

# Thailand's Electricity Reforms: Privatization of Benefits and Socialization of Costs and Risks

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## Introduction

Over the last dozen years, electricity reform in Thailand has undergone several dramatic shifts, from the limited participation of independent power producers (IPPs), to officially approved plans for a full-fledged power pool with a spot market for electricity generation, to the break-up and privatization of distribution. But as of January 2004, electricity reform has essentially come to mean *the sale of minority shares of state-owned utility monopolies which are to remain largely self-regulated*.

After tens of millions of dollars spent on designing competitive markets, legal and regulatory arrangements and assorted contracts, Thailand has arrived at a peculiar form of electricity restructuring hardly recognizable to the earlier architects of reform. The new plan features no independent regulator and no competition, only privatization—but a peculiar kind designed to raise capital for state-owned utilities, to provide high shareholder returns, and to increase salaries for state-owned utility employees, especially upper management. The privatization plan does not seek the “benefits of competition” that provide the rationale for reform in other countries, nor does it provide protection to consumers or the environment from profit-maximizing electricity monopolies. This situation is no historical fluke, however. It is consistent with the evolution of relationships among the government, state-owned utilities, the private sector, and civil society vis-à-vis electricity for six decades.

This essay describes the path by which Thailand's electricity sector has arrived at the present situation, from state-led expansion during the Cold War, through the advent of electricity reform under pro-market governments of the 1990s, to the Asian financial crisis, the rise and fall of the power pool model, and finally the pending transformation of the state utilities into “national champions” charged with enriching shareholders while pursuing Thai regional political objectives. In the conclusion we reflect on enduring as well as changing features of the social role of electricity in Thailand, sectoral decision making, and the ways in which benefits and risks are allocated between the private sector and the public.

It is worth noting the technical context in which this story has unfolded. Electricity demand in Thailand has increased more than six-fold in two decades of rapid economic expansion. From 16,900 gigawatt-hours (GWh) in 1982, electricity consumption grew to 108,400 GWh in 2002; peak power demand grew from 2,838 megawatts (MW) to 16,700 MW during the same period. Thailand's electricity production does not depend on nuclear power or Middle East oil; it is based predominantly on thermal and combined cycle generation, with natural gas accounting for 71 percent of generation capacity, and lignite/coal for about 18 percent (fiscal year 2002 statistics). The remainder of the capacity breaks down as follows: 9 percent large-scale hydropower, 2 percent fuel oil, and less than 1 percent from renewables.<sup>1</sup> Industrial co-generation (combined heat and power) accounts for about 10 percent of total electricity supplied to the grid.<sup>2</sup>

## **The History and Dynamics of Thai Electricity Reform**

### ***The State Era (1950-1980)***

The seeds of the present-day arrangements in Thailand's electricity supply industry were sown with US-led investments in the 1950s motivated, at least initially, by Cold War geopolitics. On the advice of the World Bank, the strongly anti-communist martial law administration of Field Marshall Sarit Thanarat initiated centralized economic planning with five-year plans starting in 1961.<sup>3</sup> The first plan (1961-5) emphasized electrification, roads, reservoirs and canals.<sup>4</sup> With advice and concessionary financing from USAID and the World Bank, work began on a number of large generating stations, including the Yunhee (also called Bhumipol<sup>5</sup>) hydroelectric dam and several thermal (lignite coal) power plants, as well as a transmission network.<sup>6</sup>

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1 Electricity Generating Authority of Thailand, *Power Development Plan: 2003-2016* (EGAT, April 2003).

2 Wathanyu Amatayakul and Chuenchom Greacen, "Thailand Experience with Clean Energy Technologies: Power Purchase Programs," paper presented at the UNDP International Seminar on Energy for Sustainable Development and Regional Cooperation, Beijing, China, 25-26 July 2002.

3 David K. Wyatt, *Thailand: A Short History* (Chiang Mai: Silksworm Books, 1982).

4 Much of this infrastructure development was rationalized as counterinsurgency measures. Thus the choice of location of new roads was made in part to facilitate movement of troops to border areas; government-controlled radio and TV stations broadcast official government versions of events; and irrigation and mechanized agriculture integrated rural communities into the capitalist economy.

5 Bhumipol is the first name of the current king of Thailand. Most major hydroelectric projects are named after royal family members. In part because of the high regard for the royal family held by most Thai people, these projects long enjoyed unquestioning acceptance as key building blocks for Thailand's development. In a somewhat similar vein, the common village name for rural electrification, "fai luang," is etymologically linked to the word for king, "nai luang."

6 USAID, *Thailand Electric Power Supply* (Bangkok, Thailand: United States Operations Mission, 1966); Tuntivate Voravate, *Thailand's Approach to Rural Electrification: How Was it Successful?* (Washington, DC: The World Bank, Energy Unit, Energy, Mining and Telecommunications Department, 1997).

In order to receive concessionary financing from the World Bank, Thailand was encouraged to form state-owned electricity companies.<sup>7</sup> In 1958 the Metropolitan Electricity Authority (MEA) was established to distribute electric power to the Bangkok Metropolitan area and two adjoining provinces. The Provincial Electricity Authority (PEA) was established in 1960 to distribute electricity to the remainder of the country. Several regional state-owned generating companies were consolidated in 1968 to form the Electricity Generating Authority of Thailand (EGAT), a state-owned enterprise under the Office of the Prime Minister.

By 1981, over 50 percent of the Thai population had access to electricity.<sup>8</sup> The material success of Thailand's electrification sent the message to Thai people that electricity is a public good to which Thai citizens, whether city dwellers or rural villagers, were entitled. The convenience provided by this infrastructure, combined with the stark lack of these facilities in neighbouring Laos, Cambodia and Burma, provided legitimacy to the Thai government, and helped to counter popular frustrations over inequitable land distribution, low prices for agricultural produce, and endemic corruption.<sup>9</sup>

The role of electricity in powering Thailand's industrialization and the rapid expansion of the organizations involved made the three power utilities very strong politically. By the 1970s, the three utilities (EGAT, the MEA and the PEA) were effectively self-regulating, with the exception of basic financial requirements set by the Ministry of Finance.<sup>10</sup>

### *Setting the foundation for privatization (1973-1990)*

Starting in the early 1980s and running through the 1990s, the coalition of interests that had supported the hegemony of state-owned utilities began to splinter and a new set of interests formed around a new "utility compact" emphasizing private sector participation. A variety of domestic and international forces and circumstances played a role in the transition, including: democracy and the increasing role of business interests in Thai government, high public sector debt in the electricity industry coupled with increasing reluctance by the World Bank to lend to state-owned enterprises, increasing availability of private sector capital, a series of governments friendly to foreign investment, nationwide electricity shortages, and the weakening of labour unions.

Setting the stage for privatization was a faltering but fundamental transition from military dictatorships towards democracy. A catalytic pro-democracy student uprising in 1973 led to decreased public support for

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7 K. Chatikavanij, *The Life and Aspirations of Kasame Chatikavanij* (Bangkok: self-published, 1994).

8 N. Poapongsakorn et. al., *Feasibility Studies on Rural Household Electrification Project* (Bangkok, Thailand Development Research Institute, 1995).

9 Pasuk Phongpaichit and Chris Baker, *Thailand's Boom and Bust* (Chiang Mai: Silkworm Books, 1998).

10 World Bank, "Thailand: Lam Takhong Pump Storage Project," (World Bank, 1995), p. 4.

conservative military dictatorships. Over time civilian politicians wrested power from the military, and technocrats became more influential within the economic ministries.<sup>11</sup> The rise of democratically elected, business-oriented leaders accompanied the demise of the Communist threat regionally and within Thailand, and with it the counter-insurgency strategies that had justified US aid for electricity infrastructure.

