

Viability of Norochcholai highly questionable

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The letter titled 'Power Development — A Reply' by Gard which appeared in the Island, 11.10.2001 has raised several issues in favour of Norochcholai. Let me first answer the last paragraph in Gard's letter.

"At least now when an independent foreign consultant has given the verdict, perhaps with the knowledge of the Bishop of Chilaw let us request the Government to go ahead with the project immediately."

Civil Engineering

As the power development consultant to the CEB, it was I, a civil engineer who initiated coal power studies and monitored them all on behalf of the CEB from the time Trincomalee studies began in 1980. I have objected to Norochcholai since the project because of several vital civil engineering aspects and also on security grounds.

Gard says civil engineering aspects have been studied comprehensively by local and foreign consultants and finalised. Please name these experts, as we would like to know what they have to say.

When the feasibility study for Norachcholai began, the very adverse Master Divers Report issued in 1998 on the project was ignored and wept under the carpet in order to show that Norachcholai was a wonderful site. In actual fact if the findings of Master divers who were engaged by the consultants Electro Watts had been taken seriously and acted upon, Norochcholai as a site for the coal power plant should have been abandoned by the CEB forthwith. Then the Rs. 450 million for the study could have been saved, and all these years would not have been wasted plunging the country into darkness.

A statement on coal power made by the Vice-Chairman, CEB, Dr. Ranjith Gabral has been published in the Sunday Observer of September 09, 2001. It states that coal power is extensively being probed as the answer to the power shortages in the future. But he continues to state that analysis by

experts reveal that Norachcholai might not be the best place. This statement is based on very adverse civil engineering problems faced at Norochcholai.

He refers to a report on Norochcholai made by the Chairman of Master Divers, Mr. Ariyaseela Wickremanayake, which states that the fixing up of columns for the 4.2 km long pier for the coal conveyor belt itself is an enormous practical difficulty as it has to be built on open sea. As both monsoons, South-West as well as North-East are active in the area work on the jetty could be carried out only for four months in the year.

Also he considers the problems that would involve the anchorage of floating barges, vessels and dredges during inactive period. Colombo port is clearly congested and the next alternative for anchorage may be Singapore. The other major disadvantage according to him is the cost. In addition experts have hinted of possible terrorist attacks on the project.

News items on a review report made by a team of Danish Consultants on the Norochcholai proposal appeared in The Island of 22-09-2001 and in the Sunday Observer of 23.09.2001. According to this report the 4.2 km jetty that was an integral part of the project might be abandoned altogether, as it is a risky not suitable proposition. Instead the team has recommended the transport of coal by barge from ship to the plant in case a power plant is to be built at Norochcholai. The building of a breakwater and a near shore harbour form part of this option. This however would involve cumbersome processes. It seems that this team of consultants does not really favour this proposition but what it states is that they propose this method "in case a power plant is to be built there". Most of the time during rough weather this process will not be operative and as a result will add on prohibitive demurrage costs.

It should be borne in mind that when coal is mined and exported by far the greatest component of cost exists in the transport phase of the operation. The importance of reducing ship waiting and unloading times in order to maintain economical costs of energy at the final user point should be fully realized.

The shipping circles have found that waiting and unload-

ing times vary between 15 and 20% of total round trip time. If the unloading facility is not efficient then the unloading time can greatly extend the total ship time and thus coal transporting costs. Unloading is traditionally a more time consuming operation than loading.

In this 'ship to barge' arrangement all the coal carriers from distant places like Australia will have to be equipped with special self coal unloaders. So all these ships will be assigned only for this particular project, thus making the project very costly, as all the unloaders will remain idle for about 80% of the round trip time. In addition these ships equipped with costly unloaders will have to be non-operative for about four months in the year due to rough seas. Thereby incurring high demurrage costs.

As an alternative to Norachcholai, we often hear Hambantota being mentioned. But this would first of all depend on the construction of harbour there. However according to the former Minister of Ports - Hon. Ronnie de Mel, the construction of such a harbour will not be feasible or possible for a very long time. Can the coal power plant be delayed indefinitely till this harbour is constructed? Even with a harbour coal carriers will have to be anchored about 1 km away from the shore while at Mawella 65,000 dwt coal carriers can be brought by the shore.

