

06/09/99 J.N

Natural Gas will cause electricity prices to rise by 30 per cent

Dr. Janaka Ratnasiri's views on "An Alternative to Coal Power" (*Daily News*, Aug 25) have been discussed before.

My calculations show that an electricity development programme using liquefied natural gas (LNG) will cause the electricity prices to rise by a minimum of one rupee per unit, but typically by two rupees.

If Dr Ratnasiri calculates the life-cycle costs of LNG-fired electricity for Sri Lanka, then it can be compared with the costs of electricity from coal-fired power plants, and the present selling prices of electricity. Then the real truth will emerge.

Natural gas is used for power generation in countries that have their own gas. Also, LNG transported by ship is used by countries that need more electricity, but when existing power plants and other industrial emissions cause the air quality standards to be violated at certain locations: Japan and South Korea import LNG and run power plants because they simply cannot build any more coal-fired power plants in certain areas of their countries, owing to prevailing heavy pollution levels.

My estimate of the present value of the differential cost of rejecting the first coal plant at Puttalam and moving to LNG will be US\$ 619 million at today's prices, subject to two principal assumptions. (a) The power plant and the LNG facilities can be built at a cost of 1000 US\$/kW, and (b) the delivered cost of LNG to the power plant throughout its 30-year life will be guaranteed at 4.5 US\$/million Btu, both of which are extremely optimistic. As Dr Ratnasiri says, the provisions of the Kyoto protocol are not relevant to Sri Lanka, because we are not a significant source of Carbon Dioxide (CO₂).

However, he advocates that projects should be negotiated with investors willing to purchase carbon credits. This means, there must be a private Company who will come to Sri Lanka, build a LNG-fired power plant and say: "You pay us the same price you would have paid if it was a coal-fired power plant. We will charge the cost difference between the coal plant and the LNG plant to the Government of (say) USA because they pollute the world environment a lot".

May we ask Dr Ratnasiri where Sri Lanka could find investors willing to negotiate on such terms? Is there a single power plant in the world built and operated on the basis of total (not partial) carbon credits? Is there any

investor making such an offer? If so, such an investor should be introduced to Ceylon Electricity Board. The investor must provide a grant of US\$ 619 million up-front, and build the power plant on the exact time scheduled as the coal-fired power programme.

Sri Lanka will have to stop her economic growth, population growth and social uplift and wait until the great polluters of the world agree and develop the mechanisms to subsidise new electric power plants in developing countries.

Carbon trading is only a theory, which is far from implementation. We welcome a proper carbon trading mechanism, in which the great polluters of the world will pay the developing countries such as Sri Lanka the total (not partial) differential costs to develop more environment friendly, yet expensive electricity generating technologies.

Finally, we should not forget that USA, Europe and Japan, all great contributors to world pollution are still building coal-fired power plants.

Why, because they know it is cheap. And what do we do? Advocate the use of LNG which will increase our electricity prices by 50%.

And what more: wait for handouts from the world's greatest carbon polluters, which will probably never come, to build the very same LNG power plants that will increase our electricity prices.

As a start, they should announce a total ban on developing coal-fired and oil-fired power plants in USA, to demonstrate their commitment to the Kyoto Protocol.

These countries should first demonstrate the carbon trading mechanism within their own countries. Are they doing this? Certainly not. In 1997, while the bureaucrats reluctantly agreed to the watered-down Kyoto Protocol, various US electric utilities signed more contracts to build several new coal-fired power plants.

Also in 1997, while the world leaders were debating CO₂ reductions in Kyoto in one corner of Japan, they commissioned another 1000 MW of new coal-fired generating capacity in another corner of Japan, at Haramachi, and continued their commitment to build another 1000 MW plant. Construction is going on at a pace, with commissioning scheduled for 1999.

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