

Reviving the White Elephant:

A Primer on the Bataan Nuclear Power Plant (BNPP)

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(February 2009)

Raising the Dead

Last July 2008, Rep. Mark Cojuangco, son of Eduardo 'Danding' Cojuangco drafted House Bill 4631 which calls for the 'rehabilitation, commissioning and commercial operation of the Bataan Nuclear Power Plant or BNPP.¹ HB 4631, unlike earlier BNPP-related proposals, it managed to gather a whopping hundred ninety-two signatures. The consolidated version entitled, 'Bataan Nuclear Power Plant (BNPP) Commissioning Act 2008' is being heard in the House Committee of Appropriations.

BNPP is a 357- hectare facility at Napot Point in Morong, Bataan which was built by Westinghouse Electric Co. from 1974 to 1984 at the cost of USD 2.3 Billion or four times the initial bid of USD 600 Million. From the start, it was met by the strong opposition of Filipinos. It symbolized what was wrong with the Marcos regime, a testimony to the greed and corruption of a two-decade old dictatorship.

At the height of the anti-BNPP campaign, the province of Bataan screeched to a halt, with thousands taking to the streets in a struggle that generated local as well as international support. When the Marcos dictatorship was finally toppled, it was shutdown by former President Cory Aquino.

'Potentially Dangerous'

The risk posed by the BNPP to the public has not been dimmed by the passage of 35 years. The location of the BNPP makes it vulnerable to earthquakes, faulting and volcanic eruptions.

- It sits on Mt. Natib, a caldera-forming volcano like Mt. Pinatubo, which makes up the whole northern Bataan Peninsula.²
- It is very near the Manila Trench-Luzon Trough tectonic structures.³

¹ A similar bill was filed in the Senate sponsored by Senator Miriam Defensor-Santiago (SB 2665) last 7 October 2008 which is currently pending in the Senate Committee on Energy

² Caldera volcanoes are characterized by long periods of repose with very powerful eruptions. As a rough rule, the longer a volcano is in repose, the more time it has to store eruptive energy and thus the stronger the eventual eruption.

- It is bracketed by significant and very strong (high magnitude) historical earthquakes within a hundred kilometre radius. In 1970, an earthquake occurred within 1-2 kilometers of the site.⁴ The movements can be attributed to either the movement of faults or magma.
- Earth satellite data suggest the existence of a probable fault under the site.
- Nearby Subic Bay has several documented geologically active faults, movements occur every 2,000 years; the last movement documented 3,000 years ago.⁵

Accordingly, the high risk of earthquakes and the probable presence of a fault beneath the site itself may lead to structural failures causing extensive damage to the plant, at worst, may cause the release of radioactive materials.

The structure and design of the BNPP was also found riddled with defects.

This was revealed in a series of technical audits in 1986, 1988 and 1990 conducted by the National Union of Scientists. The plant had 'serious defects in its cover design, construction, quality assurance, workmanship and project management'. The report also commented on the lack of allotment for auxiliary expenses such as the cost of insurance, training, permanent disposal of nuclear wastes, decommissioning, emergency planning and accidents.

Also, toxic and environmental pollutants have been attributed to the presence of nuclear power plants. Many radioactive elements taken into the body have a tendency to accumulate in certain parts of the body such as Iodine-131 (thyroid glands), strontium-90 (bones) and cesium-137 (muscles).⁶

If the plant became operational, disposing of the wastes-- averaging 20-30 tons a year, would be a problem. This was articulated as far back as 1977 by the Philippine Atomic Energy Commission (PAEC).⁷ In fact, there has yet to be demonstrated technology for permanent and

³1977 Report on the Evaluation of the Geological and Seismological Studies Made on the Philippine Nuclear Power Plant -1 Site by Nuclear Technologist III Elmer C. Hernandez and Senior Nuclear Technologist Gabriel Santos, Jr.

⁴ Ibid.

⁵ "Cabato, M. E. J. A., Rodolfo, K. S., and Siringan, F. P. (2005). History of Sedimentary Infilling and Faulting in Subic Bay, Philippines revealed in high-resolution seismic reflection profiles: *Journal of Asian Earth Science* Vol. 25: 849-858.

⁶ It takes fifteen years for cancers to develop.

⁷ " ...since in a volcanic belt and has no stable salt rock formation, the long-term storage and disposal of their nuclear waste will depend on the establishment of an international burial site.."—PAEC Report to IAEA (1977)

safe disposal of radioactive waste. Thermal pollution would sterilize nearby water sources as massive amounts of water are needed to cool the intensely heated reactors.

