



# WELCOME TO CHERNOBYL

TRAVEL BACK TO THE 1980'S AND SEE WITH YOUR OWN EYES  
HOW THE CITY OF PRIPYAT SURVIVED THE ATOMIC DISASTER



## EXCLUSION ZONE

The Chernobyl Nuclear Power Plant Zone of Alienation is an officially designated exclusion zone around the site of the Chernobyl nuclear reactor disaster.

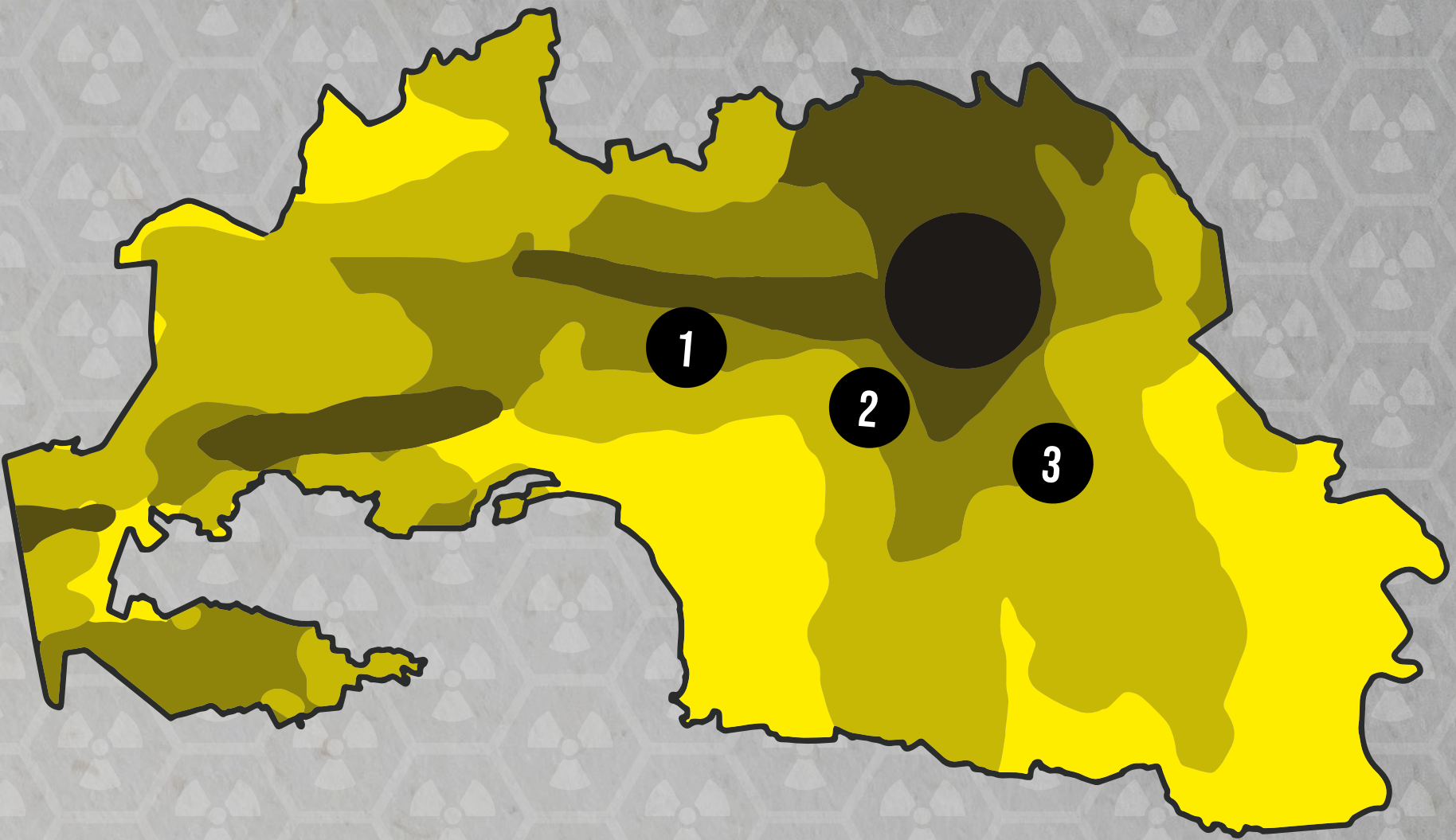
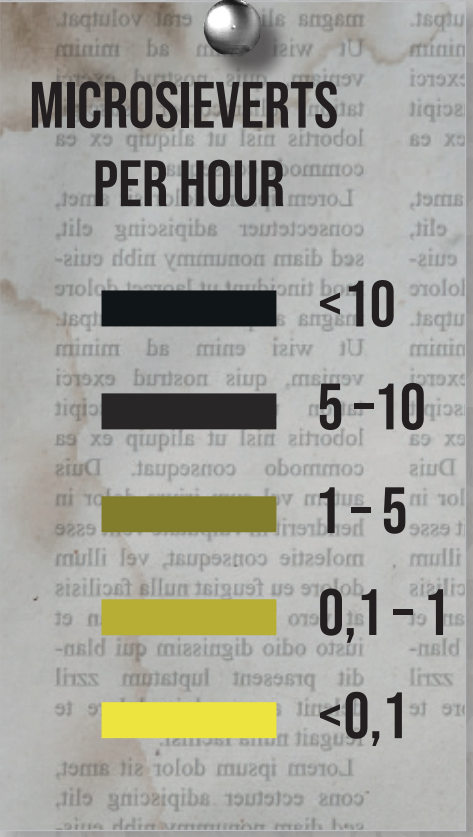
The Exclusion Zone covers an area of approximately 2,600 km<sup>2</sup> in Ukraine immediately surrounding the Chernobyl Nuclear Power Plant where radioactive contamination is highest and public access and habitation are restricted.

