence largely via the BOT modality often with market guarantees by the state. In the pre-reform set-up, the Energy Regulatory Board licenses generation companies or gencos, and the same body regulates their rates.

The Transmission Sector

In previous arrangement, electric power transmission facilities were owned and operated by the NPC. These consisted primarily of the Luzon Grid at 230 kV and beyond, the Visayas Grid with 69 kV and above, and the Mindanao Grid at 138 kV and above. NPC also owned

subtransmission assets besides. Rates of transmission were also regulated by ERB. The rate determination methodology is *return on rate base* (RORB).

The Distribution Sector

This consists of entities known as distribution utilities (DUs), which own and operate a system of wires and other subtransmission assets that convey electricity from transmission grid to end-users. In the pre-2001 period these operated by an exclusive franchise granted by Congress and the tariffs they charged were regulated by the Energy Regulatory Board.

DUs consist of private corporations, electric cooperatives, or government-owned utility. Tariff charges to end-users are invariably bundled into one price quotation.

The State Involvement and Regulation

Ownership

As already observed, the state was the main player in the power industry's generation and transmission sector. The National Power Corporation (NPC), a government-owned and operated corporation, owned the majority of the power generation capacity that included diesel-, coal-, geothermal- and hydro-powered generation. The private sector owned some gencos (IPPs), which sold directly to NPC. The NPC owned and operated the transmission systems. NPC also enjoyed some tax and tariff-free importation of petroleum products.

Regulation

The regulatory functions were vested on the Energy Regulatory Board (ERB), which approved all tariffs of DUs, ECs, NPC and gencos.

Development

The Department of Energy created in 1996 (RA 7638) was charged with the responsibility of planning and providing for the future, i.e., forecasting power needs and developing and implementing projects to meet such needs.

State Intervention

The State intervened at many points in the industry. It owned, through NPC, gencos and the transmission grids. It stepped in on the financing side, either by guaranteeing NPC debentures or by granting generous guarantees to BOT investors. It gave tariff-free import privileges. It

regulated tariffs at various nodes. It mandated *missionary electrification* in areas that could not be served by power grids and imposed *lifeline rates* for the poor households. It finally imposed a structure of subsidies: inter-class (specifically, commercial and industrial users paid more than household users), and inter-grid and within-grid subsidies (some regions paying higher so that other regions may pay less).

Electric Power Industry Reform Act (RA 9136) of 2001

A tectonic shift in the regulatory environment came with the Electric Power Industry Reform Act (RA 9136) of 2001. The fiscal deficit trap had become intolerable and fiscal probity was the recovery buzz idea.

RA 9136, in effect repeals, among others, the following: RA 7638 or the “Department of Energy Act of 1992,” RA 6396, the NPC Charter, EO 172 creating the Energy Regulatory Board (ERB), and PD 269, also known as the National Electrification Administration (NEA) Act (see Box 2).

Goals

The “Electric Power Industry Act of 2001” (RA 9136) is a radical and ambitious blueprint for the electric power industry of the Philippines. Of the declared goals in Section 2, the following are most relevant and indicative:

- “(c) To ensure transparent and reasonable prices of electricity in a regime of free and fair competition and full accountability...;”
- “(i) To provide for an orderly and transparent privatization of the assets and liabilities of the National Power Corporation (NPC);”
- “(j) To establish a strong and purely independent regulatory body and system...and enhance the competitive operation of the electricity market;”

These goals reflect the main thrusts of the Act which are: state disengagement in ownership and financing and greater market determination of outcomes under a fair and transparent (see unbundled) regulatory framework.

Market Safeguards Mandated

Cross-ownership Prohibition:

No generation company, distribution utility or stockholder or official thereof shall be allowed to hold ownership in the Transmission Company or its concessionaire and vice-versa (Rule 11, Section 3 (a), (b)).

Concentration of Ownership Limits:

“No company...can own or control more than thirty percent (30%) of the installed generating capacity of a Grid and/or twenty five percent (25%) of the national installed generating capacity...” (Rule 11, Section 4 (a)).

Bilateral Supply Contracts:

“No Distribution Utility shall be allowed to source from bilateral power supply contracts more than fifty percent (50%) of its total demand from its affiliate engaged in generation...”

These mean that cross-ownership between generation and distribution is allowed although transactions between affiliates is limited. Transmission, however, is insulated from cross-ownership. The ownership and affiliate contract limitation is to inhibit market power abuse, discriminatory access, transfer pricing and cross-subsidization.

Transparency and Unbundling

Functions

By Section 36 of RA 9136, every participant in the electric power industry should structurally unbundle its activities, i.e., separate different activities according as they are generation, transmission, distribution and supply, through the creation of separate divisions within the same company or even different juridical entities with clear accounting and auditing separation, especially as between regulated and non-regulated activities (Rule 10, Sec 1, IRR).