Meanwhile, funding continued to pour in. Advice and concessionary loans from the World Bank provided confidence to bilateral lenders from Canada, Germany, Japan and the Middle East. All of these funders lent at exceptionally low interest rates (from zero percent to a maximum of four percent), with long repayment periods (varying from 20 to 40 years). The Thai government guaranteed repayment of these loans and provided additional funds from public coffers. By the late 1980s, EGAT was spending over US\$1 billion per year for new generation and transmission facilities.<sup>12</sup>

As is common with regulated monopolies worldwide, the Thai electricity utilities profits were set according to a “cost plus” structure with a fixed rate of return. That is, profits were set by the government to be equal to a certain percentage of expenditures: the more that utilities spent, the more profits they were allowed to collect. These arrangements provided strong incentives for rapid expansion of the electricity system, allowing it to stay roughly in step with the economy during Thailand’s high-growth periods of the 1980s and early 1990s.

Thai utilities built up substantial debt, with the energy sector accounting for over 46 percent of all foreign loans between 1967 and 1971, declining slightly to 37 percent for the period 1972-6.<sup>13</sup> The situation became urgent when, between 1978 and 1981, Thailand’s oil import bill tripled, sparking a debt crisis in which government debt peaked at 39 percent of GDP.<sup>14</sup>

The crisis forced Thailand to accept a US\$600 million loan from the IMF and transferred substantial management of the country’s finances to the IMF until 1982.<sup>15</sup> In 1982-3 Thailand took out structural adjustment loans (SALs) from the World Bank with conditionalities that included increasing energy prices<sup>16</sup> and implementing measures to privatize state-owned enterprises to reduce their colossal debt (the combined debt of 12 SOEs was

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11 Pasuk and Baker, *Boom and Bust*; Walden Bellow, Shea Cunningham and Li Kheng Poh, *A Siamese Tragedy: Development and Disintegration in Modern Thailand* (Oakland: Zed Books, 1998), p. 14.

12 Grainne Ryder, “Thailand’s Flawed Electricity Privatization: The Case for Citizen-Oriented Reform,” in Probe International Power Sector Reform Series, paper #4 (Toronto: Probe International, 1999).

13 Witoon Panyakul, The World Bank, *Development, Influences & Impacts* [in Thai] (Bangkok: Nityasarn Taang Mai, 1991), p. 89.

14 In 1980, EGAT incurred losses of Baht 1,043 million (about US\$40 million).

15 Pasuk and Baker, *Boom and Bust*, pp. 75-76.

16 Electricity prices rose 259 percent during 1979-82 but the increase only partially offset fuel and capital costs. World Bank, “Thailand: Issues and Options in the Energy Sector,” (World Bank, 1985), p. 80.

142 billion baht, equivalent to US\$3.5 billion).<sup>17</sup> Such measures, for EGAT, included elimination of the national uniform tariff policy, which would have resulted in rural villagers paying more than city dwellers for a unit of electricity.<sup>18</sup> This first effort to privatize the utilities and liberalize tariffs was met with fierce opposition from labour unions and academics, and was ultimately defeated.<sup>19</sup>

From 1980-88 Prem Tinsulanonda headed a moderate military government with conservative fiscal policies, and managed to repay Thailand's debt (at the cost of social programmes) and provide stability for strong economic growth, which by 1988 reached 13.3 percent per annum.<sup>20</sup> Between 1985 and 1995, Thailand was the world's fastest growing economy, with growth of real annual average GDP of 8.4 percent.<sup>21</sup>

Table 1. Economic growth and electricity growth 1988-93<sup>22</sup>

	FY 1988	FY 1989	FY 1990	FY 1991	FY 1992	FY 1993
Economic growth	13.3%	12.2%	11.6%	8%	7.9%	8.1%
Growth in electricity demand	15%	14.5%	13.8%	13.4%	10.3%	9.6%

The skyrocketing demand for electricity (Table 1) caused power shortages and rotating blackouts by the end of the 1980s. At the same time, new power sector investments as well as fuel imports substantially increased the government's investment burden in the power sector.<sup>23</sup> In fiscal year 1989-90 EGAT committed US\$1,168 million, or 57 percent of its total budget of \$2,037 million, to servicing foreign loans.<sup>24</sup> Furthermore, the benefits and costs of this growth were distributed in ways that antagonized growing numbers of Thais, especially those forcibly removed to accommodate new power plants, those suffering loss of livelihood from fish stocks decimated by hydroelectric dams, and those suffering the effects of untreated power plant emissions.<sup>25</sup>

While World Bank loans and government funds appeared increasingly insufficient, there was a surplus of private capital searching for investments

17 World Bank, "Issues and Options."

18 World Bank, "Lam Takhong," p. 7.

19 Witoon, *World Bank*, p. 100.

20 World Bank, "Lam Takhong."

21 Pasuk and Baker, *Boom and Bust*.

22 Pasuk and Baker, *Boom and Bust*; World Bank, "Lam Takhong."

23 NEPO, "Electricity Supply Industry Reform and Thailand Power Pool," (Bangkok: The National Energy Policy Office, 2000).

24 Witoon, *World Bank*, p. 100.

25 Chuenchom Sangarasri, "Falling demand for electricity, rising demands for change: EGAT and its legacy in the era of privatisation," *Watershed* 4, November 1998 - February 1999 (1998), pp. 33-40.

with high returns. Foreign capital flooded into Thailand, increasing ten-fold between 1985 and 1995, with total external debt rising to US\$80 billion by 1995. Increases in domestic investment capital were even greater.<sup>26</sup>

A bloodless military coup in 1991 stripped the Chatchai administration of power, and vested authority in the National Peace-Keeping Council (NPKC), which appointed a civilian, Anand Panyarachun, as prime minister. To maintain legitimacy in the eyes of the World Bank and the IMF, the NPKC kept Thailand open to foreign investment. More significantly for the electricity sector, the NPKC also severely curtailed rights of public assembly, a step that weakened the power of labour unions to fight subsequent moves to privatize state-owned enterprises.<sup>27</sup>

### ***IPPs, SPPs and the rise of the Power Pool (1990-2001)***

Though the first attempt to privatize Thailand's state-owned utilities failed, internal and external pressures (as discussed above) remained strong under pro-market governments in the 1990s. These led to the formation of the National Energy Policy Office (NEPO), the rise of an independent power producer programme, and plans for a power pool model.

#### *The rise of NEPO*

Business-friendly prime ministers Prem (1980-88), Chatchai (1988-91), Anand (1991-2) and Chuan (1992-4) empowered pro-market reformers within the Thai civil service. Foremost among these in the energy sector was Dr. Piyasvasti Amranand, an ambitious neoclassical economist with a Ph.D. from the London School of Economics. In 1986 Piyasvasti became director of a new bureaucracy, the National Energy Policy Office. NEPO was formed as secretariat to the newly formed National Energy Policy Council (NEPC), which served as a direct line to the Prime Minister's Office on energy matters. In practice, the NEPC rubber-stamped many NEPO policy suggestions.<sup>28</sup>

NEPO's early years were spent restructuring the oil sector, which included managing the multi-billion baht Oil Fund, used to stabilize oil prices and capitalized by a tax on crude oil. When EGAT's debt financing and investment requirements soared to near-crisis levels, NEPO increasingly worked on electricity sector issues as well. The office was able to gain considerable power relative to the utilities and other energy organizations, much of which was granted under the 1992 National Energy Policy Council Act. Moreover, NEPO secured administration of the 13 billion baht (US\$400 million) Energy Conservation Promotion (ENCON) Fund, set up to foster clean renewable

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<sup>26</sup> Pasuk and Baker, *Boom and Bust*.

<sup>27</sup> Cummings, *Thailand*, p. 17; author phone interview, 2 January 2004, Bangkok, Thailand.

<sup>28</sup> Based on the personal experience of one of the authors (Chuenchom Sangarasri Greacen) while working at NEPO.

energy and energy efficiency. NEPO also secured technical assistance support from the World Bank to implement privatization initiatives.

Starting in the early 1990s, NEPO embarked on an ambitious electricity restructuring effort, the first stage of which was the introduction of Independent Power Producers (IPPs), to be followed by full-scale competition in generation, and eventually retail competition.

*IPP & SPP programmes*

In 1992 Prime Minister Anand passed an amendment to the EGAT Act allowing private power producers to gain long-term supply concessions. While EGAT retained control of transmission system operation and the dispatching of power plants, private producers were to generate electricity according to long-term power purchase agreements (PPAs). To ensure healthy profits and low risk to private investors, most PPAs used “take-or-pay” contracts so that in the event of low demand for electricity, EGAT and Thai electricity consumers remained obligated to pay.

