

Smaller 'hybrid' cooling towers proposed for new nuclear plant at Oldbury

Horizon Nuclear Power today said that, based on current information, a 'hybrid' cooling tower design was its preferred option for the proposed new nuclear power station at Oldbury on Severn.

Previously the company had been considering all options on an equal basis, including 'natural draught' cooling towers of up to 200m in height.

Cooling water is used to condense steam used in power generation. Natural draught towers rely on their shape and height to create cooling, whereas so-called 'hybrid' towers use fans and are up to 70m in height, more in keeping with the height of the existing Magnox power station reactor building.

The water vapour plume from hybrid tower designs is also typically less visible than from natural draught towers.

Tim Proudler, Planning and Consents Manager for the Oldbury project said:

"This has been a big decision for Horizon. 'Natural draught' cooling towers have real advantages. They're cleverly designed to move air without the use of electricity, and could be said to be the obvious technical choice, being cost effective, easy to maintain and sustainable.

"However, we appreciate that these would be a prominent feature in the local landscape. Some of the visual impact could be improved by careful arrangement, but after discussion with, and listening to, the local community, we wanted to respond. In the end, this has to be about achieving an acceptable balance."

The company is holding public 'surgery' events in October to provide more information behind the

announcement, including an update on the project activities and timetable (see below for details).

Tim Proudler said: “We’ll provide information about the merits of the cooling systems we could use, including natural draught towers, but, based on the information we have currently available, our preferred option is likely to be a hybrid tower system.”

The company, a joint venture between E.ON UK and RWE npower, announced in March that it intends submit a planning application for the new plant at Oldbury around 2014. Given the right market conditions, and subject to a final investment decision, preliminary works could begin in 2016, followed by main construction from 2019.

Generating low-carbon electricity for millions of homes, the proposed new plant would be built on land adjacent to the existing Magnox station at Oldbury.

Horizon Nuclear Power’s new plant could create up to 800 permanent high quality jobs, rising to 1,000 during maintenance periods and around 5,000 during construction.

Tim Proudler said: “Our development plans would help cement the area’s reputation as a centre of nuclear excellence, and bring long-term economic benefits to the whole region.”

As well as Oldbury, Horizon Nuclear Power is seeking to develop a nuclear station at Wylfa on the Isle of Anglesey, North Wales.

Applications for planning consent at Wylfa will be made in 2012 and Horizon Nuclear Power could have its first reactor generating electricity on the island from 2020.

Ends

For further information please contact the Horizon press office on: 01242 713677

Notes to Editors

Details of October events:

Local drop in sessions are being held at venues on both sides of the River Severn in October:

- Monday 4th October at **Oldbury Memorial Hall**, Memorial Hall, 13 Camp Road, Oldbury-on-Severn, BS35 1PT from 3pm to 9pm.
- Wednesday 6th October at **Thornbury Leisure Centre**, Severnside Suite, Thornbury, South Gloucestershire, BS35 3JB from 3pm to 9pm.
- Thursday 7th October at **Woolaston Memorial Hall**, Swains Field, Netherend, Woolaston, Gloucestershire, GL15 6NJ from 3.30pm to 9pm.

More/.

Please note: The visualizations are based on a design incorporating four cooling towers, with no prejudice to any future decisions with regards to reactor type.

These visualizations do not show a plume, which would be visible from the natural draught cooling tower design (top image) under most weather conditions and from hybrid cooling towers under occasional atmospheric conditions.



Natural draught cooling towers



“Hybrid” cooling towers

Picture shows 3D visualisations of the two main types of cooling tower, natural draught and hybrid, viewed from Grovesend Road in Thornbury. Three or four such towers would be needed, subject to final plant design.

Horizon Nuclear Power – 8 September 2010