Rates

Rule 15 provides for the unbundling of rates. Section 3 says:

- “(a) An electric power industry participant shall identify, separate and unbundle its rates, charges and costs...
- “(b) In determining the eligible costs of service to be charged to the End-users, the ERC shall establish the minimum efficiency standards...including systems losses, and interruption frequency rates parameters among others.”

Method

The ERC prescribes the rate unbundling methodology for transmission and distribution wheeling rates and the retail rates of the distribution utility (Role 10, Section 4, 5). The (ERC-approved) rates must be such as to allow the recovery of just and reasonable costs and a reasonable RORB to enable the entity to operate viably.”

Privatization

Chapter V, Section 47 of the Act mandates that “All assets of NPC shall be sold in an open and transparent manner through public bidding, and the same shall apply to the disposition of IPP contracts.” (Section 47 (d)). The privatization of NPC asset will be implemented by the Act-created and government-owned asset management corporation, the “Power Sector Assets and Liabilities Management Corporation” (PSALM Corp.), which shall inherit all the assets and liabilities of NPC, including the transmission assets.

Of the assets inherited by PSALM Corporation, the transmission assets, SPUG and the Agus and Polangui complexes in Mindanao shall be excluded from privatization. The transmission assets will be managed and operated by TRANSCO, a corporation wholly owned by PSALM Corp. Agus and Polangui as well as SPUG will constitute the reduced responsibility of the National Power Corporation.

Sectoral Regulatory Classification

Generation

Section 6, Chapter 11 of the Act declares that, “Generation of electric power shall be competitive and open.” Thus, (a) it shall not be a public utility operation requiring a local or national franchise; (b) “the prices charged by a generation company for supply of electricity shall not be subject to regulation by the ERC...”

Transmission

Section 7, Chapter 11 states that, “The transmission of electric power shall be a regulated common electricity carrier business, subject to the ratemaking powers of the ERC.” The transmission system will be wholly owned by TRANSCO which, in turn, is wholly owned by a government-owned and operated PSALM Corporation.

Distribution

- (i) Chapter II, Section 22 mandates that the “distribution of electricity to end-users shall be a regulated common carrier business requiring a franchise.”
- (ii) Franchises are granted only the Congress of the Philippines (Section 27, Chapter II). The ERC approves the retail rates of distribution utilities (Section 24, Chapter II). These rates must be unbundled into components, i.e., wires, generation, supply. Where business related to distribution is undertaken, Section 26 further mandates that separate accounts are maintained for each business undertaking to ensure that the distribution business shall neither subsidize in any way such business undertaking nor encumber its distribution assets in any way to support such business.” This is an explicit preventive to transfer pricing and other obfuscatory activities.
- (iii) Furthermore, “a distribution utility shall provide open and non-discriminatory access to its distribution system to all end-users, including suppliers and aggregators (Rule 7 (c); Chapter II, Section 23, RA 9136).
- (iv) Ownership: Section 28, Chapter II mandates that in every generation and in every distribution utility, “the holdings of persons, natural or juridical...shall not exceed twenty-five percent (25%) of the voting shares of stocks...” unless the company is listed in the Philippine Stock Exchange. The former obedience to the Constitution on de-monopolization is ambiguous. The IRR is also silent on the issue.

Supply Sector

The *supply sector* is, by Section 29 Chapter II, when serving the *contestable market* “shall not be considered a public utility operation...The prices to be charged by suppliers for the supply of electricity to the contestable market *shall not* be subject to regulation by ERC.” “Contestable market” is defined as the segment of “electricity end-users who have a choice of a supplier of electricity as may be determined by ERC in accordance with this Act.” Thus, it has a different meaning than in economics textbook. It is a bureaucratic definition rather than an economic one. For example, all end-users with “a monthly average peak demand of at least one megawatt for the preceding twelve (12) months” is the initial contestable market. This shall be lowered to 250 kW after two years and so on down (Section 4, Rule 12, IRR).

Suppliers to Contestable Markets are further required to:

- (a) Secure from ERC a license to operate;
- (b) Shall not own any interest in TRANSCO or its concessionaire;
- (c) Unbundle its supplier charge into its components;
- (d) Comply with Competition Rules and of the *Wholesale Electricity Spot Market* (WESM).

Market Making: WESM

Chapter II, Section 30 of the Act provides for the establishment of “a *wholesale electricity spot market* composed of the wholesale electricity spot market participants.” The WESM shall provide a way to price residuals of quantities transacted under bilateral contracts. Rules of WESM will be promulgated by DOE which will run the market. The *price determination methodology* shall be approved by ERC. The DOE shall appoint a “Market Operator,” an autonomous group initially under supervision of TRANSCO to directly administer the WESM.

Open Access

Section 31, Chapter II provides for open access to distribution wires in aid of retail competition, already alluded to above.

