

14. Q. Can Nuclear Power stations be protected against terrorists?

A. After the 9/11 act of terrorism in the US, a local TV company hired a plane and had it fly unchallenged up the River Severn over Hinkley, Berkeley and Oldbury nuclear power stations to show how easy it was. There are other ways terrorists could strike, so no installation could be terrorist proof. The consequences would be catastrophic. And every movement of radioactive material is vulnerable – transport of fuel rods to and from Sellafield by road and rail for example is commonplace.

15. Q. What happens to nuclear reactors at the end of their life?

A. The old Oldbury and Berkeley Reactors will be there for at least 100 years. The fuel rods are removed and taken to Sellafield – but then there is no way to deal with them so they are stored in huge water tanks. Some active elements of the nuclear process will remain radioactive for thousands of years.

16. Q. What other energy sources could we use?

A. We need to use a whole range of renewable sources - tidal, wave, solar, wind, hydroelectric, geothermal and biomass. We also need to have an effective energy efficient policy on new buildings and all domestic and commercial users need to find ways of using less electricity.

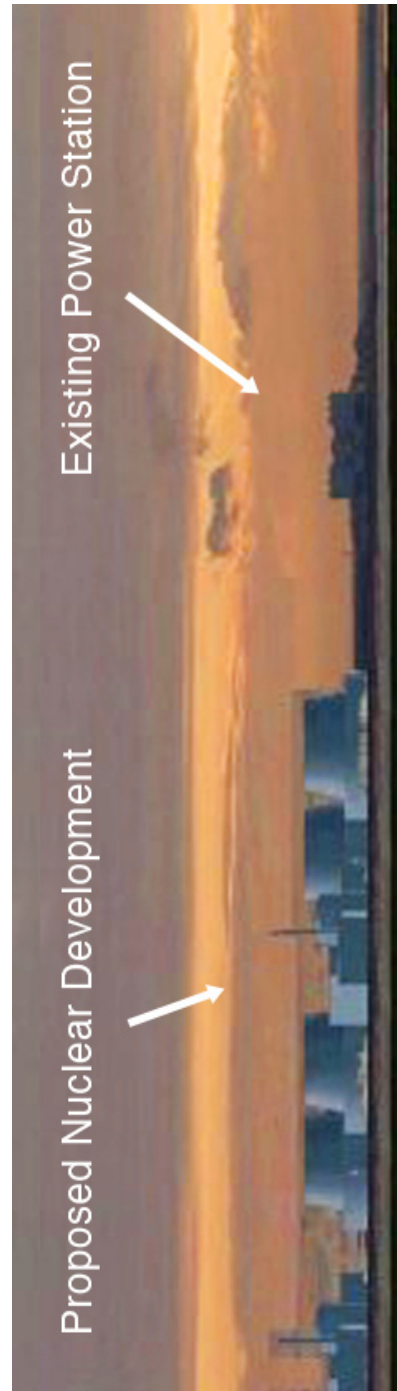
Germany has already installed more wind power than the entire UK nuclear capacity. Every year it installs the wind power equivalent of one new nuclear reactor. It will be building no more nuclear reactors.

Renewables, alongside conservation of energy, are cheaper, more secure, cut CO2 more effectively, can be built and decommissioned quickly AND ARE MUCH SAFER!

17. Q. What can I do?

A. Sign up to our newsletter at www.standagainstoldbury.org. Come to meetings. Join our demonstrations. Write letters to local and national press, to Councillors, to your MP and the Secretary of State for Energy. Pass on this leaflet to a neighbour or friend. Talk about this issue with whoever will listen!

Join us and help fight the threat of the new Oldbury Nuclear Power Station



This artist's impression, based on the construction details supplied by Horizon, shows how the proposed Nuclear Power Station at Oldbury-on-Severn will dominate the Severn Estuary landscape.

New Nuclear Power Station at Oldbury

The Facts

The Government is telling us that Nuclear Power is safe and that we need it to fill the energy gap which will be on us in a very few years. Neither statement is true.

The group STAND Against Oldbury is opposed to the Horizon/Hitachi proposal to build a huge new Nuclear Power Station at Oldbury-on-Severn, Glos. The reactors will be 4 times the size of the present ones and additionally there will be 3 or 4 cooling towers, 77 metres above ground level. It will be a very ugly and very dangerous eyesore on the banks of the River Severn.

Here are answers to some questions you may have. A full version with sources can be seen on our website

www.standagainstoldbury.org

1. Q. Who are Horizon?

A. They are a new company based at the Business Park Gloucester; taken over by Hitachi, after the accident at Fukushima led to the pull-out of every other major nuclear construction company. They have no experience in designing, constructing or running a nuclear power station.

2. Q. But Hitachi have lots of experience in nuclear power, don't they?

A. They have been involved in building 4 Advanced Boiling Water Reactors (ABWR) in Japan. These are not licenced in the UK at the moment. They have been plagued with problems, generating less than 50% of their planned output. Hitachi built one of the reactors at Fukushima, saying at the time it was tsunami and earthquake proof.

3. Q. The old Oldbury site seemed a good one for the old nuclear power station, so it should be suitable for the new one, shouldn't it?

A. The Government's own Nirex report says that the site will be inundated in less than 100 years and recommends that all nuclear material from the present site be moved away. Horizon admit that flooding is a problem and say they will build up 7 metres above ground level before construction starts. There is a lot of evidence of flooding in the Severn Estuary due to exceptionally high tides and storm surges and a tsunami.

4. Q. Isn't nuclear power essential to fill the energy gap?

A. No. The Government say there will be an energy gap by 2018. By Horizon's own admission, the new station at Oldbury will not be on line until at least 2028. In contrast, most forms of renewable energy can be brought on stream within 3 to 5 years.