The Exclusion Zone's purpose is to restrict access to hazardous areas, reduce the spread of radiological contamination, and conduct radiological and ecological monitoring activities. Today, the Exclusion Zone is one of the most radioactively contaminated areas in the world and draws significant scientific

interest for the high levels of radiation exposure in the environment, as well as increasing interest from tourists. The zone has become a thriving sanctuary with natural flora and fauna with some of the highest biodiversity and thickest forests in all of Ukraine. This is due to the lack of human activity in the Exclusion Zone and is despite the radiation.

The Chernobyl Exclusion Zone was the site of fighting between Russian and Ukrainian forces during the Battle of Chernobyl on 24 February 2022, as part of the Russian invasion of Ukraine.

Geographically, it includes the northernmost raions (districts) of the Kyiv and Zhytomyr oblasts (regions) of Ukraine.



### 1 THE VEKTOR COMPLEX


The Vector radioactive waste storage complex is located 17 kilometers from the Chernobyl nuclear power plant. Its capacities are sufficient to ensure the decontamination process and subsequent storage of radioactive fuel waste concentrated in the territory of the exclusion zone itself.

Experts note that today there are about three million cubic meters of such radioactive materials in the exclusion zone. The complex includes a storage facility for the disposal of radioactive waste in reinforced concrete boxes, as well as facilities for the disposal of waste in bulk.



### 2 DUGA-1 RADAR STATION

Duga-1 is one of the three Soviet "over the horizon" radar stations. A system made for early detection of attacks by ballistic rockets. The array station was hidden in forest together with the secret military town Chernobyl-2.



### 3 CHERNOBYL

Chernobyl is situated to the north of Ukraine close to the border with Belarus. Prior to the nuclear disaster, the city had a population of 14,000. It was largely abandoned in 1986 as the exclusion zone was established (the city of Slavutych was built specifically for the evacuated population) and in 2010 it had a registered population of only 500.

## MAP OF PRIPYAT

Named after the nearby river, Pripjat, it was founded on 4 February 1970 as the ninth *atomgrad* to serve the nearby Chernobyl Nuclear Power Plant, which is located in the adjacent ghost city of Chernobyl.

Pripjat was officially proclaimed a city in 1979 and had grown to a population of 49,360 by the time it was evacuated on the afternoon of **27 April 1986**, one day after the Chernobyl disaster.

Pripjat is also supervised by the State Emergency Service of Ukraine, which manages activities for the entire Chernobyl Exclusion Zone, and is administered directly from the capital of Kyiv.