Cross Subsidy Removal

Section 24, Chapter VIII mandates that “Cross subsidies within a grid, between grids and/or classes of customers shall be phased out as a period not exceeding three (3) years from the establishment of by the ERC of a universal charge.

The Electricity Watchdog: ERC

The regulatory watchdog of the electricity industry is the Energy Regulatory Commission (ERC), which inherits the mantle from the Energy Regulatory Board (ERB) created under EO 172. The Commission has four (4) members and a Chairman who shall be a *lawyer*.

Section 44, Chapter IV of the Act states that “The ERC shall promote competition, encourage market development, ensure customer choice and discourage / penalize abuse of market power in the restructured electricity industry.” It shall:

- (i) Formulate and enforce Grid and Distribution Code, Competition Rules and limits to recovery of system losses;
- (ii) Establish performance standards for TRANSCO and concessionaire, DUs and suppliers;
- (iii) Approve and enforce rules of the WESM;
- (iv) Formulate the methodology for determining and fixing wheeling and retail rates to captive markets and after public hearings approve or disapprove such charges as petitioned by “an affirmative vote of three (3) members...” ERC has exclusive jurisdiction over rates and fees;
- (v) Determine the *universal charge* to be imposed on all end-users;
- (vi) Implement abolition of all subsidies;
- (vii) Set lifeline rates for the poor;
- (viii) Monitor and penalize abuse of market power, cartelization, discriminatory behavior and rules on ownership. In this, the ERC exercises quasi-judicial power. It can then amend or revoke the license to operate of any participant;
- (ix) Implement the rules on functional and rate unbundling.

Not only does the ERC act as chief *regulator* of the transmission, distribution and supply sectors of the electric power industry through its approval of wheeling and retail rates, it also acts as the *competition watchdog*.

The Department of Energy and the Wholesale Electricity Spot Market (WESM)

The Department of Energy is the state agency charged with the development and upgrade of the electric power industry. It formulates and updates the “Philippine Energy Plan” that encompasses exploration utilization, distribution, conservation and pursuit of non-conventional and renewable energy sources.

Section 30 of the Act mandates that DOE establish the “Wholesale Electricity Spot Market” (WESM). The WESM is run by the “*Independent Market Operator (IMO)*”, under the DOE. The DOE, jointly with electric power participants, shall formulate the *WESM Rules* which cover the methodology for determining the price of power not covered by bilateral contracts, which is approved by ERC, the Dispatch Instructions, the conditions for entry to and termination from the market, procedures for billing and settlement.

Rate Determination Methodology

As observed above, the ERC's principal responsibility is fixing the wheeling rates and the retail rates to captive end-users. "The rates must be such as to allow the recovery of just and reasonable costs and a reasonable RORB to enable the entity to operate viably." (Section 43 (f)). "The ERC may adapt alternative forms of internationally accepted rate-setting methodology...(Rule 15, Section 5 (a)). Although the latter gives ERC the methodological leeway, if RORB is adopted, the following must be observed:

- (i) asset revaluation allowed once every three (3) years;
- (ii) interest expense (except in construction) cannot be deducted from permissible rate base;
- (iii) RORB cannot include management inefficiencies such as cost of project delays;
- (iv) Procurement by petitioners are transparent and satisfy industry standards;
- (v) Rate filing petition should be unbundled.

Transitory Oversight

Section 62 of the Act also mandates the creation of the *Joint Congressional Power Commission* (Power Commission) to monitor and ensure that the Act is properly implemented. The fourteen members of this Commission are to come from both the lower and upper houses of Congress. Among its tasks that are relevant to the regulatory environment are:

