PRESS FILE

CONFINEMENT SHELTER FOR THE CHERNOBYL SARCOPHAGUS

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1 - PRESENTATION OF THE PROJECT

The project comprises the design and construction of an arch-shaped confinement shelter, consisting of an 18,000-metric ton metal structure, 105 metres high, 150 metres long, and with a 257-metre span. Standing on 2 concrete beams, the arch will be assembled to the west of the damaged reactor (unit 4) and will be slid into place above the existing sarcophagus.

Its prime aim is to contain the radioactive material, to protect against weather damage to the existing sarcophagus built in 1986, just after the accident, and to allow work to begin on deconstruction of Unit 4 of the Chernobyl power plant.

The foundations

Work on the site will start with the foundations of the arch and construction of the auxiliary buildings needed to deal with the deconstruction debris.

Work on the foundations will begin with the arch assembly zone, then continue towards unit 4, enabling work to begin on assembling the structure as soon as possible.

The arch

The elements of the metal structure will be prefabricated in a factory and transported to the assembly area. These elements will then first be assembled on the ground in three parts. To begin with, cable jacks on metal towers will move the sides of the arch into a waiting position. Then the upper portion of the arch will be raised and connected to the two upright side sections, thus reconstituting a self-supporting arch section.

The section will then initially be moved to the west, away from the existing sarcophagus. This will free up the assembly area to continue assembling the following arch sections and to complete the equipment of the arch.

Once fully completed and equipped, the arch will be pushed eastwards to its final emplacement on longitudinal concrete rails by means of computer-controlled hydraulic jacks for a smooth transition.

The east and west spandrel walls suspended from the arch will be designed to span the structures of the existing sarcophagus. Only a few finishing touches will remain to be made once the structure is in place.

After systematic testing of its functions, the arch will be declared to be operational and deconstruction of the reactor and its sarcophagus will be able to begin.

2 - PROJECT PARTICIPANTS

Contracting authority

Chernobyl Nuclear Power Plant (ChNPP) – the State-owned enterprise officially responsible for dismantling and cleaning up the Chernobyl site.

Project Management

Project Management Unit (PMU)

A joint team consisting of representatives of ChNPP and a consortium comprised of Bechtel, EDF and Battelle Memorial Institute.

Design-construction consortium

A 50/50 consortium between VINCI Construction Grands Projets (leader) and Bouygues Travaux Publics.

Funding

Chernobyl Shelter Fund (CSF): EUR 856 million (all projects combined connected with confinement of the existing sarcophagus). This fund was set up in November 1997 at the behest of the G7 and financed out of international grants:

European Commission: 26.3%
USA: 19.16%
Germany: 8.35%
United Kingdom: 6.57%
Ukraine: 6.22%
Japan: 5.91%
France: 5.77%
Canada: 4.82%
Italy: 4.55%
Other countries (21): 12.35%

Fund Administrator

European Bank for Reconstruction and Development (EBRD)

3 - KEY FIGURES

. Value of contract: EUR 432 million (EUR 312,568,848 + USD 139,663,307)

. Span of arch: 257 metres

. Height: 105 metres (equivalent to a 30-story building)

. Covered length: 150 metres

. Weight of metal structure: 18,000 metric tons (nearly 3 times the weight of the Eiffel Tower)

. Definitive foundations: 20,000 cubic metres

. Life span of confinement shelter: 100 years

. Duration of work: 53 months
- of which planning and design: 18 months (October 2007 – April 2009)
- of which construction: 35 months (April 2009 – 2012)

. Managerial and supervisory personnel: up to 60 expatriates during peak period

. Workers: 900 (Ukrainians) during peak period

4 - PERSONNEL SAFETY

Personnel hiring will be extremely selective and include a very comprehensive medical examination, which will be the decisive criterion for recruitment.

Personnel will be required to undergo safety training in how to behave in a radioactive environment.

All personnel working in the assembly zone will be equipped with appropriate garments (coveralls, masks, boots, helmets, gloves) and dosimeters. All equipment will undergo specific treatment daily onsite.

The medical condition of crews will be monitored regularly.

Workers will work 7 days a week over 15-day periods. There will be regular but unplanned zone-evacuation drills throughout the duration of the project.

Design and construction methods will be governed by the "ALARA" (As Low As Reasonably Achievable) principle. During the planning and design phase, this consists in examining a range of solutions to a given problem and calculating the "committed dose budget" for each one.

While work is in progress, each worker will be permanently equipped with operational and legal dosimeters. Onsite radioprotection technicians will verify the data. The legal dosimeters will record monthly doses received. The operational dosimeter (badge) will serve to monitor the actual radiation dose in real time and to compare it with the predicted calculated dose. Personnel may be refused access to the work zone if the budget is exceeded.

For certain types of work, particularly in areas close to the sarcophagus (e.g. the foundation beams), personnel will work behind concrete or lead screens.

