

Power generation: What purpose do seminars such as these serve?

by A. T. G. A. Wickramasuriya

"Dirty Tricks" was the title of an article by Prof. Jim Jeffery of the University of London, appearing in the well known science journal, 'The Ecologist' (Vol. 20 No. 3 May/June 1990). Following is a copy of the abstract of his article.

"The UK Department of Energy and the Central Electricity Generating Board have slowed down wind power research and development and wave power has been deliberately sabotaged to prevent these renewable sources competing with nuclear power. The development of a wave power device which could produce significant amounts of electricity cheaper than could a nuclear plant was stopped by a blatantly cynical campaign run by the authorities which control the research and development of both renewable energy sources and nuclear power in Britain."

About ten years back, I quoted the above in the concluding part of one of my articles titled: "Seminars, Action Plans on Environment and Development," and ended it by stating that sooner or later the story of even dirtier tricks to sabotage wave power in Sri Lanka will be told (Ref. Island of 11th July 1991).

The proceedings relating to power generation in Sri Lanka, that have taken place since then and upto August 1993 can be gathered from the following comment made by the Science Editor of The Island of 12th August 1993 where he refers to my article of that date and titled: "Power from sea waves: Prospects for Sri Lanka."

On 15 July 1993, 'The Island' Science Page carried an article titled "Power from Sea Waves" which outlined progress made by Indian researchers in harnessing sea waves to generate energy.

It is well known that a few Sri Lankan researchers have also studied this potential in relation to our island nation. However, progress has been slow, and research work has not been widely appreciated by energy planners.

In this article, Mr. A. T. G. A. Wickramasuriya, a retired Deputy Director of Irrigation and consultant engineer who has studied wave energy options for Sri Lanka, probes why this line of research has not taken off in our country.

I am glad to state that at least in the past the Institution of Engineers kept copies of articles of scientific and technical value for reference in the library. It is hoped that this practice has continued. Therefore I think it unnecessary to keep repeating all what has been expressed before. Let me therefore cut a long story short by coming to the proceedings of the most recent seminar on power generation held on 16th October 1999, by the Institution of Engineers at this year's annual sessions.

Seminar on "Options for Power Generation in the next Millennium"

We are making arrangements to hold a one day Seminar on 16th October 1999 on "Options for Power Generation in the next Millennium" at Taj Samudra Hotel and it is proposed to limit the number of participants to 150. As we are attempting to obtain sponsorship, the seminar fee will be heavily subsidised as mentioned below.

* IESL Members — Rs. 100 (including Seminar Materials,

* Others — Rs. 500 refreshments, tea & lunch).

Registration will be on first come first served basis. More information will be published in Newsletter/Papers in due course.

For registration, please contact the Education & Training Division of IESL.

— Executive Secretary

From the above it serves that what mattered most to the organisers of the proposed seminar was the venue, refreshments and some other material to be distributed among the audience. No indication whatever being given of the options of power generation to be considered nor the names and designations of the principal speakers. Furthermore, the organisers seemed to ignore the fact that this institution has a membership of over five thousands and therefore

restricting the attendance to one hundred and fifty including non members was unjustifiable.

Be that as it may, I registered my name well in time, and thereafter got in touch with the organisers, viz, the Electrical Engineering Sectional Committee of the I.E.S.L., and expressed my desire to present a paper and speak on wave energy, and to include me among the panel of speakers. I drew their attention to the records in the Institution to justify my request. On 20th September 1999, the chairman of the organising committee informed me that they were unable to comply with my request as the programme had already been finalised.

Programme

First surprise; the programme was issued with a covering letter dated 7th October 1999 i.e. seventeen days after the discussion I had with the chairman.

Second surprise; the topic of the seminar was now going to be "Fuel Options for Power Generation" and not "Options for Power Generation" as was given in the original notice calling for registration.

Third surprise; Wave Energy had found no place in

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the programme, whereas nuclear power had been included, although this source of power had been given careful study by some of our most eminent scientists about twenty years back and rejected it as being unsuitable for Sri Lanka!

The chief guest at this seminar was Hon. General Anuruddha Ratwatte, Minister of Irrigation and Power and Deputy Minister of Defence. The guest of Honour was Hon. Felix Perera, Deputy Minister of Power. Apart from the welcome address by Eng. R. J. Gunawardene, Chairman, Electrical Engineering Sectional Committee, I.E.S.L.; and the keynote address by Prof. K. K. Y. H. S. Perera, Consultant Ministry of Science and Technology and a few others, who were to give some introductory speeches, I give below the items listed for presentation by the principal speakers.