The first private power producer to come on-line was an EGAT subsidiary. The Electricity Generating Company (EGCO) was formed in May 1992 for the purpose of purchasing two of EGAT's most profitable plants. The plants were sold with power purchase guarantees that provided risk-free 20 percent and 19 percent internal rate of return (IRR) on equity, respectively.<sup>29</sup> The EGCO raised its capital through an initial public offering (IPO) in the Stock Exchange of Thailand (SET) in November 1994 and commenced trading on the SET in January 1995. Through the IPO, EGAT's shareholding in the EGCO was diluted to 40.7 percent.

The arrangement raised the specter of significant conflicts of interest. On the one hand, EGAT is the sole purchaser of electricity from the EGCO and can pass costs on to final consumers. On the other hand, EGAT is a significant shareholder in the EGCO, a private profit-seeking company. EGAT pays about 20 percent more for power from the EGCO compared to that from other private producers.<sup>30</sup> The successful sale of the EGCO and subsequent profitability of the plant was cited by pro-market pundits as evidence of efficiency gains under private ownership. However, much of the efficiency gains that occurred at the EGCO resulted from transferring two-thirds of EGAT's excessive workforce from the EGCO's plants back to EGAT.<sup>31</sup>

Soon after the EGCO was established, NEPO (against opposition from EGAT) pushed for the introduction of IPPs. According to a World Bank report, the government took “necessary steps to encourage the IPPs to invest,

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29 The subcommittee to review the electricity tariff structure and the automatic adjustment mechanism (Ft), “The results of study by the subcommittee to review the electricity tariff structure and the automatic adjustment mechanism (Ft),” (Bangkok: NEPO, 2001), p. 115.

30 Anonymous source within EGAT, “Information about IPP and SPP,” (undated, circa 2001).

31 Sangarasri, “Falling Demand.”

own and operate large scale power plants. These include promotion by the Board of Investment (BOI), giving various incentives such as tax breaks [of] up to 8 years, and exemption from the machinery import tax."<sup>32</sup> EGAT received over 30 bids from international consortia, offering to supply more than double of Thailand's projected needs for the next 15 years. By 1997, EGAT signed contracts with seven IPPs for a total of 5,944 MW of power.<sup>33</sup>

Some of the key beneficiaries of the IPP programme played a role in the programme's formation. For example, upon completing his term as prime minister, Anand went on to become the chair of Saha Union, the parent company of Union Energy, a private electricity company that was awarded one of Thailand's first power licenses and subsequently became one of Thailand's largest IPP projects.<sup>34</sup>

In addition to the IPP programme, the Thai government launched a Small Power Producer (SPP) programme to support clean electricity that made efficient use of fuel or used domestic renewable energy sources. Plant size was restricted to 90 MW. The SPP programme created significant interest on the part of small cogeneration and renewable producers, but many ultimately complained of unfair treatment by EGAT and the PEA. There were complaints that SPP licenses were granted predominantly to large industrial power customers, but were denied to many potential power producers (hospitals, shopping malls, universities, rural cooperatives and municipalities).<sup>35</sup> By April 2002, 106 requests had been submitted to EGAT under the programme, of which 60 received PPAs.

### *IPPs and the economic crisis*

The Asian economic crisis, which began in 1996, dampened growth in electricity demand, but the government response showed that guaranteeing investors' returns took priority over benefits to consumers. While electricity demand growth had reached double digits in the early 1990s, the late 1990s saw stagnant and even negative growth. Suddenly Thailand had excess power capacity. A prudent move by the government would have been to review the existing PPAs and take steps to reduce future purchases, in line with declining demand. Instead, the government moved to save investors from losses from the devalued baht (which slipped from 25 to 54 baht/\$). All PPAs, including previously signed ones, were adjusted so that 70 to 90 percent of the capacity payment<sup>36</sup> was indexed to US dollars. In addition, the government signed new PPAs, committing consumers to 25 years of additional take-or-pay contracts.

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<sup>32</sup> World Bank, "Lam Takhong," p. 9.

<sup>33</sup> NEPO, *Electricity Structure Industry Reform*.

<sup>34</sup> Ryder, "Thailand's Flawed Electricity Privatization."

<sup>35</sup> Ryder, "Electricity Privatization."

<sup>36</sup> Capacity payment comprises fixed investment costs, fixed operation and maintenance costs and profits for project developers.



As a result of its desperate US\$30 billion attempt to defend the baht from devaluation, the Thai Central Bank depleted the National Reserves. The IMF ultimately responded with a \$17.2 billion emergency loan—contingent on the accelerated privatization of state enterprises.<sup>37</sup>

The drop in demand for electricity, combined with the extreme devaluation of the baht, hurt EGAT financially. Even with the sale of the EGCO, EGAT remained in dire financial straits. In 1999, the state enterprise was baht 100 billion (US\$2.5 billion) in debt and unable to meet World Bank financial criteria.<sup>38</sup> Sale of EGAT's profitable new 3,700 MW Ratchaburi plant was seen by the government as the way to improve EGAT's financial standing and alleviate the government's debt burden. Ratchaburi was sold with a 25-year PPA, guaranteeing a risk-free 19 percent IRR on equity.

Opposition to the Ratchaburi sale was initially fierce. EGAT union employees feared that privatization would lead to layoffs, but the union softened considerably when EGAT employees and their pension fund was given 15 percent of stock at par value of 10 baht per share.<sup>39</sup> The *Dow Jones Asian Power* publication noted that Ratchaburi's IPO valuation of 13 baht per share, or US\$400,000 per MW, was significantly undervalued compared with similar plants sold in Malaysia and Singapore.<sup>40</sup> When Ratchaburi stock was released to the public on the SET, all the shares were sold out in 17 minutes. In November 2003 Ratchaburi shares were trading at around 38 baht, a nearly three-fold increase in two years. As was the case with the EGCO, Ratchaburi's director was a former EGAT deputy governor.

Privatization proponents deemed the IPP and the privatization programme a success—though arguably the biggest “success” was that many PPAs were signed. Increasingly, however, consumer advocacy groups decried high tariffs, which continued to climb as a result of the weak baht, high oil and gas prices, excess capacity and costly PPAs. Meanwhile, the World Bank, the IMF, NEPO and a stream of brand-name consultants pushed for further privatization, promising that competition under fully deregulated markets would lead to lower costs.

### *Power Pool*

Stage two of the privatization plan called for full restructuring of the electricity supply industry along the lines of the UK power pool model.<sup>41</sup> In October 2000, the cabinet approved plans to unbundle the generation,

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37 Sangarasri, “Falling Demand.”

38 “EGAT people in search of future,” *The Nation*, 25 June 1999; “Cash-strapped EGAT faces up to privatisation need,” *The Nation*, 25 June 1999.

39 “EGAT employees respond quickly to offer of shares,” *Bangkok Post*, 11 October 2000.

40 Jeremy Bowden, “Thai election promises add hurdle to reform,” *Dow Jones Asian Power*, 21 February 2001.

41 In a power pool, electricity is bought and sold on a spot market with a market clearing price determined by bidding.

transmission and distribution of electricity, in order to create competition in the power sector by 2003.

The studies underlying these plans were commissioned by NEPO and conducted by a consortium of foreign management consulting firms at a cost of around US\$10 million. The studies' broad objective was to finalize the long-term structure of the electricity supply industry in Thailand. The work ultimately included detailed plans, codes, rules, processes and legislative instruments relating to the disposition of Thai utility assets, design of a competitive market and a regulatory authority to oversee the market. The studies also suggested ways to address existing obligations to IPPs and power-sector memorandums of understanding (MOUs) with other countries.