** Maximum annual authorised dose: 17,000 μSv/year (or 14.11 μSv/hour)*

5 - TIMELINE / KEY DATES

1992: KIEV 92 INTERNATIONAL COMPETITION

A competition for ideas launched by Ukraine, seeking answers to 2 questions:

- Do you have any ideas?
- How can they be implemented?

394 proposals were submitted in April 1993. In June 1993, the European RESOLUTION consortium led by Campenon Bernard SGE (VINCI) was declared the winner.

The consortium proposed to confine, dismantle, sort and store the short half-life debris, to store the waste with no final destination, and to finance the project.

1994: FEASIBILITY STUDY

Feasibility study financed by the European Commission, aimed at securing the existing sarcophagus.

- Stabilisation of the existing sarcophagus
- Construction of a new confinement shelter to permit subsequent dismantling of the sarcophagus and the damaged unit
- Management of associated waste

Formation of the ALLIANCE consortium comprising 6 European firms:

- Campenon Bernard SGE – France (leader)
- AEA Technology – UK
- Bouygues – France
- SGN – France
- Taywood Engineering – UK
- Walter Bau – Germany

SEPTEMBER 1994 – AUGUST 1995: a first ECU 3 million study contract

MAY 1996 – NOVEMBER 1996: second ECU 0.5 million study contract

2004: INVITATION TO TENDER FOR NSC (NEW SAFE CONFINEMENT) SHELTER

The invitation to tender concerned the design, construction and implementation of a new safe confinement (NSC) shelter.

Formation of the NOVARKA consortium consisting of VINCI Construction Grands Projets (leader) and Bouygues Travaux Publics (50/50).

Local partners:

- UkrEnergobud
- Fundament
- TcentroStalKonstruktsiya
- UkrEnergoMontazh
- UkrNiiProyektStalKonstruktsiya
- UkrStalKonstruktsiya

March 2004: Invitation issued to tender for the design, construction and start-up of a new confinement shelter to permit subsequent dismantling of the existing sarcophagus.

November 2004: Technical bids submitted

June 2005: Invitation to submit financial tenders

September 2005: 1st financial tender submitted

November 2005: 2nd financial tender submitted

19 November 2005: Tenders opened publicly: NOVARKA (a 50/50 consortium between VINCI Construction Grands Projets (leader) and Bouygues Travaux Publics) is lowest bidder.

10 August 2007: NOVARKA declared successful bidder

17 September 2007: Contract signed

6 – PRESENTATION OF VINCI AND BOUYGUES CONSTRUCTION AND THEIR NUCLEAR INDUSTRY REFERENCES

VINCI is the world's leading integrated concessions-construction group. Active in 80 countries throughout the world, VINCI has 142,500 employees. The Group recruited 11,000 people on unlimited-term contracts in France in 2006 and has committed to raising that number to 12,000 in 2007.

VINCI generated revenue of EUR 26 billion in 2006. It carries out its business through four main operating divisions: VINCI Concessions, VINCI Energies, Eurovia and VINCI Construction.

VINCI Construction has been active in the nuclear market for almost 50 years, both in construction and dismantling of power plants and carried out almost 90% of the civil engineering work for the existing French nuclear base.

VINCI Construction Grands Projets, which is responsible for designing and building the confinement shelter for the Chernobyl sarcophagus, employs 4,300 people, is active in 80 countries and generates revenue of EUR 777.7 million.

VINCI Construction Grands Projets has solid nuclear industry references:

Construction of nuclear power plants

- Civaux nuclear power plant (France): 9 years of work – EUR 131.1 million
- Daya Bay nuclear power plant (China): 7 years of work – EUR 269.7 million

Dismantling, decontamination and deconstruction work

- Dismantling of the Brennilis nuclear power plant (France): 6 years of work – EUR 61.2 million

Construction of storage units

- Magenta Project (France): Timetable September 2004 – March 2010 – EUR 53.6 million

Design and construction, with "performance guarantees", of a non-irradiated solid fissile material storage unit on the site of the CSA Nuclear Research Centre (Cadarache) in southeastern France.

- Underground laboratory (Meuse) - France: 8 years of work – EUR 156.9 million

Planning and design work, then construction, of two 500-metre access shafts and a 340-metre network of galleries for a scientific testing laboratory with a view to underground storage of radioactive waste.

Within its nuclear division, Freyssinet Group also brings together expertise in project management, radiation protection and security:

- Engineering, construction
- Intervention in nuclear environments
- Cleaning up, decontamination and dismantling of structures and/or processes
- Installation of waste treatment facilities

In France

> Freyssinet Nuclear Special Works Division

Freyssinet is a specialist in pre-stressing of nuclear reactors and has handled installation in over 100 projects in 13 countries over more than 30 years. The company also designs and installs paraseismic devices, strengthening solutions, and carries out modification to or dismantling of structures and heavy lifting operations.

> Salvarem

From the prevention of radioactive hazards, through cleaning up and optimisation of waste management, to the dismantling of installations, Salvarem has comprehensive know-how in the protection of human beings and the environment.

> Mecatiss

A specialist in fire safety engineering.