### 1 SWIMMING POOL

Pripjat Swimming Pool had a flourishing swimming team until the disaster at the nuclear power plant in 1986.

Until 1998 this pool was beautiful and in full use. Clean and inviting for the liquidators who were tasked with clearing the radioactive material from the city of Pripjat in Ukraine. But 12 years after the disaster, when the final liquidators left, it was abandoned along with the rest of the city. Today the pool is one of the cleanest places in the city in terms of radioactivity.



### 3 POLICE AND FIRE STATION

Even though Pripjat was a model city, it did have some crime, but the rate was pretty low.

The local fire brigade had a main role in fighting the accident. They were the first to arrive. The following weeks the police officers didn't leave their posts. They were reporting the situation and helping with the evacuation. Until 1997 the police protected the city against looters.



### 2 SCHOOLS

Before the accidents, there were five schools: one for each of the five districts of the city. Usually, they were built in the middle of the district so that it would be comfortable for all the people to reach the school.

The school N°3, right next to the Azure swimming pool, is one of the most photographed buildings in Pripjat with the hundreds of gas masks covering its canteen's floor.



### 4 AVANHARD STADIUM


The stadium was, along with the pool, the most important object of the city's sports infrastructure. In the aftermath of the accident, the stadium was used as a landing pad for helicopters. Later, a meteorological station was placed on the football field for monitoring the radiation.



### 5 JUPYTER FACTORY

It was officially a manufacturer of cassette recorders and components for home appliances, but the factory secretly produced semiconductor components for the military, and had test workshops for robotic systems.


The factory opened in 1980 and employed around 3,500 people and became the second employer in the area after the power plant.



### 6 AMUSEMENT PARK

The Chernobyl Amusement Park was never used by residents of the city as it was due to open on 1st May 1986 (five days after the accident).

The park contains a large Ferris wheel, now synonymous with the deserted city, bumper cars, a parachute ride, a shooting range, and more.



### 7 HOSPITAL

Pripjat hospital was used for staff and families of plant workers. It included an accident and emergency department, operating theatres and maternity ward.

The hospital was used to treat firefighters with radiation burns in the aftermath of the Chernobyl accident. However, it was not set up to deal with such a situation, and eventually, patients were moved to hospitals in Moscow and elsewhere in the Soviet Union for treatment.



### 8 CAFÉ PRIPYAT

Standing proudly on the beautiful shoreline of a vast lake, Cafe Pripjat, or "the Dish" as it was affectionately known by locals, was naturally a popular destination.

The average age in Pripjat was 26, so the inhabitants were likely to enjoy the round sun-drenched terrace that overlooked the water – the perfect place for chatting and drinking. There is an observation platform located on the roof of the cafe as well, which provided the visitors with a 360-degree view.



### 9 PRIPYAT CITY HALL

The city hall housed a number of local and regional government organizations. It was the main administrative institution of Pripjat. After the disaster the offices were home to several enterprises that dealt with the aftermath of the disaster.



### 11 HOTEL POLISSYA

The hotel was built in the mid-1970s to house delegations and guests visiting Pripjat and the Chernobyl Power Plant. In the process of eliminating the consequences of the disaster, the hotel building was used by the liquidators. From the hotel roof, the Power Plant was clearly visible.



### 10 PALACE OF CULTURE

It was built during the 1970s and designed as a focal point for people to enjoy a range of recreational and artistic activities all under the banner, quite literally in many cases, of political propaganda.

The name "Energetik" is a play on words, as it means both "lively" and is the term for power plant workers as well. It used to house a cinema, theatre, library, basketball court, swimming pool, boxing/wrestling ring, dancing and meeting halls – and even had a shooting range in the basement.

**WE RECOMMEND**  
...to take the dashed route entering from the southeast of the city. This way you will have the chance to see the most prominent sights of Pripjat in the shortest possible time.



MAP OF THE POWER PLANT

To search for a suitable site for a nuclear power plant started in 1965 by the 'TeploElektroProekt Institute'. The site was built 4 km from the village of Kopachi in the Chernobyl region, 15 km from the city of Chernobyl near the Yaniv station.

