## **False Claims of Weapon Threat**

This letter was sent by nuclear scientist Clinton Bastin on March 27 to Honorable Yukiya Amano, Director General, International Atomic Energy Agency; Honorable Benjamin Netanyahu, Israeli Prime Minister ; Honorable Mohammad Khazaee. Ambassador of Iran to the United Nations; and U.S. President Barack Obama.

Dear Mr. Amano, Mr. Prime Minister, Mr. Ambassador, and Mr. President:

Following is a slightly revised version of my March 18 message to Mr. Amano explaining how and why IAEA and other claims of a nuclear weapon related activity or weapon threat from Iran's fully safeguarded nuclear programs are false, and requesting that IAEA publish a report explaining why the claims are false.

I have not received a response nor learned of any action to correct the false claims.

Mr. Prime Minister and Mr. Ambassador, please encourage Mr. Amano to correct the false claims.

Clinton Bastin Chemical Engineer/Nuclear Scientist, U.S. Department of Energy (Retired)

The recent false claim by the International Atomic Energy Agency (IAEA) of possible nuclear weapon related activity in a non-nuclear facility in Iran supports false claims of a nuclear weapon threat from Iran's important, fully safeguarded nuclear programs. These claims:

• support devastating sanctions and dangerous threats against Iranians

- · could lead to military action and war
- undermine international safeguards,

• support construction of useless missile defense systems which impede negotiations to reduce nuclear weapons

• deny the importance of peaceful uses of nuclear materials and technology

• preclude negotiations to resolve conflicts resulting from many years of mistakes and misunderstandings.

• result in more conflicts

• should be corrected quickly by an IAEA report explaining why the claims are false.

The IAEA claim of possible weapon-related activity in non nuclear facilities is testing of high explosives. This is needed for design of advanced, more complex, implosion-type weapons, but not for gun-type weapons, the type weapon Iran could but would not build.

The following information would be valuable for the IAEA report. It is based on experience as director of U.S. Atomic Energy Commission programs for production of nuclear materials and nuclear components for weapons and the successful U.S. nonproliferation initiative with India, consultation to US national security agencies on nuclear weapon threats in other nations and knowledge of nuclear programs in most nations.

Iran could not produce a nuclear weapon with its existing materials, facilities and technology. Iran could withdraw low or 20% enriched uranium hexafluoride gas from fully safeguarded inventories and--if all went well--enrich it to 90%, the concentration needed for a weapon. But Iran would need to develop processes and design and build new facilities to convert the gas to metal, fabricate two fifty-pound components and assemble them with high explosives for a gun-type weapon. One component would be a cylinder; the other would have a cylindrical cavity. Detonation of high explosive would propel the cylinder into the cavity, causing the nuclear explosion. The conversion and fabrication processes are dangerous because of high potential for a criticality accident. Assembly of metal components with high explosives for a weapon would be even more dangerous. An accidental detonation during or after final assembly could result in a nuclear explosion.

A gun-type weapon small enough for delivery by an Iranian missile would have a high explosive equivalent yield of about one kiloton, comparable to US gun-type tactical weapons.

Iran would not sacrifice a multibillion dollar nuclear program for the dubious possibility of having a low-yield nuclear weapon fifteen years from now.

Use of low and 20% enriched uranium for reactor fuel, which is underway and intended to continue, eliminates any possibility for its further enrichment and eventual use in a weapon

The ability of International Atomic Energy Agency (IAEA) inspectors to easily and quickly determine the amount of nuclear material in a facility, coupled with recognition of the importance of nuclear power and other peaceful uses of nuclear technology, are the only assurances nations have that their neighbors are not devoting nuclear materials for weapons. But inspectors do not have experience with and do not understand nuclear weapons or the technology for their production. They have been provided long lists of processes or items that may - or may not - indicate work on weapons.

In addition to the claim of possible weapon-related activities in non nuclear facilities, IAEA inspectors have found sketches that they claim indicate work on weapons. But sketches for a nuclear weapon program would be stored in highly secure safes or vaults, not left where they could be found by others. The sketches are fakes, prepared by dissidents to cause problems.

Former IAEA Director General Mohamed ElBaradei understood the problem and did not support claims of an Iranian nuclear weapon threat.

This problem is compounded by the fact that all chemical companies that managed and all chemical engineers that directed US programs for production of nuclear materials and components for weapons have left the government. The Department of Energy, whose former officials directed programs to produce nuclear materials and provided consultation to U.S. national security agencies on proliferation threats in other nations, lost ability to do both.

Please let me know of your plans for this report and additional information needed.

**Clinton Bastin** 

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