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Xpressions

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Nuclear energy: It really is quite clean and handy

The nuclear power plants of our country are in the eye of the storm. The protestors say that the cooling water draining into the sea at Kudankulam will wipe out the marine flora and thereby jeopardise the livelihood of the fisher-folk. The others say that with radiation in the atmosphere, deadly diseases like cancer will spread.

In order to find out the reality, a group of scientists, doctors and environmentalists recently made a trip to Narora Atomic Power Station (NAPS) in Bulandshahar district, at Narora.

Despite being dog tired after a long journey from Delhi in this sweltering heat, we agreed for a drive to the forest around the power plant before sunrise the next day.

The artificial forest created around 1.6 km radius of the NAPS today boasts of over seven lakh trees and a variety of grass and bush.

Dotted with small and large water bodies, the forest has a variety of fauna ranging from blue-bull to tiger. As we entered the forest, a troupe of monkeys, sitting in a row on the high, boundary wall watched us with curiosity.

THE OBSERVATIONS

- In order to find out the reality of the nuclear power plants and their safety concerns, a group of scientists, doctors and environmentalists recently made a trip to Narora Atomic Power Station (NAPS) in Bulandshahar district, at Narora.
- The artificial forest created around 1.6 km radius of the NAPS today boasts of over seven lakh trees and a variety of grass and bush.
- Waste but treated water from the power plant campus is discharged into a tributary of the Ganga Canal. At the point of confluence, myriads of insects, fish and large flocks of water birds negated the possibility of radiation, if any.
- The twin towers that rose like ghosts in the background, were the cooling towers of the plant, we were told. It was a revelation that water for cooling the superheated steam from the reactor is allowed to drop in a spray in these towers and collected in a tank underneath and re-circulated. Water used as coolant is never allowed to go out.

A peacock's call drew our attention and lo, he was dancing with his plumage fully spread. It shone brilliantly against the rising sun. Herds of blue bulls, deer, wild boar, hedgehog, rabbits and a variety of birds, including the rare ones like the red-crested pochard and Indian skimmer, were abundant.

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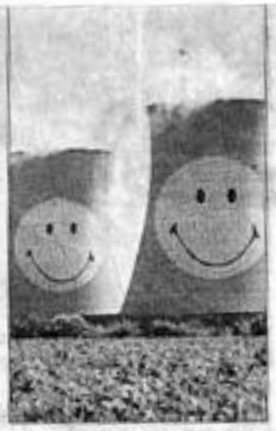
A part of this water is lost as water vapour, clouds of which are often seen rising from the tower at the top. Water used as coolant is never allowed to go out. A variety of birds hovered in the sky above the clouds of vapour, allaying the fear of radiation up there.

Inside the NAPS, a laboratory to check fallout, if any, operates all the year round. Set procedures of monitoring contamination, if any, within the 1.6 km radius of the reactor and around six km and then around a 30 km radius are strictly followed by this laboratory.

All the gases from the reactor are passed out through a 140-m high chimney. All kinds of metals in these gases are separated and traces of radiation are constantly monitored. This chimney can shut down the plant in case any radiation escapes.



A 24X7 monitored control room keeps a hawk-eyed watch on everything within the reactor and the power generation unit. It was amazing to see pigeons and other birds throng the turbine room, despite the heat. Perhaps the whine of generators attracts them!

Those birds are ignorant but they thrive there with no signs of radiation. We, too, are seemingly ignorant and scared; we want to shut our nuclear power plants.

There are risks no doubt in power generation, but is the gas cylinder in our kitchens free from risks?

(The writer is a former director of the Geological Survey of India).

(THE VIEWS EXPRESSED BY THE AUTHOR ARE PERSONAL).