The completion of the first reactor in 1977 was followed by Reactor 2 in 1978. Reactor 3 was inaugurated in 1981, and 4 in 1983. Reactor No. 4 was the site of the Chernobyl disaster in 1986. Two more blocks, numbered five and six, were planned at a site roughly a kilometer from the contiguous buildings of the four older blocks.

On April 26, 1986, the Chernobyl disaster occurred at reactor No. 4. As a result, Reactor No. 4 was completely destroyed, and therefore enclosed in a concrete and lead sarcophagus, followed more recently by a large steel confinement shelter, to prevent further escape of radioactivity. Large areas of Europe were affected by the accident. The radioactive cloud spread as far away as Norway.

After the explosion at Reactor No. 4, the remaining three reactors at the power plant continued to operate, as the Soviet Union could not afford to shut the plant down. In October 1991, reactor No. 2 caught fire, and was subsequently shut down. In November 1996, following pressure from foreign governments, reactor No. 1 was shut down. In December 2000, reactor No. 3 was shut down after operating briefly since March 1999. In April 2015, units 1 through 3 entered the decommissioning phase.



LENIN NUCLEAR POWER PLANT

The 'Chernobyl Nuclear Power Plant' was officially named the 'Vladimir Ilyich Lenin Nuclear Power Plant'. It had four active plants. Reactor 4 exploded in 1986. The remaining three plants were eventually shut down by 2000.



REACTORS 5 AND 6

Two more reactors, capable of producing 1,000 MW each, were under construction at the time of the accident. They were scheduled to start operating on November 7, 1986. Furthermore a 6th reactor was planned in a new block of buildings scheduled to be completed in 1994.

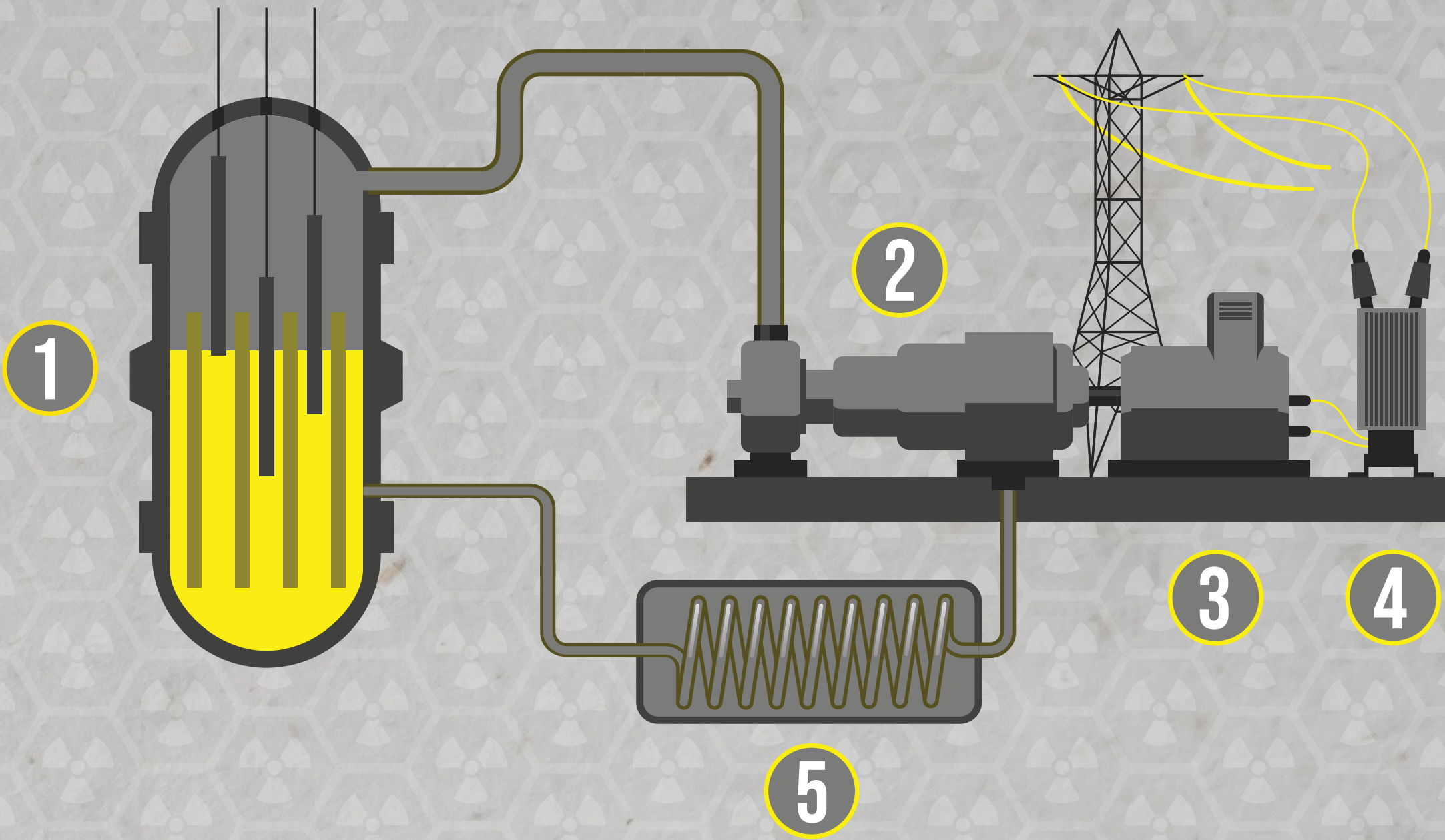
The first construction and installation work on reactor 5 began in 1981. Construction continued throughout the night of the explosion. Construction work was soon stopped but resumed again on the 10th October 1986. Six months later on the 24 April 1987 work was once again halted and the decision was made not to complete the reactors. After 23 years and one day of operation, on December 15, 2000, the nuclear power plant permanently stopped generating electricity. Currently, they are decommissioning the nuclear power plant and transform the destroyed fourth power unit into an environmentally friendly system.



