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(भारत सरकार का उद्यम)  
**NUCLEAR POWER CORPORATION  
OF INDIA LIMITED**  
( A Govt. of India Enterprise)

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## **PRESS RELEASE**

### **No Health Hazard from Nuclear Power Plant Operation**

Certain sections of press & media and public have been seeking information regarding effects on health due to operation of nuclear power plants in general and Kaiga Generating Station (KGS) in particular,

The core safety objective in operation of a nuclear power plant is to ensure that there is no undue radiation exposure to the occupational workers, public and environment. This has been achieved by adopting appropriate technologies, personal protection measures and best practices. Indeed, the radiation dose to the public at all the nuclear power plants, over the years, has been a very small fraction of the limit stipulated by the Atomic Energy regulatory Board (AERB). Thus operation of nuclear power plants poses no health hazard to the surrounding population.

Systematic base line epidemiological studies of employees and their family members have been carried out at all the nuclear power stations in India. In addition to this, annual medical examination of occupational workers at each nuclear power plant is carried out in line with regulatory requirements. These medical examination reports are maintained at each nuclear power plant and are verified by the AERB during periodic regulatory inspections. Further, the medical examination report in respect of each nuclear power plant is also reviewed by the Advisory Committee on Occupational Health (ACOH) of AERB, comprising of medical experts which informs Nuclear Power Plants of any observed case of occupational diseases and suggests ways to improve the occupational health profile.

No rising morbidity pattern has been observed in any of the nuclear power plants in India including KGS.

Considering the sensitivity associated with medical history, as per medical ethics, it is shared with the individuals only. This is also formulated in the AERB Radiation Protection Rules 2004 (Rule 23).

Prior to setting up of nuclear power plants of NPCIL, independent Environment Survey Laboratories (ESL) under the control of Bhabha Atomic Research Centre (BARC) have been set up to collect baseline radiation data of various environmental matrices like air, water, soil, grass, crops, cereals, fruits, eggs, fish, goat thyroid etc. The ESL monitors these matrices in an area 30 km around the plant. Around 1300 to 1500 samples are collected every year. The data collected since operation of the nuclear power plants in India has not shown any measurable increase over the base line data, thus evidencing that there has not been any impact on the environment due to operation of nuclear power plants.

Various international medical journals have quoted extensive medical research carried out globally that has shown rising patterns of carcinogenicity associated with several factors. Some of these are mentioned below:

1. Changing eating habits – fast food culture is partially responsible for some gastrointestinal cancers
2. Mobile phone – a probable radiation hazard
3. Stress – reduced functioning of immune system could lead to viral-induced cancer
4. Smoking – Lung Cancer
5. Alcohol – Liver Cancer
6. Gutka – Oral Cancer
7. Atmospheric Chemical Pollutants – Some of atmospheric chemical pollutants have been associated with various types of malignancies.

A scientific study by *GLOBOCAN* –an international agency for cancer research based in France, has shown that the international average deaths per thousand persons from cancer is 1.06 among general population. As against this, the national average of deaths in India per thousand persons is reported to be 0.68. The NPCIL average is far lower, at 0.17 per thousand. In addition to this, the most notable fact is that, there have been no incidences of death from thyroid, skin and bone cancers among NPCIL employees, which perhaps are the prime cancers of radiation exposure origin. Thus it is amply evident that there has been no measurable increase in rate of cancers in the population as a result of operation of nuclear power plant.

  
(N Nagaraj) 10/06/2011