> Millennium

A key player in consulting and engineering in the specific sector of criticality and control of industrial and nuclear risks and their impact on man and the environment.

In the United Kingdom

> NUKEM Limited

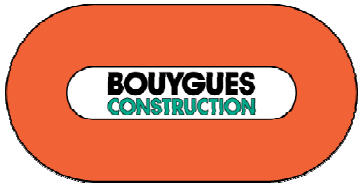
Operates in dismantling of nuclear facilities, decontamination, waste treatment, radiation protection and process engineering.

A Nukem reference: Winfrish sludge treatment plant

Turnkey contract for a remotely-operated sludge treatment plant: design / build / operate.

Timetable: 2005 – 2008.

Value of contract: EUR 50 million



Bouygues Construction is a world leader in construction, public works, electricity and maintenance, with operations in around 60 countries.

With operations in some 60 countries, it combines the financial strength of a major corporation with the responsiveness of a network of companies organised into seven complementary entities, namely Bouygues Bâtiment Ile-de-France, Bouygues Entreprises France-Europe, Bouygues Bâtiment International, Bouygues Travaux Publics, VSL et DTP Terrassement, the Concessions division, and ETDE.

Bouygues Construction brings its proven capacity to manage complex projects to bear on every type of project. Drawing on its know-how in the areas of project funding, design, construction, maintenance and operation, it can offer clients a global package and innovative solutions.
In the field of sustainable development, Bouygues Construction is pursuing a structured programme to reconcile the demands of economic profitability with the social, societal and environmental impacts of its activities.

With 43,000 employees worldwide, Group revenue amounted to EUR 6.9 billion in 2006 and is expected to reach EUR 8.1 billion in 2007.

Major ongoing projects include: A41 motorway between Annecy and Geneva (France); T1 Tower (Paris La Défense); "Gautrain" rail link between Pretoria and Johannesburg (South Africa); Hyatt Hotel in Yekaterinburg (Russia); Dubai overhead metro (United Arab Emirates); Tangier roll-on roll-off port (Morocco); A4 motorway (Poland); Olkiluoto EPR nuclear power plant (Finland); "Flamanville 3" EPR nuclear power plant (France); Sail@Marina Bay towers (Singapore)…

Major completed nuclear projects

Bouygues Construction has some 30 years experience in nuclear civil engineering, in both the construction and dismantling of nuclear plants.

Bugey nuclear power plant (1972 - 1978)

Design, computing work and construction of the nuclear block including the safety shells, the nuclear auxiliaries building, the deactivation pool and various peripheral buildings.

Flamanville nuclear power plant (1979 - 1985)

Civil engineering work for the first two tranches (Flamanville 1 and 2), each delivering 1300 MW.

Saint Alban nuclear power plant (1979 - 1985)

All the civil engineering work for the two production tranches (2 x 1 300 MW. Each tranche consists of two main parts: the nuclear area and the operating building.

Chooz nuclear power plant (1984 - 1991)

Two nuclear tranches with a production capacity of 1 400 MW. The work included all the civil engineering work for buildings in the nuclear block, the conventional block and the pumping station.

Grenoble Synchrotron (1989 - 1991)

Construction of the Grenoble Synchrotron, a particle accelerator designed to carry out research on the components of matter.

Dismantling of the Bugey power plant (1997 - 1998)

Dismantling of the power plant on final decommissioning after 22 years of operation (1972-1994) and cumulative production of 55 billion kWh. This contract was remarkable for the very comprehensive nature of the work, from cleaning up and dismantling the pool building to acceptance by the approved agency (ANDRA) of all the waste produced.

Dismantling of the Brennilis power plant (1997 - 1999)

Dismantling of the industrial installations, demolition of the buildings and cleaning up the land to restore it to its natural state. The products of the deconstruction were stored with the reactor block in a sealed enclosure before being reprocessed.

ANDRA laboratory (1999-2003)

This underground laboratory is a research tool for analysing the effects of storage of radioactive waste on the underground environment. Construction of 5-metre diameter/508-metre deep access shaft, a 4-metre diameter/500-metre deep auxiliary shaft and a 340-metre network of underground galleries (at a depth of 490 metres)

Mégajoule laser (2003 - 2007)

Construction of the Mégajoule Laser nuclear testing centre (near Bordeaux). Civil engineering and secondary trades. The experimental room, at the centre of the building, is surrounded by two halls designed to house 240 laser beams.

Bouygues Construction is currently performing civil engineering work on the world's first two new-generation (EPR) reactors at Olkiluoto (Finland) and Flamanville (France).

Olkiluoto new-generation nuclear power plant (2005 - 2008)

Framatome ANP has asked Bouygues Travaux Publics to construct a nuclear reactor building, four back-up buildings and the used fuel storage building.

Flamanville new-generation nuclear power plant (2006 - 2011)

The Flamanville 3 plant will house a pressurised water reactor (EPR - European Pressurised Reactor) with a capacity of around 1 600 MW. Bouygues will perform civil engineering work for the power plant. The contract will include some 10 industrial buildings including the machine room and the reactor building enclosure.