COOLING TOWERS

The towers were built to evaporate the cooling water from the two newly built reactors (no. 5, no. 6). They are set outside the plant. The existing reactors of the power plant had no cooling towers because they cooled the condenser with water from the Pripyat River in open-cycle. In the end the towers were never completed.

ALL YOU NEED TO KNOW ABOUT NUCLEAR ENERGY



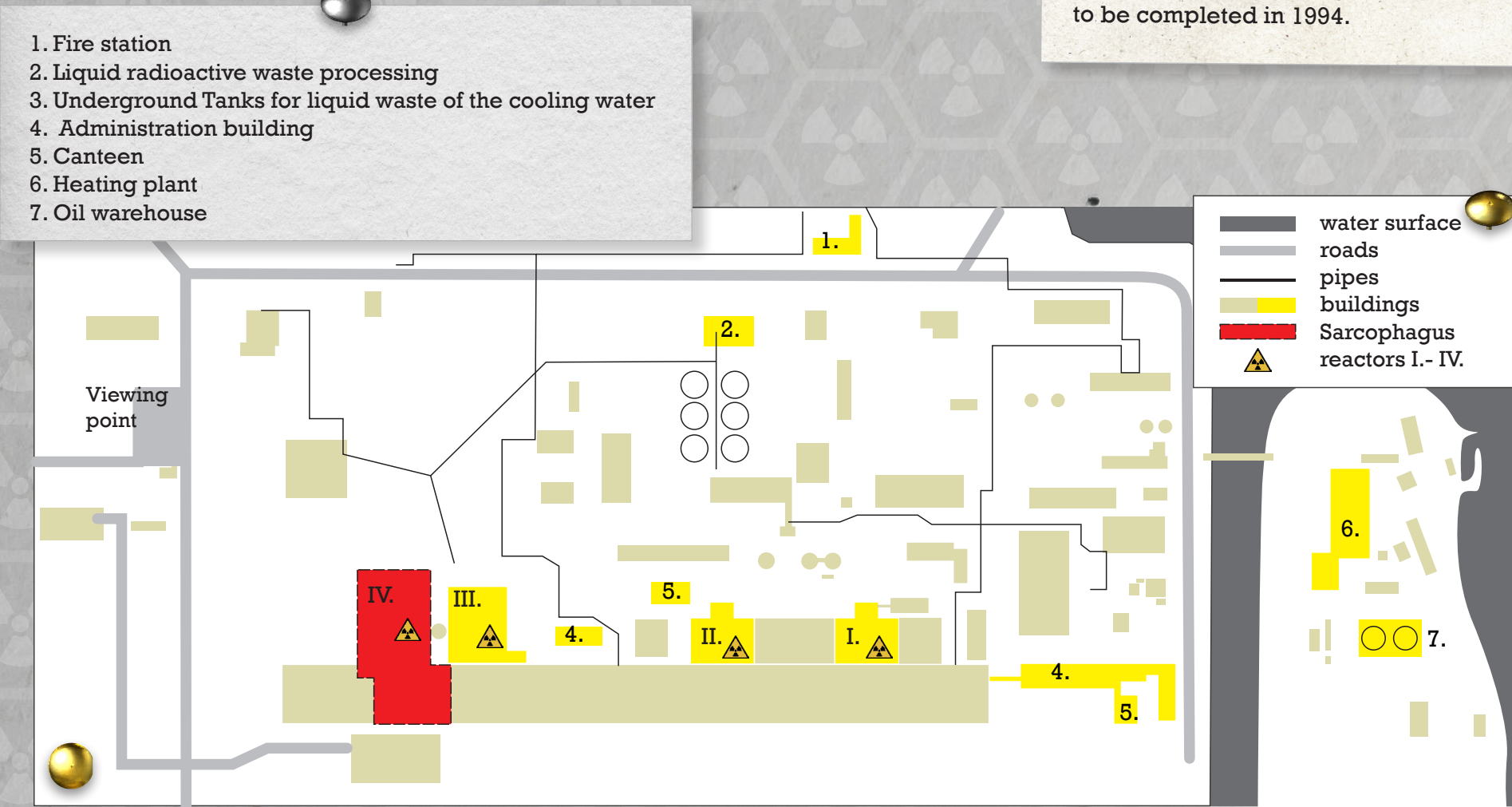
1 Thermal energy is produced by nuclear fission in the primary circuit. Uranium oxide is compressed into fuel pellets and packed into sealed fuel rods. The fission of the uranium is achieved by bombarding it with neutrons. This leads to a chain reaction which needs to be controlled by control rods - when lowered they absorb the oversupply of neutrons. The heat released during the fission heats up the water in the reactor vessel to a temperature of 320°C.

2 Steam drives one or more steam turbines. These turbines consist of blades installed on a shaft. The high pressure of the steam causes the shaft to rotate very fast.

3 The energy from the turbines drive a generator, which ultimately produces electricity.

4 Transformers increase the voltage of the electricity produced by the generator, allowing transportation of the electricity to the end-users with as little loss as possible.

5 The steam coming from the turbines passes through a condenser in order for it to cool down and then the cooled water goes back to the primary circuit beginning a new cycle.



1986

2000

2006

2022

APRIL 25, 1986

APRIL 25, 1 A. M.