The consultants' plans not only challenged utility structure, but for the second time, privatization plans also challenged the long-established national uniform tariff. A draft final report proclaimed that the "[n]ational tariff stands in the way of economic efficiency" and warned that if the market fails to provide "reasonable incentives to locate generation and loads in the right places competition will be badly distorted and inefficient in the long run."<sup>42</sup>

The studies recommended splitting EGAT, the PEA and the MEA into separate companies and selling the bulk of their assets to private investors. It also suggested having private generators (GENCOs) bid into a wholesale power pool. An Independent System Operator (ISO) would be responsible for dispatching power plants on the basis of generation prices, for system security, and for financial settlement for bulk power purchases. Thus, the price of electricity at a particular moment would be determined, in theory, by the economics of supply and demand, subject only to adjustments necessary to ensure system stability and security. EGAT would remain a holding company with a regulated transmission subsidiary (TRANSCO), hydro generation, plus a minority interest in some GENCOs.

Electricity distribution would be the responsibility of distribution companies (DISCOs), which would initially be formed from the breakup of the MEA and the PEA. Competitive retailers would have non-discriminatory access to the transmission and distribution network, with a regulated network access tariff paid to the relevant network service providers. Customers would be given access to the competitive market.

An essential requirement was an independent, empowered regulator to oversee the entire electricity supply industry. The design of the regulatory body was well conceived and enjoyed broad support. But the legislation that created the regulatory body was bundled with the provisions to set up the power pool.

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<sup>42</sup> Arthur Andersen et al., "Draft Final Report for Component 1 (Market and Industry Structure): Main Report: Thailand Power Pool and Electricity Supply Industry: Reform Study - Phase 1," (Bangkok: National Energy Policy Office, 1999).

*Power Pool collides with politics*

Political compromises began to overtake the power pool. The consultants' designs were based on assumptions of perfect competition, including a large number of competitors, and none with substantial market power. In practice, it meant that the three Thai utility giants would need to be split into many companies. On this point, economic theory collided with politics.

Restructuring plans required approval by the NEPC. Ministers in the NEPC in turn sought consensus agreement among stakeholders, including the utilities. EGAT refused to sign on unless it was split into no more than two companies. The distribution monopolies budged even less. Originally, the consultants advised breaking up the PEA and the MEA into six and three distribution utilities, respectively. In the final report the consultants recognized that "the proposed number of REDCOs is dictated more by the desire to minimize change and complexity than the loss of scale economies."<sup>43</sup> The PEA and the MEA remained intact.

Three World Bank economists offered comments on the final plan, warning of the risks of market power if EGAT were split into only two generators. The economists suggested corporatizing the existing generators as individual plant companies to create about a dozen competing companies.<sup>44</sup>

It was too late, however. The term of the pro-market Democrat government was coming to an end in late 2000. A compromise had been struck between NEPO and the utilities. Though the prospect of true competition—a fundament of reform—was severely eroded, Piyasvasti pushed ahead. In doing so, he committed NEPO and Thailand to the privatization of EGAT by 2003. However, with the inauguration of Thaksin Shinawatra and the Thai Rak Thai (TRT) party in 2001, the political balance shifted significantly, and with it the course of the reform effort.

***The Downfall of the Power Pool and the Rise of the "National Champion" (2001-present)***

Early 2001 marked a turning point in the history of electricity in Thailand. The change in Thailand's government, rising consumer dissatisfaction with electricity rates and large-scale power plant projects, the fall of "energy tsar" Piyasvasti Amranand, the U-turn in the ideology supporting Thailand's economic policy, and the California energy crisis all combined to stem the momentum of the power pool reform plan, and helped lead Thailand's electricity sector toward privatization without liberalization.

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43 Arthur Andersen et al., "Thailand Power Pool and Electricity Supply Industry: Reform Study - Phase 1: Volume 4: Final Report for Component 3 (Distribution and Supply)," (Bangkok: National Energy Policy Office, 2000).

44 World Bank, "Thailand Power Pool & Electricity Supply Industry Reform Study: Phase 1: Final Comments of Independent Review Committee," (Bangkok: World Bank, 1999).

*Thailand's contemporary political context*

The election in January 2001 was a first in many respects: the first time a party won the general election on a populist platform, the first time one party secured an absolute majority, and the first time one of the richest men in the country was elected prime minister.<sup>45</sup> Following a landslide victory at the poll, the TRT Party further consolidated its power by bringing other parties into its ruling coalition.<sup>46</sup>

Marketing himself as a “think new, act new” leader, the telecom-tycoon-turned-politician ruled the country CEO-style. In contrast to his predecessor, Thaksin made quick decisions (usually without public participation), took risks, and broke down barriers posed by existing laws, independent media, and even the powerful bureaucracy. The system of checks and balances eroded as high-level officials learned to silently submit or face transfers to inactive posts.

Despite concerns about authoritarianism and power grabbing, Thaksin enjoyed popular support.<sup>47</sup> His promises to provide debt relief, a locally managed fund of one million baht (US\$25,000) for each village in the country, and cheap health care won him enthusiastic support from the rural poor. At the same time, he skillfully played on nationalist sympathies in ways that won him widespread approval from businessmen and labour unions mobilizing against privatization.<sup>48</sup> He was able to exploit to his advantage Thai dissatisfaction and humiliation caused by the Asian financial crisis.

As part of his campaign to restore Thailand's economic sovereignty and dignity, Thaksin accelerated loan payments to “free” Thailand from the IMF's influence<sup>49</sup> and postponed neo-liberal sector reform plans that could potentially harm Thai business interests or leave ownership of national assets in foreign hands. Though the foreign press branded his policies as “cronyism,”<sup>50</sup> “inward-looking” and “nationalist,”<sup>51</sup> the government dismissed the claims as too simplistic. Aspiring to become a regional leader and to make Thailand the hub of ASEAN, Thaksin focused on building a strong domestic economy that would form a stepping stone to markets abroad.<sup>52</sup>

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45 Pasuk Phongpaichit and Chris Baker, *Thailand's Thaksin: New Populism or Old Cronyism?* (Washington, DC: Johns Hopkins University-SAIS, 2001); available at the Web site <<http://pioneer.netserv.chula.ac.th/~ppasuk/papers.htm>>, site last accessed 27 July 2004.

46 Fiscal Policy Research Institute, Ministry of Finance, Royal Thai Government, *Thailand's Economic Outlook: Towards Sustainable Balanced Growth*, presentation at the Conference on Institutional Development in Finance in East Asia, Bangkok, 31 October – 1 November 2003.

47 “Regulating Capitalism in Southeast Asia: Unreformed, Unrefined, Unrepentant,” *The Economist*, 21 June 2003.

48 Bowden, “Thai Election.”

49 Thaksin Shinawatra, “Announcement of Thailand's Last Debt Repayment to the IMF” [PM Speech, in Thai] (2003); available at the Web site <<http://www.thaigov.go.th/>>, site last accessed 27 July 2004.

50 Pasuk Phongpaichit and Chris Baker, “Thaksin's Slide Towards Authoritarianism,” *Asian Wall Street Journal* 2002.

51 Shawn W. Crispin, “Ideas Man,” *Far Eastern Economic Review*, 1 May 2003.

52 Ministry of Finance, “Thailand's Economic Outlook.”

*The California crisis and its aftershocks in Thailand*

A few months after the power pool reform plan was approved in October 2000, the California energy market was in crisis. Gaming in the deregulated market caused price spikes and a series of outages at the beginning of 2001.<sup>53</sup> The impact of the crisis was felt across the Pacific in Thailand. While the momentum of the reform programme in Thailand suffered a major setback, the pause provided an opportunity for debates and review. The utilities' concerns about grid stability and security of supply, previously brushed aside as unfounded and merely an excuse to preserve their monopolies, were perceived as real by the new TRT government. Consumers' concerns about gaming and market power abuses received more attention. Independent academics warned of the risks of letting market mechanisms determine electricity prices, and voiced concerns about regulatory capture.

Meanwhile, NEPO downplayed the relevance of the California crisis to Thailand, arguing that California's electricity problems were due to inadequate reform of the electricity sector, and that electricity shortages were ultimately caused by environmentalists, who prevented the construction of new power plants.

To settle differences of opinion, Chaturon Chaisang, the minister responsible for energy matters, held a public seminar in July 2001. As the seminar organizer, NEPO handpicked, to the extent that it could, participants who were sympathetic to its pro-market ideology—such as large industrial customers, IPPs, SPPs and financial institutions—while being careful to exclude problematic participants such as NGOs and small consumer groups.

