

22/05/00 Island

Coal Plant and Power Crisis in 2004 — A reply

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I am writing in reply to Dr. I. Siyambalapitiya's response in "The Island" of 29.04.2000 to a previous article of mine. At the outset, let me express my sincere apologies to him if he thought that I did wrong by quoting his data given to me privately by him.

I regret very much that he has completely distorted what I said about averting a crisis in 2004. I never said that this could be done with a LNG plant to be built by Enron, and that we should hand over a port to them for this purpose. What I said was that it will take 6-8 years to bring in LNG if we start work on building port facilities now, and to meet the demand till then, the CEB should build a 300 MW CCGT plant operating on naphtha. I also said that CEB should invite proposals openly from potential suppliers for a package including both LNG and the power plant, if the government is not willing to consider the Enron offer to do a feasibility study to bring LNG to Sri Lanka.

Though the CEB has been dragging on from 1995 the 150 MW naphtha operated CCGT project and also the 163 MW BOOT project for a diesel operated CCGT plant, they were able to get the 115 MW Gas Turbine (single cycle) plant commissioned within a record time of 18 months from the time of finalizing the specifications (Supplement in Daily News of 09.08.1997). Therefore, if the CEB works on a fast track, meeting the 2004 target with a CCGT plant is not impossible.

Dr. Siyambalapitiya contests my figure for the cost of delivery of LNG to Colombo. I have two sources to quote, both of whom I believe know what they talk. One is Enron itself, who has estimated the cost of delivery of LNG to Colombo as between US\$ 2.96-3.42 per MBtu, depending on the source and whether ships are fully or partially utilized. These estimates correspond to Jee price index of US \$ 18, which is supposed to be the long term average expected.

The other is a presentation based on the work of two World Bank consultants, made at an Open Forum on Electric Power Technology, organised

jointly by CEB and LIFE in September last year. They have worked out the unit cost of electricity generation from different types of power plants including LNG for which CIF values of US \$ 2.5-3.5 per MBtu have been assumed. In a study like this, it is normal to assume values that are most likely. As such, Dr. Siyambalapitiya cannot say that my estimate of US\$4 per MBtu is too low.

Dr. Siyambalapitiya laments that I have not worked out the cost of power generation from LNG using the estimates I have given. I did not do it because I am not an expert on costing. But, let me quote again the two experts of the World Bank. The values arrived at for the unit cost of electricity generated at 0.8 load factor from LNG plants corresponding to the above prices of LNG are between US cts 44 - 5.2 per KWh, while that for coal is US cts 4.1 per KWh. Now the average figure of US cts 4.8 for LNG is much less than US cts 5.70 worked out by Dr. Siyambalapitiya.

It must also be mentioned that the above results were only very preliminary and did not take into consideration any environmental factors. I believe that once the cost of damage to the environment by the coal plant and the cost of regular monitoring of emissions and the ambient air quality at several sites were included, the differential between the two could get further reduced. In addition, according to World Bank's own guidelines, carbon dioxide savings from an LNG plant could be offered for trading, which could be utilized to offset any incremental costs. It should be recalled that natural GAS could be used in transport and industry sectors as well, unlike coal, which could be used only for generating electricity. Introducing CNG for operating heavy vehicles would be the only way to eliminate belching buses and lorries from our roads in the future. Thus, the LNG option should not be dismissed without doing a detailed feasibility study based on firm quotations of prices.

With regard to the Monitoring Committee of the

CEA, it must be said that appointing a committee is one thing and complying with the law is another. The best way to judge this is to look at the track record of the CEA in enforcing environmental laws in the country. In 1993, the Cabinet appointed a committee to initiate action to reduce air pollution in the Colombo Metropolitan Area with the CEA serving as the convenor. It had drawn up specific targets for reducing different pollutants by year 2000. Hence this programme was known as the

In 1993, the Cabinet appointed a committee to initiate action to reduce air pollution in the Colombo Metropolitan Area with the CEA serving as the convenor. It had drawn up specific targets for reducing different pollutants by year 2000. Hence this programme was known as the Clean-Air 2000 Action Plan. Now, we are half way in 2000. Let alone reducing, do we know what the current levels of pollution and emissions in Colombo are?