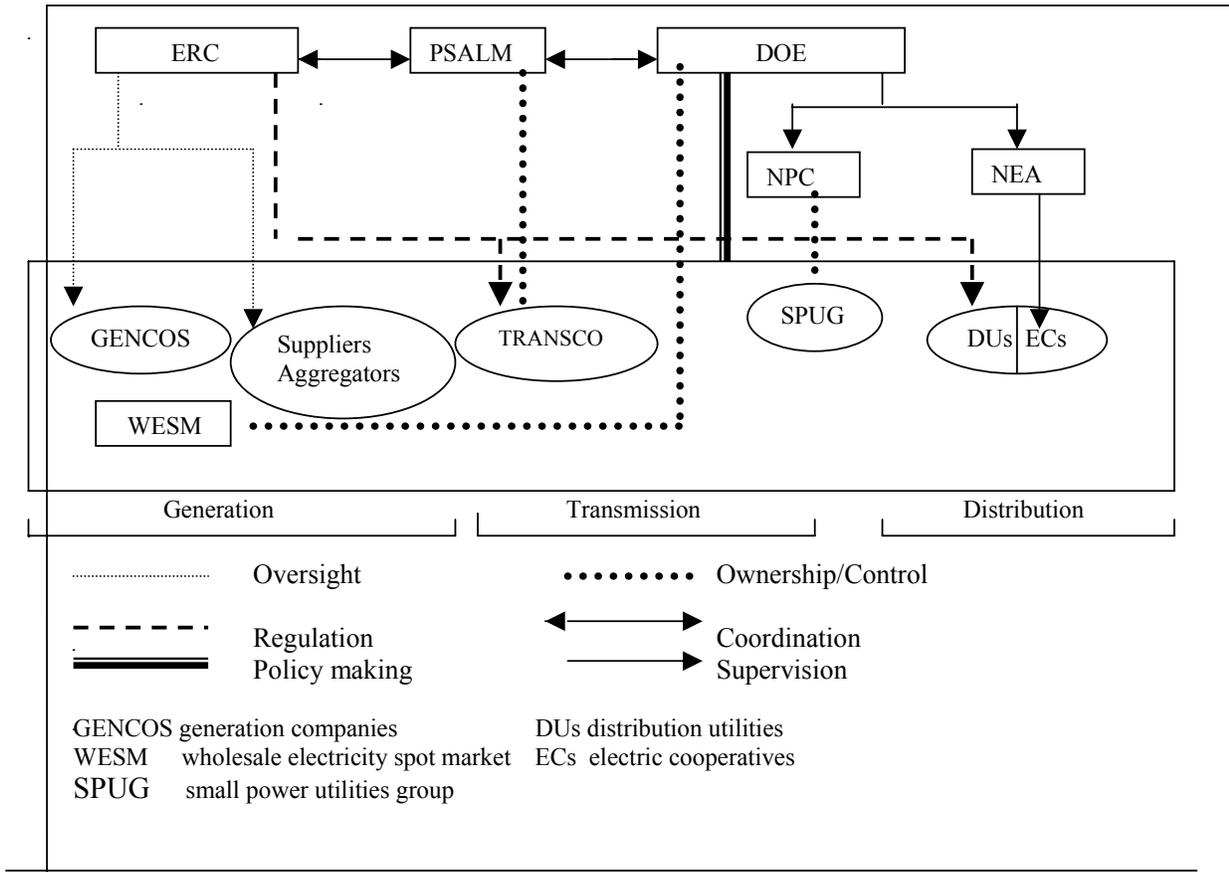
"(b) Endorse the privatization plan prepared by PSALM for approval of the President of the Philippines."

"(g) Determine wherein weaknesses in the law and recommend necessary remedial legislation..."

Industry Structure in RA 9136

The new industry structure embodied in RA 9136 is given in Figure 2. As shown in Figure 2, the ERC regulates the distribution utilities and Transco, the state-owned (i.e., PSALM-owned) transmission company. ERC exercises oversight over gencos and aggregators and coordinates with DOE and PSALM. State-owned PSALM owns Transco and other assets of Genco NOPC prior to privatization. DOE formulates policy for the whole industry and supervises NPC and NEA. NPC, in turn, owns SPUG while NEA supervises cooperatives. DOE supervises the independent market operator, which runs WESM.

Figure 2: Power Industry Structure After RA 9136



Source: DOE; Aldaba, 2002.

The Power Commission can compel under threat of punishment any industry participant to submit any data and information pertinent to the performance of the industry. The Power Commission shall exist for ten years after the effectivity of the Act “*but may be extended by a joint concurrent resolution.*” The Power Commission adds another layer of oversight and being of Legislative membership could pose a threat to the stability of the Act and its provisions. Function (g) is especially pregnant with reversal possibilities.

ERC Pricing

Box 4 lists the major components of price recognized and allowed by ERC. It highlights the role of PPA and CERA for MERALCO and FCA for NPC. The mid-2002 furore over electricity price increases (see Section F below) is associated with these items.

Box 4: Current Price Regulation by ERC

The effective selling price consists of two components:

- basic rate covers the operating and maintenance expenses, cost of purchased power and the cost of fuel used in operating the electric power plants. It remains the same until the utility files for a change subject to ERC's approval.
- cost adjustment mechanism is a method to allow utilities to automatically recover additional cost resulting from factors that are beyond the control of the utility such as imported fuel prices, currency depreciation, and cost of electric power bought from independent power producers .

For MERALCO, the cost adjustment mechanism is made up of the following:

- purchased power adjustment (PPA) recovers changes in cost of power purchased from NPC and its own IPP not covered by basic rate and the cost of distribution system losses
- currency exchange rate adjustment (CERA) recovers changes in foreign – denominated operating costs and principal debt repayment due to exchange rate movements

For NPC, it is composed of the following:

- purchased power cost adjustment (PPCA) recovers changes in power purchased from IPPs
- fuel cost adjustment (FCA) recovers changes in operating costs due to changes in fuel prices
- foreign exchange adjustment (FOREX) recovers changes in foreign disbursement due to changes in foreign exchange rates.

