May 5, 2005

Dear Colleague:

On February 1, 2003, our nation’s space program saw yet another setback when the Space Shuttle Columbia disintegrated on re-entry into the Earth’s atmosphere. This was a tragedy for the families of the shuttle’s crew and for the NASA program overall.

It could have been much worse. Suppose nuclear fuel had been involved. In 1964, the SNAP-9a U.S. navigational satellite disintegrated during an inadvertent re-entry dispersing 2.1 pounds of Plutonium to every continent. On January 24, 1978, the Soviet nuclear-powered surveillance satellite, COMOS 954, crashed in the Northwest Territories of Canada. An extensive “clean-up” effort is estimated to have recovered less than 1% of the craft’s 110 pounds of radioactive highly-enriched uranium fuel. And on November 16, 1996, the Russian Mars 96 project failed to achieve its trajectory toward Mars. It scattered debris, including nearly half a pound of plutonium across Chile and Bolivia.

The scientific understanding of the human health implications of radiation exposure at low doses, particularly from inhaled or ingested sources, continues to evolve. The traditional International Commission on Radiological Protection (ICRP) model was developed from long-term observation of Hiroshima survivors. But this model dramatically underestimated the health implications of Chernobyl, Depleted Uranium and other recent exposures. The new data and observations raise grave concerns.

I write to invite you to join me as a co-signer on the two attached letters. These are intended to protect our citizens from the potential of a catastrophic nuclear accident posed by the Prometheus Project, a NASA / DoE / Pentagon program to develop and deploy a nuclear propulsion rocket.

The first letter is directed to the office that will prepare the Preliminary Environmental Impact Statement for the Prometheus Program. The second letter is to express the support of Members of Congress for shifting Federal funding from the development of nuclear propulsion systems to research and development for solar and other alternative energy systems that can support our space program.

If you would like to join me as a cosigner on either of these letters, please give a call to my staff, Hugh Esco at 5-1605 or write him at hugh.esco@mail.house.gov.

Sincerely,

Cynthia McKinney
Member of Congress
May 27, 2005

NASA Prometheus PEIS
NASA Headquarters
Exploration Systems Mission Directorate
Mail Suite 2V-39 300 E Street, SW.
Washington, DC 20546-0001

Dear Administrator Griffin:

This letter is sent to express the grave concerns of the undersigned Members of Congress with the Project Prometheus nuclear rocket now being considered by the National Aeronautics and Space Administration. We question why such a risky undertaking would be pursued while research and development for alternative space energy sources has been back-burnered.

Previous proposals for nuclear rockets have been cancelled due to concern over the environmental impact. There already exists an exceedingly expensive backlog of sites awaiting decontamination following past nuclear production activities at Department of Energy facilities. And in fact, NASA itself has generated its own concerns about the degradation of air and water surrounding its launch site at Cape Canaveral.

If NASA insists on pursuing this dangerous idea, we trust that the Environmental Impact Statement will address at least the following questions:

1) What will be the military application of Project Prometheus?

2) Understanding that multiple reviews of the research in the area (including by the Committee Examining Radiation Risks of Internal Emitters and the European Committee on Radiation Risk) have concluded that the health effects posed by radio-isotopes which have been inhaled or ingested are vastly more serious than predicted by the existing risk models, what would be the environmental and human health implications of each foreseeable worst-case nuclear rocket accident scenario?

3) What is to protect us from a repeat of the failed launches and inadvertent re-entries we have experienced in the past, including the SNAP-9a satellite in 1964, the COSMOS 954 in 1978, the Russian Mars 96 mission in 1996, the Challenger launch accident in 1986 and the Columbia re-entry accident in 2003?
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Re: Prometheus Nuclear Propulsion PLIS
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4) Given that the Price-Anderson Act limits U.S. liability to clean-up space nuclear accidents around the world, what would be the fiscal and human health implications of each foreseeable worst-case nuclear accident scenario?

5) What sites are planned for the launch of nuclear vehicles?

6) What sites, around the United States, around the globe and in space face the risk of radioactive contamination from the development, production, storage and use of a nuclear rocket and its components?

7) What happens with a nuclear rocket contaminated by the highly toxic and volatile products of fission when it returns to Earth and what risks of exposure does it present to the human population and the environment on which we depend?

We appreciate your attention to these important questions.

Sincerely,
May 13, 2005

The Honorable Jerry Lewis, Chairman
The Honorable David R. Obey, Ranking Member
House Committee on Appropriations

The Honorable Frank R. Wolf, Chairman
The Honorable Alan B. Mollohan, Ranking Member
Subcommittee on Science, State, Justice and Commerce and Related Agencies

Dear Congressmen:

NASA, the Department of Energy and the Pentagon are currently collaborating on the Prometheus Program to develop and deploy a nuclear fission propelled rocket for the nation’s space program. Such a vehicle, if put into use would pose a grave risk to the health and well-being of our citizens, should an accident ever occur again as has often happened in the past.

On February 1, 2003 the Columbia Space Shuttle disintegrated on re-entry into the atmosphere. While tragic, the risk it posed to human health pales in comparison to other accidents. On November 16, 1996, the Russian Mars 96 mission failed to achieve its Mars bound trajectory and disintegrated over Chile and Bolivia, scattering its payload of .44 pounds of Plutonium across the Andes. On January 24, 1978, the Soviet COSMOS 954 crashed in the Northwest Territories, Canada. Estimates of the clean-up efforts effectiveness suggest that less than 1% of the craft’s Uranium-235 power source was recovered. A declassified report on the MORNING LIGHT clean-up effort reports that “the design of the (nuclear reactor) plant provides for its destruction and burning upon entering denser layers of atmosphere” raising serious health concerns for the impact of inhaled or ingested radioactive particles. And in 1964, the U.S. plutonium powered navigational satellite SNAP-9a inadvertently re-entered the atmosphere dispersing 2.1 pounds of Plutonium-238 to “all continents and at all latitudes.” Dr. John Gofman, professor emeritus of medical physics attributes rising global lung cancer rates to the SNAP-9a debris.

The scientific understanding of the human health implications of radiation exposure at low doses, particularly from inhaled or ingested sources, continues to evolve. The traditional ICRP model was developed from long-term observation of Hiroshima survivors. But this model dramatically underestimated the health implications of Chernobyl, Depleted Uranium and other recent exposures. The new data and observations raise grave concerns.
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The Report of the Committee Examining Radiation Risks of Internal Emitters (CERRIE) concluded that not enough was known about “internal emitters”, but that existing models (based on temporary external exposure) which correlate health risks with dose significantly underestimated the danger of radioactive exposure from ingested particles.

The 2003 Recommendations of the European Committee on Radiation Risk (ECRR) conducted a review of the epidemiological research done among communities exposed to internal, chronic and isotopic radioactive substances. The ECRR concluded that these “studies falsify the ICRP risk models by factors of between 100 and 1000.”

The undersigned Members of Congress write to urge that you support prohibiting Federal tax dollars from being expended on this dangerous and ill-advised program and further that you shift the $319.6 million to fund the research and development of alternative energy sources for the nation’s space program, particularly for solar programs.

Geoff Landis, a scientist at NASA’s Glenn Research Center in Cleveland, Ohio maintains that "there really isn’t any edge of sunshine" if resources are put into developing new non-nuclear technologies for space travel. The non-NASA, non-military commercial and civilian potential for such development are profound and could go far in addressing our nation’s precarious position with respect to energy security and the growing trade deficit we face.

Let us be guided by the precautionary principle when it comes to such dangerous programs.

Your support for this request is appreciated.

Sincerely,