To lend further credibility to its view on the California crisis and to steer the course of the debate at the seminar, NEPO flew in an electricity restructuring economist from California, who was the chief architect of both the original British and Thai pool models. He argued that the Thai pool was free from the design flaws that plagued the California market.<sup>54</sup>

Besides the power pool, two other alternatives were discussed. EGAT proposed a Third Party Access model to allow large customers to choose suppliers while EGAT retained most of its monopoly on both generation and transmission. An independent academic proposed a single buyer model that allowed public ownership of distribution and eventually transmission.

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53 Timothy P. Duane, "Regulation's Rationale: Learning from the California Energy Crisis," *Yale Journal on Regulation* 19, no. 2 (2002), pp. 471-540.

54 The economist later confided to one of the authors, then a NEPO employee, that "It's easy to design a good market structure, but the devil is always in the details. Politics tend to screw up a perfectly good market design." His comment shows how foreign consultants play the role of "hired guns," commissioned to carry out particular tasks regardless of whether these tasks are actually in the interest of the majority of the population. It also points out a flawed assumption often held by expert economic consultants promoting market reforms—that consultants need not be responsible for understanding the sector's political context when drawing up plans for reform. The danger in this assumption is that the structure of the sector is unavoidably wrapped up in politics, and consultants' recommendations have profound political consequences.

Though no definitive decision on the future direction of the power sector was reached, NEPO was assigned to revise its reform plan to better address concerns that were raised in the seminar, including security of supply, market power abuses, and impacts on low-income and rural customers.

*Rising Ft charge, rising demand for change*

As part of the reform package, the new tariff structure adopted in October 2000 was intended to better reflect costs and provide a smooth transition to the market model. Temporarily tweaked for political reasons to bring down electricity rates by 2 percent, the new tariffs saw an 11 percent rise four months later.<sup>55</sup> The rise was caused by a dramatic increase in a particularly opaque price pass-through mechanism known as the “Ft” charge. The Ft initially accounted for fuel price risk but grew in scope to include costs of new capacity, take-or-pay gas contracts, revenue shortfalls due to inaccurate demand forecasts, and foreign exchange risks.

Consumer protection groups rallied the public to protest rapidly rising costs,<sup>56</sup> which coincided with the posting of strong profits by Ratchaburi and the EGCO, both privatized subsidiaries of EGAT.<sup>57</sup> Small consumers were upset that they had no representation in the committee that determined the Ft but had to pay the increased charge. Large consumers also joined the call to oppose the Ft charge.<sup>58</sup> The move demonstrated their concern that the mechanism lacked transparency and accountability; despite holding two seats in the Ft committee, they were unable to independently check the utilities’ calculation of Ft.

The reaction by NEPO and the utilities to the campaign against the Ft mechanism was revealing. Though the utilities had direct financial interest in the revenues from the Ft charge, it was the head of NEPO who was the most outspoken defender of the mechanism, as evidenced by numerous NEPO-sponsored newspaper articles and his appearance on several TV and radio talk shows in April 2001. Utility unions also criticized the Ft increase, publicly suggesting that NEPO’s defence of the charge was to “please the private sector at the cost of the state and people.”<sup>59</sup>

*Coal-fired IPPs and the fall of Piyasvasti*

As the public rallied against rising electricity rates, environmental groups and affected villagers mobilized against the planned construction of two

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55 Watcharapong Thongrungs, “Power rates to rise by 11 percent,” *The Nation*, 15 February 2001.

56 “Drop extra charge activists urge govt,” *Bangkok Post*, 24 February 2001.

57 Yuthana Praiwan, “Country’s largest power plant increases profit 20 times,” *Bangkok Post*, 10 March 2001; Reuters, “Energetic Performance,” *The Nation*, 7 August 2001.

58 Soonruth Bunyananee and Busrin Treerapongpichit, “Industry deplores high costs,” *Bangkok Post*, 30 May 2001.

59 “Unions blast Piyasvasti for price surges: say he sided with private companies,” *Bangkok Post*, 18 June 2001.

coal-fired IPP projects, both located in the southern coastal province of Prachuab Kirikhan. Past campaigns against power projects, mostly hydroelectric dams, were fought mainly on the basis of environmental and social grounds. However, in this case, the environmentalists also challenged underlying energy policies and presented their analysis in newspapers and TV news talk shows. The activists critiqued private-sector participation policies, reliability criteria and investment planning, as well as the government's flaccid attention to energy efficiency and renewable energy.<sup>60</sup>

To defend the coal-fired IPP projects and its policies, NEPO raised the specter of massive blackouts, grid instability, rate increases and fragile investor confidence, and hired public relations firms that inundated the public with TV and newspaper advertisements, combined with a series of articles and government publications.<sup>61</sup> But NEPO's authority on these issues was compromised by growing evidence of a power glut and by increasing tariffs as a result of more expensive private producers coming on-line. EGAT's conspicuous silence did not help bolster NEPO's legitimacy on technical issues.

Though publicly taciturn, EGAT saw the coal IPPs as a threat to its dominant market share and worked behind the scenes in an uneasy strategic alliance with environmental activists.<sup>62</sup> The Petroleum Authority of Thailand (PTT), eager to expand its gas market, joined the fight against coal.

The controversy culminated in a three-hour televised debate on 11 December 2001, chaired by Minister Chaturon, with Piyasvasti as the team leader of energy policy defenders on one side and environmental NGOs on the other. The NGO side argued that by pursuing the two projects, the government and state utilities were acting against the best interests of the country. With oversupply of generation capacity, they argued, it would be cheaper to cancel the plants than to have to pay for capacity costs plus profits to investors.<sup>63</sup>

It is difficult to assess how much the debate influenced the eventual decision to postpone and relocate the plants and to switch fuel from coal to gas. The fact that the family of the TRT Party's Secretary General Suriya Juengrungruangkit had significant personal interest in the natural gas conglomerate PTT probably had some influence over the decision. One

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60 Alternative Energy Project for Sustainability, "Debunking NEPO's myths about coal-fired power plants" (Bangkok: 2001).

61 See, for example NEPO, "Information to be considered in decision on the coal-fired power plants" [in Thai] (Bangkok: National Energy Policy Office, 2002); NEPO, "Coal-fired power plant projects in Prachuab Kirikhan Province: clarifications on 6 additional issues," [in Thai] (Bangkok: National Energy Policy Office, 2002); NEPO, "Comparison of suitability between the use of natural gas vs. coal in electricity generation" [in Thai] (Bangkok: National Energy Policy Office, 2002).

62 An example was an unpublished document from an anonymous source within EGAT, entitled, "Information about IPP and SPP," (undated, circa 2001).

63 Televised debate on TV channel 11, *Electricity Demand Forecast and Reliability of the Power System*, [in Thai] debate chaired by Minister Chaturon Chaisaeng, 11 December 2001.

clear result of the historic debate was the challenge to NEPO's legitimacy: four months after the debate, Piyasvasti was suddenly transferred to a relatively inactive post in the Prime Minister's Office.<sup>64</sup>

*The demise of the power pool model*

In Piyasvasti's absence, a leaderless NEPO was unable to pick up the lost momentum for reform, and the Power Pool faltered. Sensing the opportunity, the power utilities, especially EGAT, grew recalcitrant. EGAT resisted change to its organization by first asking for more time<sup>65</sup> and later making pleas to not change at all.<sup>66</sup> In its last attempt at power sector reform, NEPO, accepting the doomed fate of "Power Pool," repackaged its plan under the name "New Electricity Supply Arrangement (NESA),"<sup>67</sup> though the core idea of introducing a competitive market was essentially the same. Despite cautious support from the MEA and the PEA, EGAT refused to sign on.