Source: Aldaba, 2002.

The First Test

The debate accompanying RA 9136 was strident and, at times, downright nasty. The passage necessitated carrots such as the ₱200-b subsidy by the government to bear part of the estimated ₱800-b stranded cost; mandated, if time-bound, reduction in tariffs, lifeline rates, Mindanao facilities exemptions, etc.

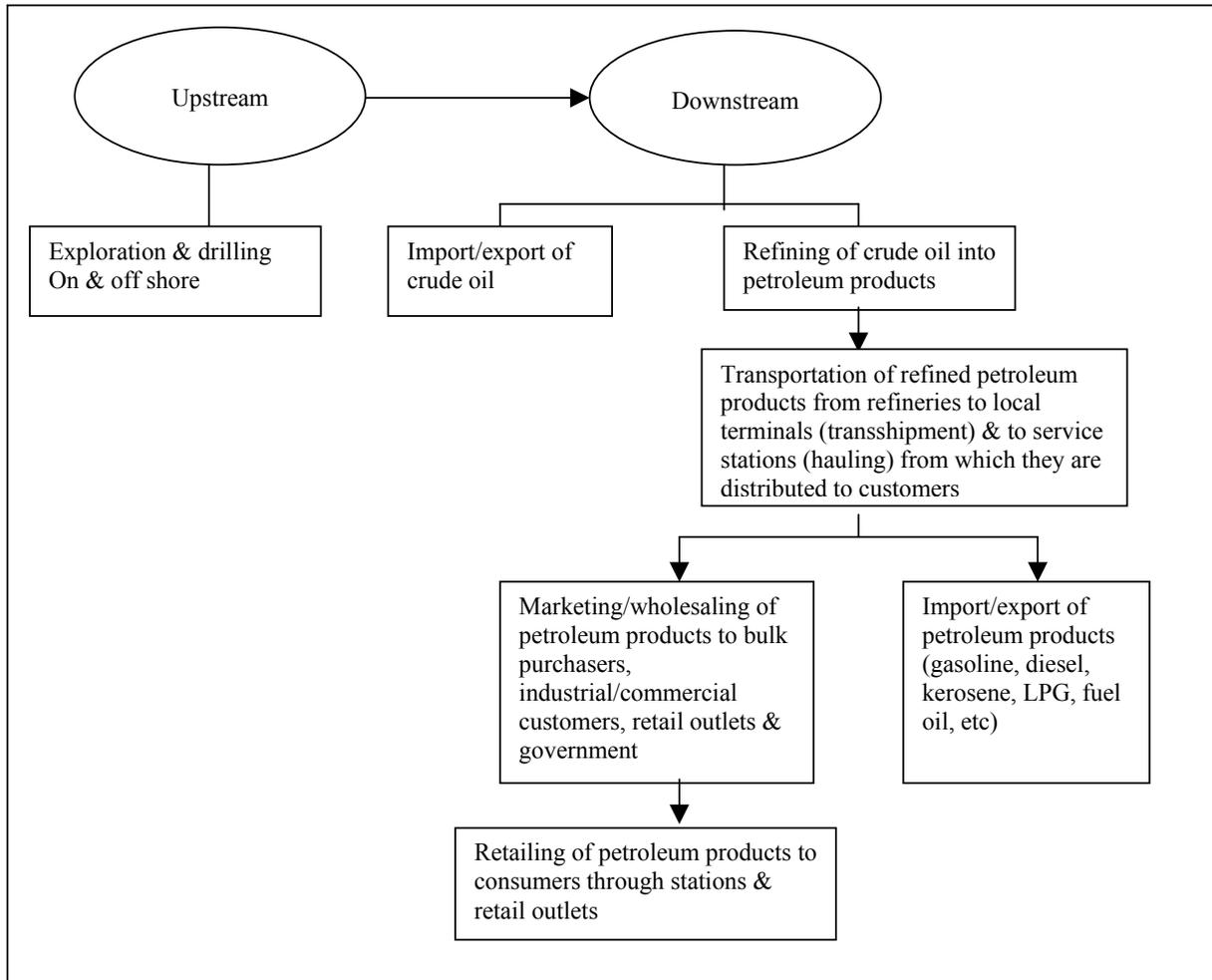
In 2002, the NPC got a ₱1.25 per kwh increment as a *purchased power adjustment* (PPA). This coincided with MERALCO's petition for a ₱1.12 per kwh as its own PPA. The steep rise in end-user tariff caused a public outcry that prompted the President of the Republic to order NPC to postpone the increment, which was to pay for NPC's own debt and the liabilities incurred as guarantees (then only contingent liabilities) to IPPs during the BOT heyday. The suspension of PPA adjustment meant that government must come to NPC's rescue to the tune of ₱15-b at a time when the fiscal deficit was a big headache. As expected, the members of Congress are rushing to exploit the raucous. A three-year relief from PPA is being proposed for consumers and one year for industries. A cap on MERALCO's PPA is

being proposed, etc. Even more drastic measures are foisted. For all the glowing verbiage of RA 9136, the reality of its implementation threatens to completely undermine the law. Only time will tell RA 9136 was worth the exercise after the political gauntlet has taken its toll.

