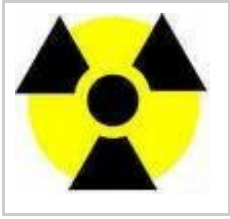


RADIATION SAFETY: Lessons from Japan

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The world has accepted the Nuclear Reactors to produce electricity because several reasons. Most important being the industrialized world has become addicted to the modern ways of life, which are driven by electricity. In the rest of the third world also overgrowing population is causing scarcity of the electricity, which has become an essential part of life in the past century.

While most of the electricity is produced from coal, a substantial portion is produced from petroleum products like, furnace oil, natural gas, etc. However, because the combustion of coal or petrochemical cause environmental pollution. Hence when the electricity was found to be produced from the nuclear fission, its cleanliness became the most attractive attribute for everyone.

Most of the Europe and US started building nuclear power plants, with France being most enthusiastic with biggest dependence on nuclear from its 58 reactors. US has over 100 and Europe as a whole has over 150 reactors with Japan and many third world countries also wetting their feet in this clean and initially expensive but on ongoing basis cheap source of electricity.

Nuclear fission is something new to mankind. Ionizing radiation experience has been only once tested on large scale in WWII by US in the shape of two atomic bombs struck in Japan to end that destructive war. Since then no real experience of the destructive ability of the nuclear radiation has been experienced except in accidents like Chernobyl in Russia and Three Mile Island in US, which happened in nuclear reactors. Despite that and the problem of having to store the spent fuel rods for many thousands of years, the nuclear remained attractive option for many countries. US have been promoting to give more licenses to establish more reactors for this clean electricity.

However, the large catastrophe of Japan in March 2011 has now made everyone think again on the dangers of the nuclear as a source. Japan accident was too unfortunate to have one of the largest earthquake followed by tsunami and that in turn causing radiation scare from the spent rods, which could not cooled well enough because of loss of water, and pumping stations due to electricity failure, the very commodity that the reactor was producing.

It is only just about a week since the accident happened in Japan and all measures to contain it is being taken. However, we all need to put our heads together to start thinking as to what is right for our coming generations. Should we use nuclear source or not with its associated problems, scare and real dangers.

United Nations should take lead and do the following;

- Take a real stock of present facilities and its precaution and protective mechanisms.
- A commission needs to estimate the real issues of natural gas as source, since it is abundant.
- If we need to decide on nuclear, what are the minimum but robust precaution need be taken.
- Until we find answers to this a moratorium be placed on new facilities
- Old facilities with any speck of doubt of its safety must be closed until found to be acceptable.