Subsequently, NEPO fell prey to the Thaksin government's campaign to "reform Thailand's obsolete bureaucracy," which many critics saw as a euphemism for bringing bureaucracy under the TRT Party's firm control.<sup>68</sup> The bureaucratic reform campaign led to a major reorganization of government agencies, and in October 2002, a new Energy Ministry was established. NEPO was renamed and downgraded to become the Energy Policy and Planning Office (EPPO), reporting to the Energy permanent secretary rather than the minister. At around the same time, the government appointed the outspoken, ambitious former managing director of the EGCO, Sithiporn Ratanopas, as the new EGAT governor. The newly appointed Energy Permanent Secretary, Cherdpong Siriwit, enjoyed a close relationship with Sithiporn. The unfavourable political climate prompted Piyasvasti to quit his life-long career in civil service a few months later, sealing the fate of the programme to create a competitive electricity market in Thailand.<sup>69</sup>

*Thaksin's Thailand Inc., state-owned enterprises and the stock market*

The downfall of the power pool plan was no political accident. From his inauguration onward, Thaksin steered Thailand away from its long-held embrace of the free market and towards more self-reliance and less foreign participation in achieving economic growth.<sup>70</sup> Much of Thaksin's policy innovations can be traced to his chief policy advisor Pansak Vinyaratn. Pansak,

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64 "Cabinet sacks energy tsar as verdict nears," *Bangkok Post*, 10 April 2002.

65 Yuthana Praiwan, "Egat wants to delay power pool system," *Bangkok Post*, 18 September 2001.

66 "Don't divide EGAT, governor pleads," *The Nation*, 24 December 2002.

67 Thai "NESA" was inspired by England's "New Electricity Trading Arrangement (NETA)," an evolution from the original English "Pool".

68 Aphaluck Bhatiasavi, "Power in the hands of a few, media muzzled, meeting told," *Bangkok Post*, 10 December 2003.

69 "Piyasvasti not willing to serve in new job after forced transfer," *Bangkok Post*, 4 January 2003.

70 Crispin, "Ideas Man."



in a speech given in China, outlined the logic behind the administration's suspicion of the Western-led reform agenda and blind liberalization:

The word competitiveness becomes very dangerous when your country has no, or unequal, intellectual and capital resources to compete in a framework defined by somebody else. The real problem is we are duplicating an economic model and production paradigm of the West. This is the reason why the control of capital management is the most strategic issue in the world today.<sup>71</sup>

For Pansak, a key lesson of the 1997 financial crisis was that control of large capital is essential for Thailand to survive the forces of globalization. Far from seeing state-owned enterprises (SOEs) as inefficient dinosaurs needing to be broken up, Thaksin thought of SOEs, owned and controlled by Thais, as potential engines of the national power. Though journalists criticized Thaksin's lack of concern about the distinction between public and private,<sup>72</sup> in Thaksin's view, partial privatization of SOEs did not preclude their use as tools to achieve national aims such as expanding Thailand's economic influence in other countries. In the same vein, the government also had no qualms in negotiating business deals on behalf of a partially privatized SOE.<sup>73</sup>

Less than two months after he came into power, Thaksin announced a plan to list and privatize 16 SOEs, including the three power utilities, in the Stock Exchange of Thailand (SET). His aim was to use (partial) privatization as a way of boosting the stock market's capitalization to 100 percent of GDP, or about baht 5 trillion, from the year 2000 level of baht 1.2 trillion.<sup>74</sup> Thaksin was also adamant about raising the national GDP, most easily achieved through increasing transactions in the stock market as a result of state asset sale.<sup>75</sup> Efficiency through competition was de-emphasized. Indeed, the intention, as became evident later, was to allow the SOEs to retain their monopoly and state-enterprise status.<sup>76</sup>

### *The experience of the Petroleum Authority of Thailand*

The privatization of the Petroleum Authority of Thailand (PTT) offers lessons for the pending privatization of the Thai power sector. The first state

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71 Crispin, "Ideas Man."

72 Crispin, "Ideas Man."

73 See, for example, Prachachart Thurakij, "Energy Minister gets trade partner countries to sign energy MOU," [in Thai] *Prachachart Thurakij*, 6 November 2003. "Russia roped into energy cooperation," [in Thai] *Daily News*, 27 October 2003.

74 The Stock Exchange of Thailand, "Working Group Join Forces to Revive Thai Capital Market," 31 March 2001; Thanong Khanthong, "Thaksin to lead Thailand Inc.," *The Nation*, 30 November 2000.

75 Crispin, "Ideas Man."

76 "State firms won't be sold off, says Thaksin," *Bangkok Post*, 10 July 2003.

enterprise to be privatized during Thaksin's administration, the PTT's main businesses are oil and natural gas supplies and pipelines, with many subsidiaries in both upstream and downstream petroleum businesses. Total assets for the company in 2001 totalled nearly 300 billion baht (US\$7.5 billion).<sup>77</sup> Despite a previous plan approved during the Chuan administration to liberalize the gas sector and unbundle the PTT's various businesses, the PTT was corporatized as a single conglomerate entity. About 30 percent of the shares were sold in the Thai stock market while the government retained the remaining shares. The IPO, in November 2001, in which all shares were grabbed in two minutes, was lauded as a "success."<sup>78</sup> The minister of Finance vowed to list other state-owned enterprises to satisfy investors' enthusiastic demand.

However, the PTT public offering was ridden with private deals.<sup>79</sup> Though the government initially targeted over 100,000 first-time investors, there were reports that the majority of the shares for sale to retail investors had been reserved for politicians, banks' preferred clients and journalists, leaving retail investors who stood in long lines to return home empty-handed.<sup>80</sup> A nephew of Suriya Juengrungruangkit, the minister of Industry overseeing the PTT and the TRT Party secretary general, for example, was reported to have acquired 22 times the maximum amount of PTT shares distributed to retail investors.<sup>81</sup>

The PTT's profits rose sharply, reflected in a five-fold share price increase from 35 baht per share in November 2001 to 183 baht per share by the end of 2003. In December 2003 alone, the share price went up 70 percent after the cabinet approved a 100 billion baht gas transmission expansion plan with a guaranteed return of 16 percent.<sup>82</sup> But these skyrocketing share prices were inevitably linked to gas price increases. Because over 70 percent of Thailand's electricity comes from natural gas, rising PTT gas prices meant rising electricity costs for power consumers. In 2002, nearly 43 percent of all revenues from electricity sales ended up in the accounts of the PTT.<sup>83</sup> Citing

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77 *PTT Public Company Limited 2002 Annual Report* (PTT Public Company Limited, 2003).

78 "PTT float provides lessons," *Bangkok Post*, 31 December 2001.

79 "A public offering with private deals," *Bangkok Post*, 15 November 2001.

80 "PTT's IPO to lure local investors," *The Nation*, 16 August 2001; "A public offering with private deals," *Bangkok Post*, 15 November 2001.

81 Prachachart Thurakij, "Converting SOEs into stock: new companies get gold while the public get risks," [in Thai] *Prachachart Thurakij*, 28 December 2003.

82 The guaranteed equity IRR of 16 percent for the 100 billion baht gas transmission expansion plan, approved by the cabinet on 9 December 2003, is usually high when compared with the current minimum loan rate of merely 5.75 percent, and considering that the pipeline business is a low-risk monopoly.

83 The calculated share of PTT revenues at 42.94 percent is derived from the ratio of combined revenues received by the three electric utilities to those of the PTT. EGAT, "Management of energy/electricity sector for the benefits of the public," [in Thai] (The Electricity Generating Authority of Thailand, 2003).

what it believed to be excessive costs, EGAT, itself a monopoly, recently demanded that the PTT's supply monopoly end.<sup>84</sup>

Despite these irregularities, the PTT privatization experience became the envy of the SOEs. Other state-owned enterprises noted that the PTT was able to minimize organizational changes; retain natural monopoly businesses and potentially competitive ones under one roof with no clear independent regulatory framework; and maintain special SOE privileges (as long as the government had the majority shares) while enjoying a corporate style of management and a lavish pay scale. The PEA's governor could not wait for his organization to be privatized so that he could quadruple his salary.<sup>85</sup>

### *The rise of "National Champion"*

After the "success" of the PTT privatization, Thaksin initiated a ritual of visiting state-owned enterprises, one at a time, to assess their readiness to become incorporated and listed in the SET. His visit to EGAT in March 2003 was soon followed by visits to the MEA and the PEA. By this time Thailand saw its third energy minister since the TRT Party began its rule, Prommin Lertsuridej, a medical doctor turned business executive under the tutelage of Thaksin's telecom business empire, and later turned politician.