Chernobyl's operators begin reducing power at reactor No. 4 in preparation for a safety test, which they have timed to coincide with a routine shutdown for maintenance. The test is supposed to determine whether, in the event of a power failure, the plant's still-spinning turbines can produce enough electricity to keep coolant pumps running during the brief gap before the emergency generators kick in. Ironically, this safety test brings about the reactor's destruction.

APRIL 25, 2 P. M.

Reactor No. 4's emergency core cooling system is disabled to keep it from interfering with the test. Though this doesn't cause the accident, it worsens the impact. At around the same time, the test and shutdown are temporarily delayed to accommodate the region's power needs.

APRIL 25, 11:10 P. M.

Operators receive permission to continue with the test and shutdown. By now, the less-experienced night shift is on the job, which purportedly never received proper instructions on how to perform the test.

APRIL 26, 1986

APRIL 26, 12:28 A. M.

Power plummets to far below the level at which the reactor is considered stable. Operators respond by removing most of the control rods in violation of the plant's safety guidelines, yet they still have trouble raising the power, in part due to xenon buildup in the core.

APRIL 26, 1 A. M.

The power stabilizes, albeit at a lower than preferred level, and plant supervisors order the test to proceed. The automatic emergency shutdown system and other safety features are subsequently turned off.

APRIL 26, 1:23:04 A. M.