"Fossil Fuel Options for Power Generation"

Oil — Eng. D. Chandrasekera, Advisor, CPC.

LNG — Dr. Janaka Ratnasiri, Consultant, Ministry of Forestry and Environment.

Coal — Eng. Shavindranath Fernando, DGM (Generation Planning), CEB.

"Nuclear and Renewable Source for Power Generation"

Nuclear — Dr. M. P. Dias, Chairman, Atomic Energy Authority.

Wind & Small Hydro — Mr. Sunith Fernando, Consultant.

Dendro — Vidya Jyothi Dr. Ray Wijewardene, Eng. P. G. Joseph

Solar — Mr. L. Gunaratna, Renewable Energy Consultant.

Questions and Comments

At the stage of discussions my comments and questions highlighted the following:-

1. The meaningful and appropriate contribution made by Dr. Ray Wijewardene in his presentation.

2. The serious situation the country would face in

the event of a major war, maybe at a global or regional level, which would cut off the import of fossil fuels, leave alone escalation in prices during other times.

3. The outcome of the working group on wave energy set up by the Ministry of Power and Energy, ref. the Ministry letter of 19th May 1989. (I give below a copy of an excerpt of their letter sent to me by the State Secretary and Additional Secretary to the Ministry Mr. S. Gunaratnam).

Working Group on Wave Energy

The Task Force on New Renewable and Rural Sources of Energy (NERSE) set up under the Ministry of Power & Energy, recently discussed the need to set up a working group on Wave Energy.

This working group will formulate programmes to assess Wave Energy potential in Sri Lanka and would advise the Ministry on the present state of the art of Wave Energy Conversion Technologies. This committee would from time to time report to the NERSE Task Force on the status of the activities. The Ministry would give its support in helping the working group to carry out of its activities."

There was no reply either from the panel or anyone else to (2) above. The reference is quite evident viz that every activity that had to depend on availability of imported fuels will find to a halt!

I am glad that a reply to (3) above did come from no less a person than Eng. D. G. Senadipathy who was not only the President of the I.E.S.L. in 1991 but also a past Additional General Manager, CEB during that period. He said that the task of determining the feasibility of wave energy for Sri Lanka was entrusted to the University of Peradeniya. This leads one to raise three more questions; firstly why then was this organisation not been called upon to present a paper on wave energy at this seminar? Secondly, why was this fact not even being mentioned in the keynote address or in any other presentations? Thirdly, how much was paid to the university for this assignment?

Conclusion

Prof. Perera began his keynote address by quite correctly stating that the topic of this seminar was extremely challenging. Challenging because, a millennium is such a long period, through which even electricity generation itself will change, from the present form to something completely unknown today. Speaking of the next millennium on energy, I cannot but agree with Prof. Perera on the Einstein equation, well known to most scientists, that is $E=MC^2$ where M is the mass of matter, and C is the velocity of light speculation of the possibilities during the next thousand years is no doubt fascinating and good for writers of science fiction.

Before planning development activities for the next thousand years, let us for a moment consider the manner in which natural events have acted or reacted to man's activity at a global level as well as at the local level. As I have said and pointed out on several occasions of gatherings of scientists including the Institution of Engineers as far back as 1964, the land and water wealth of Sri Lanka is deteriorating at an alarming rate, due to the growing impact of the sea that surrounds the island. The topic of the seminar held at the Annual Sessions of the IESL last year, on the 17th October was "Coast Erosion: Are there solutions"? I did not have the opportunity to present a paper in this subject, and could not attend the sessions. The proceedings of this seminar as published in the transactions of the Institution give only the names of speakers, their designations and the topics of their presentations. It is surprising to note that not a word has been mentioned about conclusions or recommendations on this question!

Finally I wish to state that NERD is the one government organisation that has for long been carrying out research on alternate sources of energy. The exclusion of this organisation from being invited to actively participate at the recent seminar, reflects discrimination or to say the least, the irresponsible manner in which seminars such as these are planned and conducted. Worst of all such seminars discourage our scientists carrying out the type of research, meaningful and necessary for our country.