Comments on THE GLOBAL WARMING WILD CARD, by Varun Sivaram, in the May 2007 Scientific American with the LFTR in mind, by David Copeland

P.1 (Paragraph 1):Missing from discussion was nuclear energy, as participants knew only of our conventional reactors. Elements of discussion were solar and wind, coal, gas, oil, and conservation. The potential contribution of each of these elements falls far short of what it could be in a LFTR/renewables energy environment.

P.2 Far greater growth is assured by leapfrogging fossil-fuel sources and working toward a LFTR/renewables energy platform.

P.3 The WLEA's commitment is a 95 percent or greater reduction in greenhouse-gas emissions worldwide.

P.4 The WLEA's argument is both greatly increased use of electric power and greatly reduced greenhouse-gas emissions based a LFTR/renewables energy platform.

P.5 A third choice is to invest in wind, solar, and LFTRs. Natural gas may be a viable interim, transitional heat source, but remember: the ultimate goal is to eliminate the burning of fossil fuels.

P.6 Dedicated LFTRs are the answer for industrial process heat and large-load electric power for factories and refineries. Electric vehicles charged from a LFTR/renewables energy platform will obviate the importation of oil for motor fuel.

P.7 With a LFTR/renewables energy platform, India can forget about importing coal and oil.

P.8 LFTRs provide energy cheaper than coal, standing alone or backing renewables.

P.9 A barely adequate grid is the elephant in the living room in the U.S., also. The west should help developing countries with their grids, as we update ours. The focus should be on small-scale, lightly connected units (microgrids) , not on long-distance, high KW transmission from centralized power plants.

P.10 (Also see P.11.) A 40 percent increase in green energy, or even 60 percent, falls short of the increase possible with a LFTR/renewables energy platform. On how LFTRs could help with Indus River Valley water problems, see "A proposal for India and Pakistan", a WLEA paper. On nuclear reactors, contact the WLEA for detailed information.

P.11 (See P.9.) "Green corridors" are tremendously wasteful and cost ineffective, and are unnecessary with a dispersed LFTR/renewables energy platform.

P.12 Good!

P.13 Large-scale solar and wind farms are popular currently, but will prove to be greatly inferior to LFTRs at that scale. Centralized power plants, today's paradigm for energy production, will have no place in a LFTR/renewables energy environment, being cost prohibitive and totally unnecessary. And, advanced storage technologies will make small-scale provision of electric power – to the isolated farm, for example – quite satisfactory.

P.14 Right on, but . . .

P.15 LFTRs promise to be the best source of heat for electric power generation – far better than natural gas – for backing renewables, emitting no greenhouse gas rather than less greenhouse gas. And you can forget about importing natural gas.

P.16 Forget pipelines and terminals. And please, would you be willing to talk to Vikram Singh Mehta about LFTRs?

P.17 No new coal-fired plants should be built at all. The focus on natural gas is misplaced, in light of a far better alternative.

P.18, 19 Conservation is fine for the rich but counterproductive for the poor. We want the use of cheap electric power to improve the lives of the poor, and this must be a factor in developing a national energy platform, a national energy economy. For industry, factories, see P.6: dedicated LFTRs could cut industrial emissions to zero.

P.20 Efficiency in buildings and dwellings should, idealy, eliminate the need for air-conditioning, even in hot climates. (Adobe houses don't need them, but that's a whole other issue.)

P.21 OK

P.22 Right on! With 95 percent electric vehicles charged from a LFTR/renewables energy platform, the transportation sector would hugely reduce greenhouse-gas emissions in India. And, you could forget importing oil for motor fuel: the 5 percent of vehicles burning diesel fuel would use diesel produced from domestic coal using LFTR process heat.

P.23 Indeed.

P.24 Good! And see "a Proposal for India and Pakistan" a WLEA paper.

P.25 Ah, politics.

P.26 There must be economic help from developed countries to redo the grid, on the basis of a carefully determined plan for dealing with different and changing load situations. India must deal with all the problems enumerated in these paragraphs simultaneously and in a coordinated manner.

P.27 Again, a coordinated approach, and foreign aid transparently allocated.

P.28 See P.22. National vs. state issues might be resolved if states were competing for economic development afforded by a LFTR/renewables energy platform.

P.29 LFTR process heat and LFTR-fired electric power would satisfy the steel industry, and coal-to-chemicals technology based on LFTR process heat would prosper the coal industry.

P.30 Right! If India had a well-thought-out plan and clear intention to evolve a LFTR/renewables energy platform, foreign aid would likely back it.

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