

SOCIETY RESPONSE TO NUCLEAR ENERGY

Professor Natividad Carpintero Santamaría

General Secretary, Institute of Nuclear Fusion - Polytechnic University of Madrid

C/ José Gutiérrez Abascal n° 2 – 28006 Madrid (Spain)

E-mail: ncsantamaria@telefonica.net

ABSTRACT

Energy demand in the world is growing increasingly, among other factors due to economic development. Every way of producing electricity has got their own drawbacks and has implicit environmental impact. Among all the energy sources, nuclear energy is the most polemic because of the way it is presented by the mass media. This aspect provokes controversy to occidental societies which reject this kind of energy with arguments normally based on a wrong and insufficient knowledge of the matter. The antinuclear discourse, promoted late in the seventies, has gone deeply into the collective social unconscious and has undermined public acceptance of nuclear energy due to the fact, deeply exploited by antinuclear groups, of linking nuclear energy with the atomic bombing of Hiroshima and Nagasaki. In this sense, it is important to mention that in Japan there was a profound resentment and opposition to nuclear energy, because the memory of the nuclear bombings was permanently alive. However when the Japanese government told its people that this energy was necessary to boost their industrial development, Japanese citizens in an unprecedented attitude of patriotism overcame their most antagonist feelings, in order to contribute to the industrial development of their country. The result was that most of them voted in favour. Presently Japan gets 30% of its energy by means of 56 nuclear power plants and 1 more is under construction. Antinuclear groups took as their best emblem the accident of Chernobyl to justify their opposition to the nuclear power plants. The manipulation of this accident has been one of the most shameful in the nuclear history. It is widely known among the experts that the reactor used in Chernobyl was a type of military plutonium converter with a positive temperature reactivity coefficient, which made very dangerous its functioning. Any nuclear regulatory commission in democratic and responsible countries would have never authorized the use of this reactor. For this reason, it is very important to tell the truth to public opinion leaving out tendentious and demagogic positions. The energetic future will be based on nuclear fusion, since one of its fuels is deuterium, found in the water and accessible to any country in the world. Nuclear fusion is the best alternative to the present dependence of primary energies based on fossil fuel sources. This paper presents different alternatives to improve the image of nuclear energy among population in a moment in which several countries present an onset of crisis in the energetic sector due to the economic growth. The fact is that the demand may start to be overcome by the offer and this circumstance, together with the global warming of our planet as reported by the United Nations, have provoked a new perspective in the debate of boosting nuclear energy as a fundamental source because it is ecologically and economically sound.