OIL

The various segments of the oil industry is given in Figure 3.

Figure 3: Oil Industry Segments



Source: PDCP Bank “Oil Deregulation”, Industry Digest, 1997; Aldaba, 2002.

Historical Overview of the Regulatory Environment

Prior to 1971, the downstream oil industry operated without government intervention with market outcomes determined by market competition among six oil refiners, viz., Shell, Caltex, Esso, Filoil and Getty. Only one, Filoil, had substantial equity controlled by Filipino

capital. These directly imported their petroleum requirements for refining. Foreign ownership also substantially affected the debate and policies in the sector.

The balance of payments crisis in 1969-1970 precipitated the devaluation of the peso, which in turn, led to hefty increases in the price of gasoline. The public and jingoistic rhetoric of the time blamed the “oil industry cartel” and foreign oil companies for the price increases and called for state regulation of oil prices. In response, RA 6173 created the *Oil Industry Commission (OIC)*. State intervention thus began on a brew of anti-foreign and anti-cartel sentiment.

The sentiment was to push state involvement beyond regulation. PD 334 created the state-owned Philippine National Oil Company (PNOC). PNOC was designed to be a market player, owning and operating refining, storage and distribution assets. PNOC struck a joint venture with Mobil Oil and promptly acquired Esso and Filoil. The OIC, created in 1971, was folded into the Board of Energy (BOE) in 1977 and this was charged with the responsibility of setting prices of petroleum products, oil pipeline rates and of electricity. (See Box 2 for the legal evaluation). A Department of Energy was created to formulate energy policies and programs.

To maintain a stable pump price of gasoline, the Oil Price Stabilization Fund (OPSF) was created. The idea is orthodox price stabilization: smooth retail price fluctuation by setting the price at long-term average petroleum price so that a premium is collected by the Fund when actual petroleum price is lower than average and disbursed when this was higher than average. If properly set, the OPSF would be sustainable. It also, however, required that if there is a rise (fall) in the intercept, the price would be accordingly raised (reduced). This never became part of the political rhetoric. Downward shifts in world petroleum price got reflected in pump prices but upward shifts were strongly resisted. The specter of foreign predatory behavior was permanently raised. The result was that OPSF became a fiscal quagmire that helped weigh down long-term economic performance. In 1990, the government infused an additional ₱5-b into the OPSF. This was gone after two years.

By the middle of the 1980s, the industry had only three refiner-players: Caltex, which bought Mobil, Shell which bought Getty, and the state-owned PNOC, which swallowed Filoil and Esso with a combined share of ninety percent of oil industry output.

As observed earlier, EO 172 transformed the BOE into the Energy Regulatory Board, which fixed petroleum product prices, gas prices, and of electricity. The DOE regulated importation of crude oil, the refineries and other facilities and product quality.

The mechanism used for determining the price was a recovery approach based on a mark-up over the landed cost of crude oil over the previous two months. This guaranteed a baseline profit for firms. Differential taxes were imposed on products based on affluence of consumers.

In the 1990s, it was becoming clear that the whole set-up was unworkable without sacrificing the fiscal health of the economy. Little investments were being made in view of the heavy hand of the state and its unpredictability. Something had to give.

The “Downstream Oil Industry Deregulation Act of 1998”

Scope

The “downstream oil industry sector” refers to “the business of importing, exporting, re-exporting, shipping, transporting, processing, refining, storing, distributing, marketing and/or selling crude oil, gasoline, diesel, liquefied petroleum gas (LPG), kerosene and other petroleum products (Section 4 (h)). “Downstream” then embraces everything that pertains to oil business except oil exploration and extraction, which constitute the “upstream”.

The basic law regulating the downstream oil industry sector in the Philippines is RA 8479, otherwise known as the “Downstream Oil Industry Deregulation Act of 1998.” In its wake are repealed a cumulation of many laws: RA 6173 as amended, EO 172 as amended, LOI 1431 (Oct 1984), LOI 1441 (November 1984), LOI 1460 (May 1985), PD 1889, EO 137. Thus, RA 8479 brings under one roof, so to say, the whole regulatory framework of the oil industry sector.

