Relevant Provincial and Department Heads
PEOPLE’S REPUBLIC OF CHINA
Subject: SOLAR STIRLING ENGINE SOLUTION FOR ENERGY INDEPENDENCE
July, 2008

Dear Responsible Persons,

Two decades and four years ago I highlighted Solar Stirling Engine as energy independent solution in a key note speech titled “The Promising Future of Stirling Engines in China”. The occasion was the Second Stirling Engine International Conference held at Shanghai, China. I was then visiting consultant from the US to the Chinese Academy of Science representing Stirling Engine R and D Limited Partnership (see attached Conference speech article cover page and key pages of MTI Stirling Engine technology transfer agreement with China). A recommendation letter from Chairman Beno Sternlicht is also attached.

Two decades and more have passed; the engineering community of the world has made great strides in Stirling engine developments, including China. Yet the world energy crisis is more critical than ever, triggered by the recent surge in oil price. The irony is that by all calculations, solar energy reaching us in one hour, if captured and converted to electricity, is enough to serve all of us for one year! Can Solar Stirling be important in helping to bring energy independence? The answer is a resounding yes.

As illustrated, in Southern California Deserts, tens of thousands of Solar Stirling Systems are being erected to become the two largest Solar utility plants in the world. By 2009 the total electricity generated will be 500 MW, enough to serve 300,000 homes. Each Solar Stirling Engine System is designed to provide 25 KW electricity individually. When the two plants are complete, the total electric capacity will however, reach 1750 MW, equivalent to two large size nuclear power plants.

Solar Stirling Engine Systems for converting solar power are the most highly concentrated, state of the art renewable energy technologies, leading all current renewable energy technology, including photo voltaic panels, hot water panels and wind power generators in the use of space. The technology that is chosen by the California utilities has efficiency exceeding 30 % of total solar energy utilization. It is expected that
the total system efficiency will reach 50% with further development. Stirling Engine Systems can also readily compete with nuclear power plant in capacity, cost and safety. That is why it is the preferred technology for California utility owners to build large solar electricity utility plants. I know, because during 1980’s, I was the country representative for Combustion Engineering to promote the Tennessee Valley nuclear power plant sales to China (see attached representation agreement).

For your consideration, we have attached an overview position paper titled “Solar Stirling Engine Solution” in both English and Chinese, detailing the importance and urgency of deploying Solar Stirling Engines Systems nationwide for both large and small scale solar electricity generation. I am sure you will agree that there is no time to loose. That is why we are calling for your support for our Solar Stirling Engine Partnership to solve China and the world’s energy independence. As a world leader of vision and mission, your endorsement and support of this worthwhile undertaking will be most appreciated by the Chinese nation and all people of the world.

In conclusion, as a national and local policy to become more energy independent, to reduce environmental pollution, to practice conservation and to reduce cost of operation all points to the choice of using Solar Stirling Engine Systems as the most viable solution. This recommendation is based on my over five decades of experience as a practitioner of energy conservation engineer in government as well as private industries. China is at a very critical stage of modernization. The important policy of scientific development calls for harmony with nature, within the society and world harmony.

To play a responsible role as a rising and renaissance major nation we must set an example in our renewable energy policy. With the ample evident merits as discussed here, not to include the Solar Engine Systems for consideration as a major part of China’s energy independent policy is unconscionable. Your humbly is available for discussion by invitation from relevant energy implementation department and provincial heads. An Executive Summary of Stirling Engine Concept Proposal is available by request.

In Service of Energy Independence

Francis C W Fung, PH.D.

General Partner
Solar Stirling Engine Partnership (SSEP)
A Commission of World Harmony Organization