

and lack of a distribution system for potassium iodide. This situation has come about partly because of a lack of concern on the part of the medical community, undoubtedly due to the self-serving reassurances of the nuclear industry that accidents such as that at Three Mile Island are a statistical "impossibility" and need not be prepared for.

The health risks of our nuclear program (which will soon require both conventional reactors and breeder reactors) must be critically compared with the health risks of the many alternatives to nuclear: (1) insulation and other retrofitting, (2) conservation: eliminating energy waste, (3) small and large dam hydroelectric, (4) wind generated power, (5) passive and active solar water and space heating, (6) cogeneration: use of waste heat, (7) energy conscious design, (8) tidal power, (9) wave power, (10) geothermal, (11) ocean thermal, (12) photovoltaics, (13) biowaste conversion: gasahol and methane, (14) energy crops: wood and grains, (15) coal gasification, (16) trash as a fuel, (17) strictly regulated use of coal. The first eleven of these alternatives would have a net benefit to health as they reduce the use of fossil and nuclear fuels. Especially when cumulative long-term effects are included, the health hazards of nuclear power are clearly far greater than those of all other energy sources. There has been a complete lack of a meaningful effort on the part of government to develop and promote the alternatives. We call for a coordinated effort on the magnitude of the space program to develop and implement these alternatives as a first resort.

LOW LEVEL RADIATION

Since the discovery of radiation by Becquerel in 1896, those responsible for radiological protection have assumed that any magnitude of radiation exposure is harmless until it is proven beyond a reasonable doubt that exposures of that magnitude constitute a health hazard. (Fig.1) This attitude continues to result

Figure 1 Permissible Exposures to Ionizing Radiation Recommended by the International Committee on Radiological Protection

1934--- 52 rad/year
1950--- 15 rad/year
1956--- 5 rad/year