Having reviewed EGAT's strong financial performance, Thaksin was confident the stock market would be able to absorb the mammoth company. If possible, the PM even wished to accelerate the IPO date to the end of 2003, as opposed to the informally agreed date of March 2004. He ruled out the idea of creating a competitive market for fear that "in a free market, foreigners come to take stakes in power plants and electricity prices soar." His plan was to instead have the government be the major shareholder so that "the government will still control electricity prices and we can prevent a takeover by foreigners."<sup>86</sup>

Thaksin's philosophy was well received among Thais who resented past free-market policies and structural adjustment, believing them to be at the root of Thailand's economic and social ills. In one telling example of this sentiment, Thai Petrochemical Industry (TPI), in the lead-up to the IPO of its shares in June 2003, aired a television advertisement portraying Thailand under the dark "IMF" sky with an Uncle Sam figure and a Thai manager, under the spell of a "slave contract," busy lynching Thai workers. In a sudden epiphany the Thai manager sees the error of his ways, throws away the slave contract, and together with the workers turns back to lynch the Uncle Sam figure. The dark clouds then lift and the smiling workers attend a board meeting as shareholders of the company.

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84 Yuthana Praiswan, "EGAT says PTT supply monopoly should end," *Bangkok Post*, 18 November 2003.

85 Authors' in-person interview, 30 September 2003, Bangkok, Thailand.

86 "PM Pressing for Egat IPO this year," *The Nation*, 14 March 2003.

Capitalizing on Thais' bitterness towards the IMF, Thaksin declared the day in August 2003 that Thailand repaid all IMF loans (ahead of schedule) as an "independence" day.<sup>87</sup> Standing in front of a movie-screen-sized Thai flag, the prime minister gave a two-hour televised speech, detailing the government's economic triumphs. After the event, many national flags were put up in public and private places.

Against the backdrop of nationalist sentiment, EGAT successfully convinced the Energy Ministry to adopt a reform model that was safe from foreign takeover and would position Thailand as a regional leader in the electricity arena. A new rhetoric emerged to support this line of thinking. "Private-sector participation and competition to achieve efficiency" was replaced by calls "to ensure national efficiency and competitiveness, and secure regional leadership" and "to build strong national champions in the energy sector."<sup>88</sup> The main rationale for the plan was that it was necessary for EGAT to be "big" in order to compete with multinational energy companies active in neighbouring countries.

In August 2003, the Energy Ministry commissioned the Boston Consulting Group (BCG), another highly paid management consulting firm, to devise a new national energy strategy, and redesign and justify a new industry structure and regulatory framework. The work was to be completed within a period of four months in order to meet the March 2004 deadline for EGAT privatization.<sup>89</sup> The hiring of the BCG, which had a close relationship with EGAT, reflected EGAT's ability to influence policies within the Energy Ministry.<sup>90</sup>

As a result of the accelerated work schedule, the token consultation process failed to include input from civic groups and small consumer representatives.<sup>91</sup> The tight timetable also meant that discussion on each key issue was very limited, especially when compared to the previous reform plan that was developed over four years. In the words of an advisor to the Ministry of Finance:

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87 Shinawatra, "Last Debt Repayment to IMF."

88 The Boston Consulting Group (BCG), "Developing a National Strategy for the Thai Energy Sector: Draft Technical Proposal Document" (Bangkok: Ministry of Energy, 2003).

89 "Hiring of privatization consultants of 3 power utilities not transparent," [in Thai] *Thai Post*, 12 June 2003. This was an extremely ambitious task for the BCG, considering that the key BCG consultant on the project accidentally revealed at a meeting with the minister that he did not know what the "Fr" charge was. Prachachart Thurakij, "Boston [Consulting Group] panders to EGAT at Power utility privatization discussion," *Prachachart Thurakij*, 6 October 2003; "Thailand's electricity authority privatization plan approved," *Agence France-Presse*, 13 October 2003. The article can be obtained at the Web site of ClariNet, available at <[http://quickstart.clari.net/qs\\_se/webnews/wed/be/Qthailand-energy.Rbzl\\_DOD.html](http://quickstart.clari.net/qs_se/webnews/wed/be/Qthailand-energy.Rbzl_DOD.html)>, site last accessed 27 July 2004.

90 "Thailand's electricity authority privatization plan approved," *Agence France-Presse*, 13 October 2003.

91 The BCG, "Strategies for the Development of Thailand's Energy Sector and the Power Sector Efficiency Improvement Program: Steering Committee Meeting #3," (Bangkok: Ministry of Energy, 2003).

The process is so rushed all that could be done at the committee meetings was compromise, compromise, and move on [to the next issue on the agenda]. The next 2-3 years are considered lost. The only hope there is is to ensure the regulatory body to be set up in 2-3 years will be sufficiently empowered and capable of regulating EGAT's monopoly.<sup>92</sup>

The BCG/EGAT perspective was virtually hegemonic. The only public voices that spoke out against the plan were those of the former energy tsar, Piyasvasti Amranand, and his archnemesis Witoon Permpongsachareon, a leading environmental activist on energy issues and also a member of the National Economic and Social Advisory Council (NESAC).<sup>93</sup> Piyasvasti, now the chair of a security management company, spent his spare time writing newspaper columns arguing for clear industry structure and a regulatory framework to improve investors' confidence. In his capacity as a NESAC member, Witoon also called for a clear and separate regulatory body but went further to suggest unbundling and independent control of system operation, transmission and distribution, to safeguard small consumers' interests and give community-scale renewable energy generators a chance to contribute power to the grid.<sup>94</sup>

These dissenting voices were insufficient to break the momentum. The BCG recommended that EGAT, as National Champion, retain its monopoly power under a scheme christened the "Enhanced Single Buyer" (ESB) model. EGAT is currently a single buyer (or monopsony). The ESB model is different only in the sense that any new IPPs will have to compete directly against EGAT's generation, raising the specter that EGAT may purposefully underbid to drive out competitors, but then pass higher actual costs on to consumers. In fact, EGAT's ability to do this is assured since tariffs are set in ways that guarantee a minimum return on invested capital. But EGAT would retain its monopoly on transmission and system operation, and on a majority of the generation, opening a number of other anti-competitive opportunities. The proposed model was met with concerns that the to-be-privatized EGAT could abuse its monopoly position.<sup>95</sup> To allay such fears, BCG stated that "establishing a strong, credible regulator" with the "necessary legislation and rules" would be an "essential requirement for success" of the ESB model.<sup>96</sup>

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92 Author's phone interview, 21 November 2003, Bangkok, Thailand.

93 NESAC is an independent organization created by the constitution to advise on public policies and provide a counter-balance to the NESDB (central planning agency). Currently NESAC is chaired by former prime minister Ananda Punyarachun.

94 The Science Technology Resources Environment and Energy Working Group under National Economic and Social Advisory Council, "Electricity sector reform and establishment of independent regulatory body: Draft proposal," [in Thai], paper presented at the roundtable discussion on electricity sector reform and establishment of independent regulatory body, Bangkok, 19 August 2003, hosted by the National Economic and Social Advisory Council.

95 Turajit, "Boston Panders."

96 The BCG, "Strategies."

Merely a month later, the “essential requirement for success” of the ESB model was compromised. The steering committee overseeing the BCG study accepted in principle that no such “strong, credible regulator” would be established before EGAT was privatized. In addition, the design of the future regulatory body, as proposed by the BCG, risked being neither “strong” nor “credible.” Of the proposed seven commissioners to be handpicked by the Energy minister, four are to come from government agencies, and the other three are to be “ex-industry professionals” with “at least ten years” of industry experience. In Thailand, specifying these requirements essentially reduces the pool of qualified applicants to former EGAT employees, since all IPPs are under ten years old. Furthermore, the regulator’s authority was limited to “economic regulation,” specifically excluding “non-economic operations such as rural electrification, renewables and other social obligations.”<sup>97</sup> Despite these grave shortcomings, the BCG’s recommended ESB industry structure and regulatory framework was approved in principle by the cabinet on 9 December 2003.