Both at Norochcholai and at Hambantota there is no fresh water, which is very important for the project. The latest plan to obtain fresh water at Hambantota is to desalinate sea water, an expensive process practiced only by the oil rich desert countries. Even for construction purposes water has to be brought in bousers from distant places. At Norochcholai too the plant is to adopt desalination, a power consuming process to obtain fresh water. At Mawella fresh water can be obtained from Nilwala.

Black & Veatch Inc, the leading coal power consultants in the USA (Trinco Coal Power Consultant) examined the Southern and Western coasts for setting up coal power plants. Mawella ranked first. They neither recommended coal-unloading jetties - 4 km long - as in Norochcholai nor 'ship to barge' propositions. Setting up a coal power plant in the

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31st Oct 2001 Island.

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West coast was taken up on the study made by the Japan Consulting Institute (JCI). In this study the recommended best site is Dungalapitiya/Negombo and Norochcholai/Kalpitiya comes last. It is certain CEB engineers who did not have any thing to do with these coal power studies are responsible for pushing the project to Norochcholai/Kalpitiya. Then for the feasibility study they selected a consultant who was briefed to say what they wanted.

Security

Gard says "Mr. CF should at least now realise with the terrorist attack, the World Trade Centre in New York and the most impenetrable pentagon had been destroyed. If we keep on speaking of terrorist attacks no development work could be undertaken and we will be in eternal darkness."

This is the very reason why a poor country like ours should take special precautions against possible terrorist attacks. It is stupid to compare Sri Lanka with the USA. During the Second World War the USA was producing one ship a day to maintain the supply lines to the war zones in the face of the deadly German U Boat attacks in the Atlantic and the Japanese attacks in the Pacific. In Sri Lanka to repair the terrorist bombed oil tanks at Orugodawatte it took some 4 years. It seems the Central Bank which was bombed 6 years ago and the surrounding areas are still under repair. So any damage to economic targets in Sri Lanka will surely be disastrous.

When I speak about security what is of special importance is the

vulnerability of the fragile 4 km long, coal unloading jetty, the life line of the power plant and not the power plant itself. This jetty in the Kalpitiya sea can never be protected, since fishing boats have to be allowed to pass through the props or columns supporting the conveyor belt. The destruction of the power supply from a 900 MW coal power plant, over 5000 million units, which will form 70-80 per cent of the power system will be catastrophic. All our industries will have to be shut down.

It is because security concerns were ignored, many of our leaders President Premadasa, Ministers Gamini Dissanayake, Lalith Athulathmudeli, C. V. Gooneratne, Amirthalingam, top military leader Algama etc. were assassinated. Our Present President Chandrika Kumaratunge had a narrow escape from a terrorist attack because security was lax that day. When R. Premadasa became President he was Chief Guest at the institution of Engineers, Annual Sessions. There he declared that as he had promised to end the war, he had ended the war and brought peace to Sri Lanka. The large engineering gathering silently listened to this declaration. A couple of years later however, he was assassinated. So it is calamitous to base one's arguments on fantasy, when the reality is otherwise.

The promoters of Norochcholai say that terrorist threats are the same anywhere. If this is so, can we get a private power developer to take up Norochcholai without a Government guarantee? On the other hand the Mawella Power Project will interest the private sector without a Government guaran-

tee. This will prove that security threats anywhere are not the same. Trincomalee had to be set aside as all the private contenders wanted a Government guarantee because of security concerns. If security is not a worrying consideration, then let us take up Trincomalee where a far superior site and far superior plans are available.

Important Criteria

It is an erroneous concept to consider that a barren land without any vegetation, where the least number of people have to be resettled are the most important criteria to set up a power plant with imported coal. On the contrary, the guidelines that are really essential in this case are a good harbour facility for the economical uninterrupted availability of coal and the availability of fresh water supplies.

It is based on these two vital requirements, Trincomalee was first selected for the project and then Mawella where unstable jetties in the open sea and breakwaters are not required and where fresh waters is freely available.

In the present context, Mawella is the only site recommended by reputable consultants for the project now available at hand for the speedy construction of a coal power plant thereby solving the power crisis. An attempt to set up a coal power plant at Hambantota will definitely end up as another, costly blunder as at Norochcholai. Sheer wastage of 6 years and Rs. 450 million. From the time Norochcholai was taken up for this project I have objected to this site on the basis of security and very serious civil engineering constraints.