

DAE to set up nuclear reactor in Visakhapatnam

MUMBAI, Oct 12 (PTI)

THE Department of Atomic Energy (DAE) will set up an exclusive nuclear reactor in Visakhapatnam to produce medical isotopes aimed at boosting India's self-reliance in radioisotopes and making cancer treatment more affordable, a senior Bhabha Atomic Research Centre (BARC) official said.

The proposed facility, which is to be established under a Public-Private Partnership (PPP) model, will be India's first reactor dedicated solely to the production of medical isotopes used in diagnostics and therapy for cancer and other diseases.

"DAE has decided to set up a nuclear reactor exclusively for producing isotopes for medical

The proposed facility will be India's first reactor solely for the production of medical isotopes and therapy for cancer and other diseases.

purposes, particularly for cancer treatment. It is expected to come up within the next four to five years under a PPP arrangement," the official told PTI.

He said the reactor will be located in Visakhapatnam and will not only cater to the domestic demand but also support exports. "It will take care of the entire requirement within India and also enable exports," he said.

Emphasising the project's significance, the official added that approval has been granted and funding is awaited.

"Since it is a PPP initiative, pri-

private players are expected to invest and become stakeholders. They will have the rights to sell the isotopes, while NPCIL and BARC will be involved in designing and execution. The operation will be handled by NPCIL," he said.

Currently, India does not have a dedicated reactor solely for isotope production. The existing reactors used for nuclear medi-

cine also conduct physics and radiation-related experiments, they said. BARC presently supplies around two lakh units of nuclear materials annually to medical institutions across India for diagnostics and treatment of diseases such as cancer. "About 10 per cent of the total patient load is handled by Tata Memorial Centre, while 370 hospitals together contribute nearly 60 per cent," the official said.

According to BARC's data, nearly two lakh isotopic sources are supplied annually for PET scans, CT scans, and other nuclear medicine procedures.



Fuel loading at fast breeder reactor in Kalpakkam to begin this week

NEW DELHI, Oct 12 (PTI)

HAVING overcome multiple challenges, fuel loading at India's first prototype fast-breeder reactor in Tamil Nadu's Kalpakkam is expected to start next week.

Nuclear scientists, working on the sodium-cooled 500 MWe reactor, had encountered some problems.

"Early next week we will start loading the fuel. Last time, after the Prime Minister inaugurated it, we could not load the fuel

as we encountered some technical problems. We have solved them now," a senior official told PTI. Prime Minister Narendra Modi had witnessed the core loading at the facility in March last year.

Once operationalised, the 500 MWe Fast Breeder Reactor will be only the second of its kind in the world. Russia operates the other fast breeder reactor of 800 MWe. A few other countries had tried mastering the complex technology, but had given up.

China threatens 'resolute measures' if US clamps 100% tariffs

BEIJING, Oct 12 (PTI)

CHINA on Sunday defended its latest export control measures on rare earths and related items as a legitimate action to safeguard global peace, warning the US of "resolute measures" if President Donald Trump proceeds with his threat to impose 100 per cent tariffs on Chinese exports.

China on Thursday announced new restrictions on the export of technologies and equipment related to the mining and processing of rare earths, lithium batteries, and rare earth-based superhard materials.

The controls, which took effect immediately, also cover overseas transfers of production technologies. Beijing said the deci-

sion followed concerns that some foreign companies were using Chinese-sourced materials for military purposes.

Reacting to China's move, US President Trump threatened to impose a 100 per cent tariff on Chinese goods from November 1 and hinted at curbing exports of "any and all critical software", reigniting the trade war between the world's two largest economies. Responding to a question on Trump's threat, the Chinese Commerce Ministry in a statement on Sunday accused the US of overstretching the concept of national security and abusing export control measures against China, including in the semiconductor and chip sectors.

"Willful threats of high tariffs

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are not the right way to get along with China. China's position on the trade war is consistent: we do not want it, but we are not afraid of it," the statement said.