Reform Thrusts

Chapter II of the law sets down the principal reformation thrust of RA 8429. Section 5 entitled “Liberalization of the Industry” states that “...any person or entity may import or purchase any quantity of crude oil and petroleum products from a foreign or domestic source, lease and/or operate refineries and other downstream oil facilities and *market* such crude oil

and petroleum products...” This, in effect, (a) abolishes the crude oil import monopoly of the government, (b) extends the importation to “other petroleum products” such as gasoline, (c) grants the import privilege to “any person or entity” who satisfies the four provisions/conditions set down in Section 5, and (d) opens up the domestic market to new players who may not be refiners but meet the provisions/conditions. Import of oil-based products was prohibited. In effect, only domestic refiners dependent oil purchase can service the domestic market.

Section 6 specifies a single and uniform tariff duty on imports of crude oil and refined petroleum products of 3%. Thus, the implicit protection to domestic refiners in the form of tariff cascade (i.e., a 4% differential between the tariffs of refined petroleum products and crude oil) is done away with. The original version of RA 8479, i.e, RA 8180, provided precisely for such a protection for refiners. This provision, among others, was challenged before the Supreme Court, which declared RA 8180 unconstitutional. The Legislature passed RA 8479, which dropped the constitutionally invalid provisions (more on this below).

Section 7 spells out the market competition policy, requisite safeguards and the regulatory responsibility pertinent, thereto: “The Department of Trade and Industry and DOE shall take all measures to promote fair trade and prevent cartelization, monopolies, combinations in restraint of trade and any unfair competition in the Industry...” Thus, anti-market behavior shall be punished. It also delineates the three other basic functions of the DOE, viz.: (1) to monitor the industry players and industry outcomes, such as oil industry, world and domestic prices, product quality, refining processes, etc.; (2) to conciliate dispute over contractual obligations among industry players; (3) to market-make, which includes: (a) encouraging entry of new players to increase competition including a package of incentives such as but not limited to tax incentive and especially (b) promoting *retail competition* to embrace training of potential retailers and loan financing.

The Regulatory Structure

The DOE, as observed, is the central regulatory agency in charge with the responsibility of implementing oil safeguards and other provisions of RA 8479. IN this section, we elaborate on the tasks assigned to the DOE.

Implementation of Anti-Trust Safeguards: DOE-DOJ Task Force

The law prohibits anti-market behavior in the form of *cartelization monopolies* and *predatory pricing*. To enforce this safeguard, the law creates the *Joint (DOE-DOJ) Task Force* (Chapter IV, Section 14 (d)). This task force shall receive, report complaints and investigate cases of anti-market behavior related to “unreasonable rise in prices and prepare a report of its findings. When a violation is in evidence, the Task Force refers the case to local prosecutors who will pursue the case with the Regional Trial Courts. If a private entity is a victim, the entity is entitled to sue for relief or damages with the Regional Trial Court. Thus, the Joint Task Force is only an investigative body and is bereft of any quasi-judicial powers.

Monitoring and Standards

Standards

The DOE monitors and publishes such industry pertinent outcomes as oil inventory, world and domestic prices (via Price Display Boards), product quality. The monitoring of the latter is set against standards set by the *Bureau of Product Standards (BPS)* of the DTI in cooperation with DENR, DOE, DOST and representatives of suppliers and consumers.

Where such standards are violated, the DOE may recommend revocation of permit to operate, recommend readjustments of the business or stop operations (Chapter IV, Section 14 (a), (b), (c), (e)).

Monitoring and Reportorial Requirement

Within DOE, the pertinent agency in charge of gathering information and receiving and processing reportorial submissions and notice filing is the *Energy Industry Administration Bureau (EIAB)*. (IRR of RA 8479, Rule II, Section 5).

The EIAB (i) requires every industry player to file a *notice of operation* including details of its business and legal personality including name, address, facilities and pertinent permits such as SEC registration, other pertinent certificates, etc; (ii) requires *notice of importation* prior to loading which includes type, quantity, FOB price, port of destination and entry, bill of lading, invoices, etc.; (iii) *Notice of Exportation* to include details such as bill of lading, name and address of exporter, type of cargo, ports and dates, etc.; (iv) all refiners, importers and marketers a *monthly report* of actual and future imports, exports and local purchase, etc.

Arbitration and Conciliation

“The DOE shall conciliate and arbitrate any dispute that may arise with respect to the contractual relationship involving the dealer’s mark-up, the freight rate in transporting petroleum products and the margins of LPG distributors...” (Rule III, Section 10 (b) of IRR). The DOE Secretary acts as the *arbitrator* over these disputes and as such exercises quasi-judicial powers. The arbitration proceeding is specified whether oral or written. Any decision is appealable to the judicial courts.

Competition Enhancement

The DOE is tasked with the duty to make the market more competitive (Section 8, RA 8479). The IRR pursuant of this task enjoins the DOE to:

- (i) Grant the same incentives to new oil industry investment as are granted BOI-registered enterprises in preferred area of investments by the Omnibus Investment Code of 1987. These include tax breaks among others.
- (ii) Go on an information drive to attract new players
- (iii) Promote retail competition via (a) training of potential retailers, (b) loans facility for such.