As part of the regulatory package, the government asked the consultants to suggest an improved tariff structure. The BCG recommended abandoning the current “cash-based” model (designed to ensure sufficient cash for utilities to finance new investments) in favour of a “return-based” model (designed to ensure a guaranteed rate of return for utilities). The government has adopted the use of “return-based” criteria, though details of the adopted tariff model have not been finalized. But if the BCG’s analysis is correct, electricity tariffs will need to rise as much as four percent compared to the existing structure.<sup>98</sup>

#### *Wires on the horizon: The ASEAN power grid*

On the somewhat more distant horizon, but coming into clearer focus, is the prospect of an interconnected ASEAN grid covering all of Southeast Asia, stretching from Southern Yunnan to Indonesia, and from Burma to Vietnam or even the Philippines. The plan was previously promoted mainly by the Asian Development Bank and, to a lesser extent, by the World Bank. Due to its prohibitive costs, the project languished for decades, never moving beyond verbal discussions and non-binding cooperation agreements. As the National Champion idea caught on, EGAT revived its two-decades-long ambition to be the “hub” of the ASEAN grid. With strong support from the Energy Minister, the prospect of the massive regional transmission network is increasingly likely, and with it, EGAT’s involvement in a number of huge hydroelectric power plants in Burma and Laos.

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97 The BCG, “Strategies for the Development of Thailand’s Energy Sector and the Power Sector Efficiency Improvement Program: Recommendations on Tariff Structure” (Bangkok: Ministry of Energy, 2003).

98 The BCG, “Strategies for the Development of Thailand’s Energy Sector and the Power Sector Efficiency Improvement Program: Discussion with EPPO” (Bangkok: Ministry of Energy, 2003).

EGAT stands to benefit from Thailand's strategic location, enabling it to be a "middleman" collecting wheeling charges from countries wishing to send power through Thailand's network. EGAT recently launched a public relations campaign to promote the ASEAN grid. The rhetoric used suggests an exchange between equal partners who stand to benefit equally from trade. The most colourful example is a multi-media advertisement campaign featuring the common Thai dish *kraprao gai khai dao*, or "chicken stir-fry with basil and fried egg." To eat the stir-fry without fried egg, or fried egg without chicken stir-fry, is considered incomplete. In the advertisement, an exchange between two countries with complementary resources is likened to two people, one with chicken stir-fry and the other with fried egg, sharing to create a perfect combination. The case of interconnection among Scandinavian countries is often raised as a model. But the reality is quite different. Burma, Laos and Cambodia are far from being equal partners of Thailand. They are poorer nations with a wealth of natural resources, while Thailand is by comparison an economic powerhouse with an insatiable demand for energy. The "exchange" is most likely to be a one-way flow of commodity electricity into Thailand, while the flow of money from Thai consumers will bypass affected and resettled villagers and will instead enrich investors and project developers, EGAT among them.

The ASEAN grid represents one of the main early vehicles by which EGAT can harness the capital raised by listing its shares on the SET and expand to become a major regional super-utility.

## **Conclusions**

Over the past five decades Thailand's electricity arrangements have evolved from state-owned utilities to limited private sector participation (under SPP and IPP programmes), to adopting (on paper anyway) plans for extensive liberalization. The recent shift to a "National Champion" and "Enhanced Single Buyer" model placed confidence in the prospect that partially privatized monopoly utilities will work as economic powerhouses, providing profits to the treasury and private investors alike, while at the same time serving as a tool to advance Thai regional political objectives. This transformation reflects a potent chemistry. Perhaps the key ingredient is a strong nationalist / populist / plutocratic government that rejects foreign ownership and foreign intervention, and seeks regional economic and political supremacy. Another key ingredient is the political strength of utilities, which allows them to reject certain aspects of neoliberal reform (such as competition and regulatory oversight) while embracing others (such as stock market capitalization). A third ingredient is a significant cadre of politically powerful individuals well placed to personally benefit from the massive transfer of public assets to the private sphere. The final essential

ingredient is an emasculated (or at least apathetic) civil society unable to effectively prevent activities in the electricity sector that are injurious to the public interest. Of all these ingredients, only the first is new in Thailand, and therefore can be regarded as catalytic.

A recurring theme in Thai history is that the power sector does not receive a level of attention from civil society (or civic-minded leaders) in proportion to its significance to Thailand's economy, environment and society. There have always been very few players submitting ideas for public discussion, and even fewer analytically rigorous discussions of options, approaches and strategies. This vacuum opens the opportunity for a few well-connected individuals (e.g., US Cold War planners in the state era, Dr. Piyasvasti in the power pool era, Thaksin in the present) to play a disproportionate role in determining the course of the sector's history, with few checks or balances.

Part of the problem, to be sure, is that the vast majority of the population treats electricity as a technical matter to be looked after by rational economists and engineers. However, lack of civil society involvement is not simply the fault of an apathetic public. Thai utilities and government policy makers are both guilty of withholding data and excluding participation from the small slice of civil society that is concerned, motivated and analytically inclined. Consequently, key decisions are perennially driven by politics and personality rather than by analysis. To the extent that analysis does occur, it is performed to support foregone conclusions or to fill gaps in broad designs that have political determinants.

### *Consequences*

It is no surprise, then, that the public and small consumers consistently lose out. When transformations occur in the sector, they happen in such a way that risks and costs are socialized, while benefits are captured by well-positioned individuals and businesses. Thus, the public is required to pay for generous take-or-pay fuel contracts that exceed national requirements, pay for too many reserve power plants, and pay high prices for electricity from producers protected from competition. Meanwhile, economically competitive clean co-generation and renewable energy based on Thailand's considerable biomass residues encounter a variety of procedural and administrative barriers, and are likely to encounter more as EGAT privatizes.

On the horizon are new costs and risks that the public will be required to bear if EGAT is privatized as planned. The privatized gas monopoly PTT has paved the way for a powerful new kind of corporate identity that is able to claim either "state-owned enterprise" or "private sector" identities depending on which best suits the situation at hand. Thus, for example, the PTT can claim to be a private company to protect itself from public scrutiny. But the PTT also enjoys special privileges as a state-owned enterprise when the government negotiates on its behalf, or when it invokes the state's monopoly



on violence to protect its assets.<sup>99</sup> As shown in the recent extravagant performance of PTT stocks, the ability to selectively switch between these identities can be a useful tool in making profits, but these benefits ultimately come at a price to the public.

Under similar terms, EGAT plans to implement a number of electricity-generating projects abroad by utilizing government-facilitated business negotiations, with funding for the projects coming from a combination of equity financing from a sale of shares on the stock exchange, plus future revenues from captive customers. Captive customers and taxpayers are rightly concerned about shouldering risks whose benefits accrue mostly to EGAT shareholders.

The privatization of hydroelectricity involves the hidden transfer of (largely customary) public rights and resource flows into private hands. Water behind dams has for decades been managed (albeit imperfectly) to balance competing uses—for electricity, irrigation and flood control. With EGAT privatized and profit-driven, public water resources are likely to be managed for electricity revenue maximization, with detrimental impacts on communities that rely on the dams for irrigation and flood control. This process is not limited to Thailand itself. Indeed, EGAT's power development plans in bordering countries will initiate a transnational commodification of natural resources in Laos and Burma—countries where communities' rights to these resources are far from legally protected, even if they form the basis of the communities' subsistence.

While the future remains uncertain, in the near term it appears that “privatization of benefits and socialization of costs and risks” remains the key defining feature of electricity reform in Thailand.

#### ***Postscript: EGAT union protest***

In February 2004, EGAT's 20,000 union members went on strike to protest privatization. EGAT employees were joined by union workers from the PEA, the MEA and other state-owned enterprises. EGAT union leaders had several motives for the protest, including job and benefit security as well as antipathy to the transfer of national assets to private investors. A coalition of NGOs also publicly protested privatization, calling on the government to focus on establishing an independent regulator and reforming the industry structure to make it more accountable to the public.

As of June 2004 the issue is unresolved. EGAT privatization is officially on hold—presumably until after the general election in early 2005.

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Palang Thai, Bangkok, Thailand, July 2004*

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99 Kultida Samabuddhi, “Tensions as work starts,” *Bangkok Post*, 24 June 2003.