It urged the US to "promptly correct its wrong practices", "adhere to the important consensus" reached during phone

calls between the two heads of state "to protect the hard-won outcomes of consultations", while resolving trade differences through dialogues and "mutual respect and equal-footed consultation". "If the United States insists on going the wrong way, China will surely take resolute measures to protect its legitimate rights and interests," the statement said.

As a responsible major country, China employs export controls on related items according to the law, in order to better defend world peace and regional stability, and to fulfil non-proliferation and other international obligations, it said. The statement clarified that China's export controls "are not export bans" and

that licenses will be issued for eligible applications, including exports for humanitarian purposes such as disaster relief and medical assistance.

China, which accounts for about 70 per cent of global rare earth mining and nearly 90 per cent of their processing, is the world's dominant supplier of the minerals critical for manufacturing electronics, automobiles, wind energy, and defence equipment. The US, the EU and India are the top importers of China's rare earth metals. The Commerce Ministry said before the measures were announced, China had already notified relevant countries and regions through bilateral export control dialogue mechanisms.

Bhupender Yadav heads to Brazil for key pre-COP talks



NEW DELHI, Oct 12 (PTI)

UNION Environment Minister Bhupender Yadav will attend the pre-COP meeting in Brasília on October 13 and 14 as India steps up preparations for the UN climate summit COP30, which will be held in Belém, Brazil, in November.

The two-day pre-COP brings together environment and Climate Ministers, senior negotiators and observers to narrow differences on politically sensitive topics and try to build ministerial consensus ahead of the UN climate conference in Belem.

NSE faces around **170 mn** **CYBERATTACKS DAILY**

Dedicated 'cyber warriors' ensure uninterrupted ops

MUMBAI, Oct 12 (PTI)

THE National Stock Exchange (NSE) faces around 170 million cyberattacks daily, requiring a dedicated team of "cyber warriors" to work around the clock to ensure uninterrupted operations.

The NSE recorded its highest-ever 40 crore (400 million) cyberattacks in a single day during 'Operation Sindoor', designed as a DDoS sim-

ulation. However, attackers failed to cause any damage due to the coordinated efforts of men, machines, and advanced technology.

"Every day, millions of cyberattacks take place on the NSE. But our technical teams, their systems and technology combat these attacks round the clock using specialised software," a senior NSE official told PTI.

Pakistan, Afghanistan

CROSS-BORDER CLASHES ESCALATE

■ Pakistan claims 19 Afghan security posts captured and over 200 Taliban terrorists killed in response to “unprovoked” attacks by Afghan forces; Kabul claims 58 Pakistani soldiers killed during retaliatory ops

ISLAMABAD/PESHAWAR, Oct 12 (PTI)

PAKISTAN seized 19 Afghan military posts and “terrorist hideouts” in response to what it termed “unprovoked” attacks by Afghan forces in the border areas, security sources said on Sunday, while Kabul claimed that 58 Pakistani soldiers were killed and 30 others injured during the retaliatory operations. At least 23 Pakistani soldiers and over 200 Taliban and affiliated terrorists were killed in intense overnight clashes along the Pakistan-Afghanistan border, the Pakistani army said on Sunday, as tensions escalated between the two neighbours amid mutual accusations of cross-border aggression.

The Taliban-led government’s Defence Ministry confirmed the attacks early on Sunday, saying that its forces had conducted “retaliatory and successful operations”. “If the opposing side again violates Afghanistan’s territorial integrity, our armed forces are fully prepared to defend the nation’s borders and will deliver a strong response,” the Ministry said. Afghan forces targeted Pakistani posts at Angoor Adda, Bajaur, Kurram, Dir, and Chitral in Khyber Pakhtunkhwa and Baramcha in Balochistan.

Zabihullah Mujahid, the Taliban Government’s chief spokesman, said that 58 Pakistani soldiers were killed and around 30 others wounded during the operations on Saturday night, ‘Tolo News’ reported. Mujahid added that during the retaliatory operations across the Durand Line, 20 Pakistani security outposts were destroyed, and numerous weapons and military equipment were seized.

He said that nine Afghan soldiers were killed and 16 others were wounded in the operations, according to the report.

The spokesperson said that the operation was halted at midnight following
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