Rearguard Action

Going With the Flow Apparently

The public debate over the oil industry deregulation was strident and acrimonious. The deregulation rhetoric was imperious in the mid-1990s. the whole world was in toe. While there were outright oppositors (the anti-transnational cartel rhetoric), most swam with the flow while battling for provisions that would, in effect, limit the extent of the deregulation and preserve the franchise value of old players. The compromise bill, RA 8180, which was passed in March 1996, removed price controls, scrap the pump price stabilization mechanism, the Oil Price Stabilization Fund (OPSF), get rid of exchange rate guarantee and liberalize entry. While radical, RA 8180 carried provisions that discriminated against potential new entrants and would have emasculated the market orientation of the law:

- a. Mandatory Pricing was defined as which meant that new players could not use lower price to gain market share, in effect, ensuring that new players will be scarce, if at all.
- b. New entrants are required to carry a c/o-day inventory which meant that new entrants will be saddled with a high inventory cost, thus discriminating against new entrants.

These new provisions were challenged before the Supreme Court and in a landmark decision in October 1996, the Supreme Court declared RA 8180 unconstitutional on account of these anti-market provisions. The challenge was all the more interesting because it was meant to derail the deregulation altogether and, in past, it succeeded since the Supreme Court struck down the whole bill rather than just the offending provisions. But the ploy backfired when a revised bill, RA 8479, without the infirm provisions, viz., predatory pricing now referred to pricing below average variable cost, a 3% uniform tariff on all imported petroleum products and no forty-day inventory requirement, was passed.

National Oil Exchange

Increases in pump price of gasoline due to increases in world petroleum price and the drastic exchange rate adjustment in the wake of the Asian Crisis gave opponents of deregulation a field day. The “still” heavily concentrated structure of refiners and so-called excessive cartel profits were blamed for price increases. The calls for re-intervention coalesced in the proposal for a “National Oil Exchange” which would consolidate the economy’s oil demand and bid it to world suppliers. In effect, the state monopoly over imports of crude would be reinstated. The interest in the National Oil Exchange proposal waned when the world price of oil softened but the forces against deregulation will not rest.

Early Outcomes

Since the passage of RA 8479 in February 1998, new players have appeared in retail marketing, bulk marketing and terminaling. The number of domestic refiners has stayed put.

It is in retail business that the visibility of new players is pronounced. As of February 2000, the number of petrol stations selling new players’ gasoline reached 145 nationwide. Most of these are in Luzon where their oil depots are located. This despite the fact that new players are *not allowed* to own their own stations in contrast to old refiners who do own gas stations.

REFERENCES

- Achacoso, L and G. Domingo, 01 September 2000, "Fuel for Growth: A Look at the Philippine Petroleum Industry," W. Sycip Policy Center, AIM, Makati, Philippines.
- Aldaba, Rafaelita, June 2002, "Regulatory Policies and Reforms in the Power and Downstream Oil Industries", unpublished monograph.
- Churchill, Anthony, 1995, "Regulating the Power Sector," in Regulatory Policies and Reform: A Comparative Perspective (Chapter 15), edited by Claudio R. Frischtak, Private Sector Development Department, The World Bank.
- Galang, Roberto and Chani Marie Solleza, 2001, "Deregulation Under Fire: An Assessment of the Downstream Oil Industry," Asian Institute of Management, W. Sycip Policy Center.
- Gausch, J. Luis and Pablo Spiller, 1998, Managing the Regulatory Process: Design, Concepts, Issues, and the Latin America and Caribbean Story.
- Newbery, David, 1995, "Regulatory Policies and Reform in the Electricity Supply Industry," in Regulatory Policies and Reform: A Comparative Perspective (Chapter 14), edited by Claudio R. Frischtak, Private Sector Development Department, The World Bank.
- RA No. 8479 "An Act Deregulating the Downstream Oil Industry, and for Other Purposes."
- RA No. 9136 "An Act Ordaining Reforms in the Electric Power Industry, Amending for the Purpose Certain Laws and for Other Purposes."
- Reside, Renato Jr., 2001, "The Future of the Philippine Power Sector: Reason to be Cautious (Lessons from California and the United Kingdom," in Socio-Economic Reform Program in the Philippines – Impacts and New Directions (Chapter5), edited by Canlas and Yasuhiro Nimura, Institute of Developing Economies, Japan External Trade Organization.
- "Rules and Regulations to Implement Republic Act No. 9136 entitled Electric Power Industry Reform Act of 2001."
- Tuaño, Philip Arnold, 2001, "Privatization of a State Enterprise: The NAPOCOR Case," in Economic Reforms and Governance in the Philippines – Eight Case Studies, Ateneo School of Government and Ateneo Center for Social Policy and Public Affairs.
- World Bank, 2000, "Philippines Country Framework Report for Private Participation in Infrastructure."