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In 1994, regulations were gazetted to prohibit any diesel vehicle from emitting smoke more dense than a specified amount. Do all diesel vehicles running on our roads now confirm to these regulations? In 1996, the Ministry of Transport and Environment purchased three sets of expensive equipment for monitoring the ambient air quality, on a World Bank loan given under the Colombo Urban Transport Project. When the Ministry wanted to hand them over to the CEA, it declined on the grounds that they did not have the necessary staff to operate them. Subsequently, they were given to the NBRO

for a period of three years, which has lapsed now. The data measured by NBRO and handed over to CEA for dissemination, unfortunately are still in their files, and not made available to the public. Only the weekly summary of worst values is available in the web page of NBRO. It would be interesting to know what will happen to these equipment.

In 1995, the Cabinet approved a programme to expand the air quality monitoring to outstations beginning with three stations initially. After 5 years, what is the progress of this Cabinet approved programme? Then, there are several thermal power plants at Kelanitissa and Sapugaskanda. Is there any regular programme to monitor their emission levels and the ambient air quality in the surrounding areas? If the CEA cannot monitor the air quality in Colombo or at the site of the present power plants, or initiate action to implement a Cabinet decision, would the public believe that they would conduct satisfactory monitoring programmes in Kalpitiya or Puttalam?

In any case, there are no emission standards gazetted for the CEA to enforce, though the drafts were prepared long time ago.

Attempts were made several years ago to bring in a new environment law giving more authority to the Provincial Councils in the management of the ambient air quality, but it has got shelved somewhere. Therefore, Dr. Siyambalapitiya's statement that 'CEA enforcing the Environmental Laws in the country' is a meaningless one.

In the opening paragraph, Dr. Siyambalapitiya tries to put the blame on environmentalists for delaying the coal power plant, and making the public to face a crisis. We all know why the Trincomalee project got shelved, certainly not on environmental grounds. Yes, at Mawella there were some protests. But the CEB too should take the blame for not having a dialogue with the people of the area and the policy makers. Also, there was no

detailed study done on the site there. Regarding the Norochcholai project, the CEB should be thankful that the EIA report was accepted by the Technical Evaluation Committee (TEC) despite many shortcomings it had. I had pointed out these myself when the EIA report was kept open for public comments, but not even an acknowledgement was received. The terms and conditions under which the project received approval have not been made public. As such, Dr. Siyambalapitiya cannot maintain that this project was blocked by environmentalists.

People concerned with the environment make comments on EIA reports, because these reports have certain shortcomings. It is up to the CEB to produce a document free of shortcomings or, when these are pointed out, to take appropriate action to rectify them. But what the CEB has been doing was to ignore any suggestions, whether made by environmentalists or other engineers, and to insist on going ahead with their plans. When the EIA report of the Upper Kotmale Hydro Power Project was rejected by its TEC in 1994, the CEB had enough time up to now, to consider better options, not one or two, but several in detail. Regrettably, no such thing was attempted.

With over 50 years of experience in hydro-power development, the country should have by now enough competent engineers to undertake such feasibility studies ourselves. These studies cost millions of dollars when carried out by foreign consultants. Even the conceptual designs and planning are done by them. Cannot the CEB engage our own engineers to do such work when several options could be studied at reasonable cost? Who is to be blamed for this situation in the country? Then, who is to be blamed for the disasters at Lower Kotmale and Samanalawewa projects, causing considerable delays and colossal wastage of money. Was it the environmentalists? I suppose it is the human nature to blame others to cover one's own faults.

Going back to meeting the time target of 2004, I cannot understand why Dr. Siyambalapitiya had to resort to presenting a distorted version of my statement. It cannot be that he did not comprehend what I wrote. May be he was trying to undermine the credibility of what I said, or he did not have any other point to argue about. I am glad that he has accepted all my points except that on pricing.