

Declared dead after Chernobyl, nuclear lives again

As it should be.

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When reactor number four at the Chernobyl nuclear power plant in Ukraine exploded on April 26, 1986, spewing radioactive dust over much of Europe, many people believed the disaster sounded the death knell for nuclear power.

The radioactive fallout -- up to 10 times the amount released during the Hiroshima atomic bombing in 1945 -- spread across Ukraine and its neighbors and reached eastern Europe, Scandinavia, northern Britain and even eastern United States.

Estimates of human deaths from the explosion vary from tens to thousands. The accident made Chernobyl a global byword for all the perceived ills of nuclear power.

But 20 years after the world's worst nuclear accident, atomic power is back in favor in several countries.

"The safety record of the nuclear industry since Chernobyl has been very good. Predictions of a major incident every 10 years have simply proved incorrect," Malcolm Grimston of the Royal Institute for International Affairs think-tank said.

"Fossil fuel prices have shot up in the past decade, so the economic argument has swung back in favor of nuclear power."

Booming economy China is embarking on a major nuclear building program, the United States has given the green light to new nuclear plants and at least 15 other nations from Turkey to Australia are considering nuclear power.

Britain is debating whether to renew aging nuclear plants, -- despite sharp controversy -- and the Group of Eight rich nations is expected to endorse atomic power at a July summit.

NUCLEAR AGE?

The reasons for nuclear's rehabilitation are simple, although they stem from intractable global challenges.

Many scientists say global warming, blamed in large part on the burning of fossil fuels in power plants, factories and cars, could herald catastrophic climate changes such as more droughts.

Turmoil in the Middle East, declining reserves of oil and gas elsewhere and the rising power of unpredictable, energy-rich Russia have pushed security of supply up the political agenda.

The nuclear industry boasts it has zero carbon emissions and, as fuel can be stored for decades, is not at the mercy of international supply chains such as those for oil and gas.

"Nuclear is emerging as the lowest cost option with likely forward high fossil fuel prices, the greenhouse gas issue and likelihood of costs being imposed on CO2 emissions,"

said Ian Hore-Lacy of the World Nuclear Association (WNA), which aims to promote nuclear power as a sustainable energy resource.

Those opposed to nuclear power say, however, that the question of what to do with nuclear waste, which has a lethal life measured in thousands of years, has not been resolved.

There are about 440 commercial nuclear power reactors operating in 31 countries supplying about 16 percent of the world's electricity, ranging from 78 percent in France to two percent in China, according to the WNA.

At a March meeting of the Group of Eight, Russia and the United States urged the world to embrace nuclear power to guarantee stable energy supplies and cut dangerous emissions.

Russia said "safe and secure" nuclear power represented a crucial alternative for countries that choose to use it.

Rapidly developing countries like India are banking on nuclear in their quest for unlimited energy supplies, but some analysts say they could simply be exchanging reliance on Middle East oil and gas for dependence on a 45-nation club of nuclear fuel suppliers.

SMOKE AND MIRRORS

The nuclear industry's most optimistic scenario sees atomic power providing half the world's electricity in less than 50 years, but while it may be ready to celebrate nuclear's rebirth, opposition from the green movement is mounting.

Anti-nuclear campaigners note huge cost overruns on building nuclear plants, the need for massive state subsidies to make atomic power economically viable and the fact that no new designs for plants have been proven on a commercial scale yet.

They also say that the massive expenditure needed for nuclear power would divert much needed resources from cleaner and cheaper alternatives like wind, solar, waves and biomass.

"There is a real chance to give power to the people," said Philip Sellwood of the Energy Saving Trust (EST), a British body funded by government and industry to promote energy efficiency.

"It would be extremely unfortunate if we say this is a large-scale technology solution. We would fail to deliver on the environment, security of supply or cost," he told Reuters.

Environmentalists are not alone in raising danger flags.

A report this month from a British all-party parliamentary group warned the government, faced with having to shut down all but one of its aging nuclear plants within a decade, not to rush a decision on a new generation of nuclear power stations.

"Over the next 10 years, nuclear power cannot contribute either to the need for more generating capacity or to carbon reductions as it simply could not be built in time," it said.

The report said many issues -- like long-term waste disposal, public acceptability and the availability of uranium -- still needed to be resolved, and it raised questions of safety, the risk of terrorist attacks and nuclear proliferation.

Hore-Lacy dismissed the worries as "fear-mongering", while Grimston said that, on paper at least, nuclear technology was now cheaper, more reliable and safer.

"On safety, Chernobyl was a flawed design -- which is why it wasn't licensed here -- that was badly operated," said Grimston, who pointed out that nobody was hurt in America's worst nuclear accident in 1979 at the Three Mile Island plant in Pennsylvania.

Paid activist, Greenpeace nuclear "specialist" Jean McSorley, the industry's optimism is a case of smoke and mirrors. "There are still more reactors round the world planned for closure than construction. I think this is very good public relations from an industry that knows that if not now -- with high energy prices -- then it will be never," she said.