These plants also produce weapons-usable plutonium, wherein an amount of plutonium the size of a tennis ball can make a device which could kill thousands.

Last November 2008, the National Power Corporation (NAPOCOR) has signed a Memorandum of Understanding (MOU) with Korea Electric Power Corporation (KEPCO) that aims to conduct a feasibility study for the possible commissioning of the BNPP, lasting three years. Given the tone of NPC, echoed by the Department of Energy, Korea is the country to emulate.

Meanwhile, BNPP's sister plant in Korea, Gori 2, built in 1983 has been experiencing problems that have sparked public worries. In fact, out of the fourteen mechanical problems documented in Korean nuclear plants last year, five of them involved 5 Gori reactors (found in Gori 1-4) which was supplied by Westinghouse Electric Co.

Yet despite this, the Korean government plans to add 12 more plants to their present 20 by 2022, and the particulars are shrouded in secrecy.

Is this what Filipinos have to look forward to once the BNPP is up and running?

'Tax-Payer's Money Down the Drain'

The BNPP deal was a showcase of corruption and the vast powers exerted by the Marcos Dictatorship. Westinghouse Electric Co. held a dismal record in safety. Of the top ten accidents from 1969 to 1979, four of them occurred in Westinghouse plants.⁸ Despite this, a contract between Westinghouse Electric Company and the Philippine government through a go-between, Herminio Disini was drawn up.

Disini was believed to be the dummy put up by Marcos.⁹ Out of the deal, Disini pocketed USD 17 Million which is believed to have found its way to Marcos' hands.

In return, it was the Filipino people who paid the price for the bad deal. Debts from the BNPP made up almost 20% of total debt servicing for more than thirty years. A 2004 estimate puts the price the public has to pay for the behest loans incurred with the BNPP at \$155,000 per day.¹⁰

⁸ Richard Udell, " Public Citizen's Nuclear Power Safety Report ", 1981

⁹ Disini is from Marcos' side of the family.

¹⁰ 2004 Foreign Exchange rate: 1 USD = 56 Php

The bulk of the debts were finally paid off in April 2007 where USD 50 Million or Php 2.5 Billion was allotted from the 2007 National Budget. Portions of the debt which are converted into low-interest Brady Bonds are due on 2017 and 2018.

It is not far-fetched to assume a similar pay-off is in the offing when the USD 1 Billion estimated fund for rehabilitating the BNPP is at hand. ***Shall we be made a fool of the second time around?***

In the process of seeking approval for the consolidated bill proposing the revival of the BNPP, the so-called 'public hearings' were revealed to be superficial if not downright bogus, grossly in favour of proponents of the Bill.

Even Congress Energy Committee members were purposely excluded in some of the meetings that discussed the merits of the Bill and the rationale of the proponents because they were perceived to be anti-BNPP. ***Why the rush to re-open the BNPP?***

'Nuclear Renaissance': Big Interest Groups at Play

Nuke deals are being signed here and there with powerful countries like US, France, Canada and Russia leading the pack. Emerging powers like China and India are not to be left behind with large amount of State-funds directly being allotted for nuclear industry development. Competition for the nuclear market rather than meeting the energy needs in a time of crisis explains the resurgence in the nuclear energy industry worldwide – a battle by big industry players to win overseas contracts.

This is also the reason for close ties between government and nuclear corporations. Political-backing is needed for this risky business to move forward.

Nuclear corporations are the biggest lobby groups and political funders. Some government officials (as in the case of the Bush administration and even Obama's¹¹) even have actual stakes in the business. In return, the administration of former President George W. Bush gave the bulk of taxpayer energy subsidies—a total of \$20 billion—to atomic power in 2007-2008 and Obama's economic recovery bill opens the door to possible \$50 billion in loan guarantees for the nuclear-power industry.

In the Philippine energy/power sector, the big businesses names are also the big players – Lopez, Zobel, Ongpin, Pangilinan, and very recently the Cojuangcos.

The Cojuangcos through the family-owned **San Miguel Corporation** (SMC) has diversified into the energy business and "big-time" investments are involved. Big-time means gaining a stronghold in the power sector, considered to be one of the high-growth businesses.