5. Q. Won't a Nuclear Power Station bring lots of jobs to the area?

A. It is estimated there will be a total of 1,000 permanent jobs at the Oldbury site, half of them going to Japanese workers. Compare this to the 27,000 permanent local jobs that investing less money into alternatives would bring to the Forest of Dean alone.

The best estimates show that a like-for-like investment in wind power will create at least 12 times as many jobs as the same investment in nuclear; a like-for-like investment in solar power will create at least 360 times as many jobs as the same investment in nuclear. Investing in energy efficiency creates more jobs than investments in any form of generation.

6. Q. Isn't Nuclear Power a cheap energy source?

A. No, and it never has been, even if you ignore the final decommissioning and waste disposal costs. EDF, the company who intend to build the new nuclear power station at Hinkley in Somerset, are demanding a guaranteed price of twice that granted to alternative energy sources and are asking for an additional £10 billion from the Government before starting.

The 2010/2011 liability for cleaning up our existing nuclear programme was around £7 billion. This translates into a liability of £350 per household per annum – 8 times the subsidy that is available for renewables.

7. Q. Radiation from nuclear power generation is said to be a fraction of the background radiation we are all exposed to naturally. So why worry?

A. The comparison with background radiation, X-rays, etc, is very misleading. As part of the day-to-day running of a Nuclear Power station, radioactive particles are released into the air, settling on local vegetation and into cooling water. In the River Severn, radioactive particles settle in the mud. At low tide the mud will dry out and the particles may become wind-borne. Unlike background radiation these particles may be ingested via food, water or air and enter the body to lodge there and continually bombard the surrounding cells with damaging radiation. They

can produce very serious genetic changes leading to cancers and other health effects.

In 1984 a cluster of childhood leukaemias was identified by the group Severnside Campaign Against Radiation, in and around Lydney. This was one of several clusters close to other Nuclear Power Stations. The clusters were deemed to be too large to be a coincidence by most epidemiological and medical experts.

8. Q. Have there been any serious nuclear accidents?

A. There have been at least 4 major accidents and thousands of minor ones.

In 1957, at Windscale, Cumbria (renamed Sellafield), after a fire in the plutonium piles, a plume of radioactive gas spread over Northern Europe. Scientists gambled on flooding the reactor with cooling water, risking explosive gases being created and causing an explosion. The accident was played down and the only precaution was to throw away milk within 200 square miles.

At 3 Mile Island Pennsylvania in 1979 a near disaster was caused by a combination of technical and human errors - which beforehand the industry had claimed was impossible.

The Chernobyl disaster in the Ukraine in April 1986 was caused by a sudden and unexpected power surge. An emergency shutdown was attempted but the resulting fire sent a plume of highly radioactive fallout over large parts of the western Soviet Union and Europe. New-born lambs in North Wales are still being slaughtered every year as being too radioactive to eat as a result of the radioactive fall-out from the accident.

The accident at Fukushima, Japan in March 2011, was caused by an earthquake followed by inundation of the plant following a tsunami. Flooded emergency generators led to water boiling away in the reactors causing fuel rods to overheat and melt down. Best estimates of the clean-up costs for Fukushima indicate a liability of not less than \$250 billion. Japan's national debt will increase by as much as \$150 billion as part of this.

9. Q. Have people needed evacuating after a nuclear accident?

A. Yes – after 3 Mile Island the evacuation zone was a 20 mile radius. Within days, 140,000 people had left the area.

At Chernobyl, 350,400 people were evacuated and resettled from the most severely contaminated areas. The residents were told to bring only what was necessary, as the authorities had said it would only last a few days. An exclusion zone of 30 km (19 miles) remains in place today. 120,000 people have still not been able to return home.

At Fukushima, on day one of the disaster, nearly 134,000 people who lived between 3–20 km from the plant were evacuated. 4 days later an additional 354,000 who lived between 20–30 km from the plant were evacuated. About 160,000 who fled are still living in temporary housing.

10. Q. What would happen if there were an accident at Oldbury?

A. For a serious accident, evacuation would be necessary. If it were like Fukushima, people would need evacuating from a 30k zone – which would mean *people living in Stroud, Dursley, half Gloucester, half Newport, all of Forest of Dean and all of Bristol would need evacuating.* However, the Forest of Dean, Bristol and Gloucestershire Councils say they have no plans for evacuation.

11. Q. Aren't the chances of a serious accident infinitesimally small?

A. Unfortunately not. Given the 4 serious accidents since 1957 it has meant an average of one serious nuclear accident every eighteen years. Since there are now 450 nuclear plants in the world, it is not unreasonable to predict that any one particular nuclear plant has a 1 in 8,100 chance of having a serious accident in a particular year, or a 1 in 200 chance over a forty-year lifetime. Although it is claimed that new reactor designs will be inherently safer, this is only a theoretical claim. In any case, some of these new designs are untried, such as the one proposed for Oldbury.

12. Q. Can we insure our houses against a nuclear accident?

A. No. You cannot buy your own private insurance policy to protect your home against nuclear accidents. All insurance companies exclude radiation from their policies as an uninsurable risk. Aviva, for example, list radiation as the first item not covered by their house insurance.

13. Q. Can nuclear waste be disposed of safely?

A. In spite of years of attempts to find a site for highly radioactive waste, nowhere has been found in Britain after 60 years of producing this waste.

In January 2013 Cumbria County Council refused plans to have a Nuclear waste storage facility built in the county.

Four sites have been named as potential dumps for intermediate level radioactive waste, and one of these is Berkeley!

Recently Horizon have admitted that they will be storing nuclear waste on the new Oldbury site. Leon Flexman, Head of Corporate affairs for Horizon, confirmed that *high level nuclear waste would be stored on the site.*