Future power cuts and the real culprits

I thank Mr. Hemantha Withanage (*The ISLAND*, 19 July 1999) for explaining the role played by the Environment Foundation and others in blocking two vital electricity generating projects, denying our economy of 74 billion rupees worth of investment, and a stable lower-cost supply of electricity. I also thank Mrs. Kamini Vitharana (*The ISLAND*, 20 JULY 1999) for her response explaining the concerns about the Upper Kotmale hydroelectric project.

In my letter in *THE ISLAND* on 1st JULY 1999, I explained the serious capacity shortages the Sri Lanka electricity supply system will face in year 2001, year 2003/4 and thereafter, as a result of the prolonged debate about the Upper Kotmale hydroelectric project and the coal-fired power programme.

In his response, Mr. Withanage has described in great detail the highly successful role played by various environmental and other organisations, and individuals, in denying the people of this country their right to receive a lower-cost, stable electricity supply from these two power projects. There is no need to confuse the readers by mixing-up the current issue with the electricity strike of 1996. In my view, there is also no need for the environment movement to shoulder the entire blame for the future power cuts and/or consequent price increases: they can share the blame with other groups and individuals who block these vital power projects for various other reasons.

What is at stake is a 14-billion rupee investment for the upper Kotmale power plant and 60 billion rupees for the first coal-fired power plant, for which investment funds have been lined-up for the past few years. When built they will be the two largest investment projects of this decade. Both the projects will help stabilise the price of electricity, and hold future electricity price increases below the levels of inflation.

What the environment movement and others who oppose these two vital power projects want is to deny the remaining 48 percent of our households their right to have electricity at home, and the household, industrial and commercial customers their right to receive reasonably-priced electricity.

If these two projects do not go ahead on schedule, with upper Kotmale already badly behind schedule, there will be serious capacity shortages in the electricity supply system from year 2001 onwards. As the crises approach the government of the day will resort to stopgap measures to buy more generating capacity at short notice, which will obviously be oil-based. Thanks to the environment movement, there will be no objections to the establishment of oil-fired generating plants, which will make our electricity supply more and more expensive, and almost totally reliant on oil.

No electricity planner needs to be alarmed about future power cuts. Sri Lanka conducts electricity planning in accordance with international standards of the profession, to optimise reliability at the lowest overall (ie system-level), long-term economic cost, while satisfying all the environmental standards. They can assure the society-at-large that they have done their best for the country, in showing the way the electricity supply should be developed, such that our people pay the right price for electricity; in showing why and how the "fuel mix' in the electricity supply should be and can be balanced so that we do not depend on any single source (hydroelectric, oil or coal). The beauty of our electricity generating system is that a very reasonable strategic "fuel mix" can be achieved without undue increases in electricity prices.

Norway, a leader and a financier of the worldwide environment movement uses 25,000 units of electricity per person per year, all of it from hydroelectric power plants. How much can a Sri Lankan use ? Only 300 units per year, and our environment movement is unhappy with any method to generate electricity to meet the growing demand, except by the use of oil. Oil-fired power projects proposed to be located even in the City of Colombo strangely meet with no resistance at all from the environment movement. It is the hydroelectric projects that will use our own and only indigenous resource, and coal-fired projects that provide cheap, reliable electricity all over the world, that meet with all the objections.

USA has over 200,000 Megawatts of coal-fired power plants. The national average price of electricity in USA is equal to the price of electricity in Sri Lanka. Even today, while pledging to reduce emissions, USA and Japan are building more and more coal-fired power plants. Why ? Because they know that coal is the fuel that will continue to keep their present and future electricity prices low and stable. Take China, where they are building several very large hydroelectric projects and coal-fired power projects. And for Sri Lanka, no no: no more hydroelectric projects and no coal-fired power plants. Let us build more and more oil-burning plants, increase our imports of refined diesel and raise the prices of electricity on and on.

The practical potential to use renewable sources of energy (wind, solar, wave, tidal and OTEC) also requires to be explained. A unit of electricity from wind energy will cost no less than Rs 6.50, solar not less than Rs 25.00, wave and tidal highly sitespecific but not likely to be less than Rs 15.00, and OTEC still awaiting its technology to be perfected. Denmark is the country that gets the largest share of its electricity from these new, renewable energy sources, largely from wind. HOW large is that share? Only a mere 2% and how does Denmark get the bulk of their electricity? From 5000 Megawatts of coal-fired power plants. It is true that USA Denmark and The Netherlands, and even UK and India have large wind-farms of several dozen Megawatts each, but none of them can generate electricity at a price lower than a good hydroelectric project or a coal- fired power plant.

Our environment movement is repeatedly conveying the wrong message to the public who are largely unable to quantify. that wind, solar, etc. can provide all or most of our electricity. Do not evade the issue of cost. No country in the world, including those who finance the environment movement around the world has reached even a 3% level of supply from these new, renewable sources. Yes, wind energy can be given, if you agree the price of electricity to be raised to ten rupees per unit (presently Rs 4.75), and dedicate the entire coastal belt and the hill country to set up wind farms. It must be clearly understood that renewable energy can only perform a supplementary role.

Until the environment movement lets the Upper Kotmale hydroelectric power plant to be built and commissioned, its energy will come from oil-burning power plants, which will have to be built to avert a power crisis. Each year, these power plants will use an average of 160 million litres of diesel, and emit a minimum of 800 tons (typically 1,000) of sulphur dioxide, in close proximity to Colombo. Our people will first inhale these fumes daily as they come, and will also pay increased prices for electricity when the bill arrives at the end of the month. Diesel vehicles already emit 6,000 tons of sulphur at our nose-level, whereas the first coal-fired power plant will also emit 6,000 tons, but at 150 m above ground level. If the coal-power plant does not come up on time, this additional 6,000 tons of Sulphur will also be released at lower levels, in Colombo, from oil- plants that will be built with the kind blessings of the environment movement.

If there is any doubt about the competence of various Government Institutions charged with the responsibility of performing the regulatory functions under the Environment Act, that should be looked-into by the Ministry of Environment. However, power projects cannot wait until the regulatory agencies get their staff trained and experienced in handling the project applications: unless of course, our society is prepared to stop the growth in population and economic activity.

Power cuts will come sooner and later in the new millennium, and with Mr. Withanage's letter on behalf of the Environment Foundation, the public now know who exactly is blocking the implementation of vital projects that are designed to stabilise the electricity supply and its price.

Delay upper Kotmale hydroelectric by one day: the economy loses Rs 2.2 million. Delay the coal- fired power plant by one day: the economy loses Rs 13 million. How and why? Oil has to be imported at a higher cost to supply electricity that would have come from these projects. Who will pay ? Of course the electricity customers: households, industries, buildings, alike. Not bad. The efforts of the environment movement and others cost the economy Rs 15.5 million per day !!!

So, do not say the politicians did nothing about the two upcoming power crises. The real culprits who prevent vital decisions are elsewhere.

Dr. Tilak Siyambalapitiya
Negombo

Opinion