¹¹ Two of Obama's largest campaign fundraisers include Frank M. Clark and John W. Rogers Jr., both top Exelon officials. Even Obama's chief strategist, David Axelrod, has done consulting work for the company. Exelon is the US' largest nuclear power plant operator.

It has acquired 27% share of **Meralco or Manila Electric Co.** (the country's biggest power retailer) making it the second largest shareholder after the Lopezes with 33%.

But a certain investment company called the Global 5000, believed to be an ally of SMC bought the other 7% share of Meralco from SSS, Land Bank and Development Bank of the Philippines (DBP). The combined stake of SMC and Global 5000 could definitely make a management take over of MERALCO from the Lopezes.

SMC has also secured the purchase of 51% share or majority of **Petron Corporation**. This move technically made Petron a subsidiary of SMC today. Last year, Danding also made a bid to get the 20-year concession for the operation of transmission lines.

Rep. Mark Cojuangco's House Bill 4631, which seeks to revive the BNPP at the eye-popping cost of USD 1 Billion can be viewed in the perspective of his family's large stake in the energy business.

Rep. Mikey Arroyo (eldest son of GMA) who suddenly became chairman of the House Committee on Energy has paved the way for the railroad approval of the bill at the committee level. Aside from this, he plans to put in revisions to the Electric Power Industry Reform Act (EPIRA) that will hasten privatization.

The speed with which the two lawmakers have been pushing the bill raises doubt.

Meanwhile, the government through the Department of Energy (DOE) and State-owned NAPOCOR is pushing a parallel track. The DOE has formed core groups to undertake a two-year study on a proposal to revive the use of nuclear energy in the country. As early as January 2008, DOE Secretary Angelo Reyes has said, *'it is open to ...nuclear option and if we like to revisit that option, since its becoming clear this is going this direction'*.

The dynamic duo of Mark Cojuangco-Mikey Arroyo represents the political collaboration between the Arroyo clique and the Cojuangco camp. Danding is one of the **'closet cronies'** and political benefactors of GMA. Proof is the 2007 GMA-backed Sandigan Bayan (Office of the Ombudsman) decision that Danding's 20% share in San Miguel Corporation (SMC) is rightfully his. The Cojuangco-led Nationalist People's Coalition (NPC) bloc in the House of Representatives is instrumental in killing the three impeachment complaints filed against GMA.

In all indications, the BNPP's revival can be seen as part of a grand plan to monopolize the energy sector by persons perceived as close to Malacañang.

Questionable Benefits

Proponents of the Bill cite two main arguments for re-opening the BNPP:

- A solution to the anticipated power shortage in 2012 of 3,000 MW
- Cheaper alternative especially with the ongoing energy crisis.

As of April 2008, DoE data show that total installed generating capacity on a national level is 15,937.1 MW. Of this, 83% or 13,205 MW is said to be dependable capacity. Peak demand is only 8,999 MW, with 6,643 MW from Luzon, 1,102 MW from Visayas, and 1,241 from Mindanao for the year 2007. This leaves an excess generating capacity of 4,212 MW. Rather than a shortfall, there is surplus of power generated.

Rather than relying on nuclear power, other sources of energy are available such as hydro, geothermal and wind. According to the DOE, the country still has several untapped energy sources such as geothermal (1,200 MW), wind (7,400 MW) and hydro resources.

Also, nuclear power plants end up being too expensive to operate; the sheer size of the project makes it vulnerable for corruption and shady deals. Most probably, like the first BNPP deal, the estimated USD 1 Billion may balloon when the refurbishing is underway. We may find ourselves replacing oil dependency with uranium dependency as we would need to import uranium in order to make our reactors work.

No Reason to Revive

There are no logical reasons to revive the BNPP, in fact, the reasons for its rejection in the past still stand despite the passage of time. With a nuclear plant such as the BNPP in our midst, the public would be in a perpetual state of insecurity. Thus, once more we need to muster enough strength to repel all moves to resuscitate a mistake.

Let us not let our people be hoodwinked twice into an anomalous, onerous and useless deal that will be borne by generations to come. The BNPP is neither for the public good or gain, thus, the only logical alternative is to oppose its resurrection. What is needed is to build the broadest possible network of advocates to put the strongest possible pressure to shut down the BNPP once and for all. **Let us say NO TO BNPP!**

Protect our Communities from the Risks and Danger of the BNPP!

Put our Taxpayers Money into Renewable, Community-Based, Sustainable Sources of Energy!

No to the Revival of the BNPP!

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