The test officially begins, and an unexpected power surge occurs.

APRIL 26, 1:23:40 A. M.

An operator presses the emergency shutdown button, but the control rods jam as they enter the core.

APRIL 26, 1:23:58 A. M.

The first explosion, to be quickly followed by at least one more, blows the 1,000-ton roof right off the reactor and shoots a fireball high into the night sky. A blackout roils the plant as the air fills with dust and graphite chunks, and radiation begins spewing out. Walls and equipment collapse, and dozens of fires start up, including one on top of the neighboring reactor. Despite all evidence to the contrary, the nuclear engineer in charge of the test insists that reactor No. 4 is still intact. He later dies of radiation poisoning.

APRIL 26, 1:28 A. M.

The first firefighters arrive at the scene. They have no knowledge of the radiation and wear no protective clothing.

APRIL 26, 2:15 A. M.

Local Soviet officials convene an emergency meeting at which they decide to block cars from exiting or entering Pripyat, a nearby city that was built to house Chernobyl's workers. Police officers assisting with the roadblock likewise have no knowledge of the radiation and wear no protective clothing.

APRIL 26, 5 A. M.

Officials shut down reactor No. 3, to be followed the next morning by reactor Nos. 1 and 2. They are re-opened months later.

APRIL 26, 6:35 A. M.

By now, all fires have been extinguished except for a blaze in the reactor core, which will burn for days.

APRIL 27 - 29, 1986

APRIL 27, 10 A. M.

Helicopters begin dumping sand, clay, boron, lead and dolomite into the burning core in an attempt to slow radioactive emissions.

APRIL 27, 2 P. M.

After telling residents nothing about the disaster for some 36 hours, Soviet officials finally begin evacuating roughly 115,000 people from Pripyat, as well as nearby towns and villages. Residents are informed it will be temporary and that they should pack only vital documents and belongings, plus some food. Soon after, however, an exclusion zone is set up around Chernobyl that prevents their return.

APRIL 28, 1986

Swedish air monitors detect a large amount of radiation in the atmosphere, which is traced back to the USSR. Soviet officials admit that there's been an accident, but they falsely state the situation is under control.

APRIL 29, 1986

Spy satellite photos provide U.S. officials with their first glimpse of the devastation wrought by the Chernobyl disaster.

MAY 1986

MAY 1

Soviet officials refuse to cancel the May Day festivities in Kiev, even as radiation continues to be released unabated.

MAY 4

Liquid nitrogen is pumped underneath the dead reactor in order to cool it. Other aspects of the cleanup, which involves up to 800,000 workers, include bulldozing contaminated villages, shooting contaminated pets and livestock, and burying huge amounts of contaminated topsoil.

MAY 6

Radioactive emissions drop sharply, possibly because the fire in the core has burned itself out. Meanwhile, Soviet officials finally close schools in Kiev and advise residents to stay inside and to not eat leafy vegetables.

MAY 8

Workers finish draining about 20,000 tons of radioactive water from the basement under the core.

MAY 9, 1986

Workers begin pouring concrete under the reactor, which is later encased in an enormous concrete and metal structure known as the sarcophagus.

MAY 14, 1986

Soviet leader Mikhail Gorbachev speaks publicly about the incident for the first time, saying on state TV that „the worst is behind us.“

AUGUST 1986

AUGUST 25-29,

The International Atomic Energy Agency hosts a conference at which scientists blame the accident not just on human error and a subpar safety culture, but also on Soviet reactor design flaws.

AFTER 1986

DECEMBER 15, 2000

Unit 3, the last working reactor at Chernobyl, is shut down. Units 1 and 2 had been shut down in 1996 and 1991, respectively.

APRIL 2006

Gorbachev writes that the Chernobyl disaster, „even more than my launch of perestroika, was perhaps the real cause of the collapse of the Soviet Union.“

FEBRUARY 2022

The Chernobyl Exclusion Zone was the site of fighting between Russian and Ukrainian forces during the Battle of Chernobyl as part of the Russian invasion of Ukraine. On 24 February 2022, Russian forces captured the plant. The resulting activity reportedly led to a 20-fold increase of radiation levels in the area due to disruption of contaminated soil.