

Coursework:

The vote (a narrow one) was just passed on the 19 September 2008. There was a lot of controversy in the country as whether this deal would benefit India. However the main argument against this was not in the matter of the political parties being played out by different political groups. Although the increase in capacity for nuclear energy was the main reason for this deal the question is whether technology really has way to go after our fossil fuels are depleted and none properly discussed. Indians find nuclear energy as a source to generate power to not the solution rather another problem which they would still pay heavily for if accident takes over.

Firstly nuclear energy is not renewable, which many people say it is. The fuel for a nuclear power plant consists of fuel rods consisting pieces of fissionable material (uranium rods) which is enriched in U-235. After around 18 months the rods have mostly fissionable material to allow the reactor to continue to run at full power. The fuel rods are then removed and replaced with new rods. The rods are put in a fissionable storage tank for around five years till they stop emitting heat. At this point they can be taken to a reprocessing plant where they can be enriched again, however this is at the moment not done and therefore still a heavy cost measure. This means that the process of enrichment might end but the issue of uranium resources will come up. At the moment from the current uranium resources available depleted by as early as 2025 especially with the rapid expansion in the number of nuclear power plants in the world.

Secondly nuclear energy poses a great health risk to the people working in and around the plants (Chernobyl, Three Mile Island, Chernobyl are just three examples of what can happen if fission nuclear accident). At Chernobyl one of the blocks of the plant exploded making 100,000 kilograms of highly radioactive material, which was equal to 1000 Hiroshima bombs, into the surroundings. This has significantly increased the amount of abortions, stillbirths, and childhood mortality, a growing number of birth defects and genetic abnormalities, retardation of mental development, a growing number of leukaemias, leucoses, lymphomas, sarcomas, cancers, diseases of the respiratory, cardiovascular, gastrointestinal, endocrine systems and up to this day, children in the region and concentrated forest live in contaminated houses, play in contaminated outside and breathe contaminated air. The effects of Chernobyl have been played down and covered up to so they want to promote nuclear energy as a clean source of power (Chernobyl and Three Mile Island have seen similar effects with a rise in children with leukaemia and lymphoma). Scientists have said that it is only a matter of time before another accident like Chernobyl happens as 100% safety will be guaranteed.

Even with all the health related issues put aside, the waste produced from the plants is highly toxic and volatile. This waste is not biodegradable and therefore has to be dumped in some artificial structure which is not practical in many country and often are suffering from over-crowding. People feel that it is a clean form of energy as it doesn't emit CO2 however the radiation from waste, actually it is much worse as it affects us directly.

In the line of the economic side it is strange to think that people are willing to produce nuclear energy with its inherent financial costs (each power plant costing \$2 billion and producing