Ukraine clings to nuclear power despite Chernobyl trauma

April 30 2017, by Dmitry Zaks

Ukrainians remember the Chernobyl nuclear disaster well, but atomic energy is still their country's energy backbone

Ukraine is still suffering from the trauma of the world's worst civil nuclear accident at Chernobyl but has nonetheless turned the hazardous fuel into the backbone of its energy portfolio.

The crisis-torn country now uses atomic power for more than half of its

electricity needs as it struggles through a coal shortage sparked by a three-year war against Russian-backed insurgents in the separatist east.

And that figure shot up to nearly three-quarters of all power consumed during natural gas price disputes with its eastern arch foe and energy superpower Russia from 2014 to 2016.

Ukraine Wednesday marked 31 years since the disaster in which thousands died with the country extending the lifespan of its communist-era nuclear reactors and turning atomic power into a workhorse that will be around for generations to come.

The Chernobyl plant's fourth reactor in the north of former Soviet Ukraine exploded in 1986 after a safety test went horribly wrong at 1:23 am on April 26.

Some Ukrainians remain worried that a similar catastrophe could hit their country again.

"The main risk in using nuclear energy in Ukraine is associated with reactors that have exhausted their lifespans," says Iryna Golovko of the National Ecological Centre of Ukraine's energy projects department.

"Today six of Ukraine's 15 operating reactors have surpassed their designed service lives," she told AFP. "And by 2020, there will be 12 of them."

Coal crunch

Ukraine enjoys abundant coal reserves that happen to lie mostly in regions controlled by Russian insurgents.

Kiev spent nearly three years in the uncomfortable position of fighting

the rebels while enriching them by buying their anthracite coal to keep its thermal power plants pumping.

Ukrainian President Petro Poroshenko bowed to public pressure and banned all trade with the separatist east on March 15.

Energy Minister Igor Nasalyk said shortly after Poroshenko's decision that nuclear power's share of total electricity production had jumped to 62 from around 55 percent.

It had stood at 46 percent before Ukraine was riven by war and economic crises in 2013.

The government has since allowed regional power companies to impose blackouts in case of weather-related surges in demand.

Ukraine is also negotiating a coal purchase agreement with the United States that Kiev hopes could fulfil two-thirds of its annual needs.

But energy analyst Viktor Logatskiy of the Razumkov Centre research institute still thinks that the service lives of all 15 of Ukraine's existing reactors will be extended by 2030 as a long-term power source backup.

Gas wars

Ukraine's Energoatom state nuclear power provider has brushed off any fears about the safety repercussions of the extra burden being put on the country's four atomic power plants—one of which is Europe's largest.

Energoatom argues that times when Ukraine was either cut off from or not purchasing Russian gas because of price and geopolitical considerations saw nuclear power account for as much as 70 percent of electricity production.

It also says that reactors whose lifespans is extended are safer because they have been retrofitted with all the latest equipment and operating technologies.

Logatskiy thinks that Ukraine's atomic power plants even have room to grow because they are not operating at their full capacity.

"Despite heightened energy production, Ukraine's nuclear power plants are being used safely and pose no accident threat," Logatskiy said.

Tricky math

Yet Ukraine's official statistics on nuclear power show that actual production has risen only slightly since the year before the Russian-backed insurgency began.

Energoatom data provided to AFP show it had pumped out 23.84 billion kilowatt-hours (kWh) of electricity in the first four months of the year.

That figure was only 2.5 percent greater than the 23.25 billion kWh generated over the same period of 2013.

Some analysts attribute the discrepancy between the small rise in energy production and the much bigger jump in nuclear power's share of the market to two years of economic recession that have dampened industry's power demands.

They also point to Russia's 2014 annexation of Ukraine's Crimea peninsula and effective loss of a part of the separatist industrial east.

"Our thermal power plants that use coal are simply producing less electricity," Golovko said.

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