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A NEW NUCLEAR STATION AT WYLFA

Already the site of an existing power station, Wylfa is an ideal location for new low-carbon nuclear power generation.



In 2009, Wylfa was nominated into the UK Government's Strategic Siting Assessment process (SSA) as a site potentially suitable for the deployment of a new nuclear power station by the end of 2025. Along with several other sites, including Horizon's site at Oldbury, Wylfa was included in the draft Nuclear National Policy Statement due to be ratified in 2011.

We believe Wylfa is an excellent location for a new nuclear power station. It has adequate space for the development, an existing National Grid connection and hard rock foundations. It is sufficiently high above sea level to avoid serious flood risk and has good access to sea water for cooling purposes.

The nuclear heritage of Wylfa and Anglesey has also given rise to a strong skills and knowledge base necessary for the construction and operation of a new nuclear power station. Retaining and growing this local expertise is very important to us.

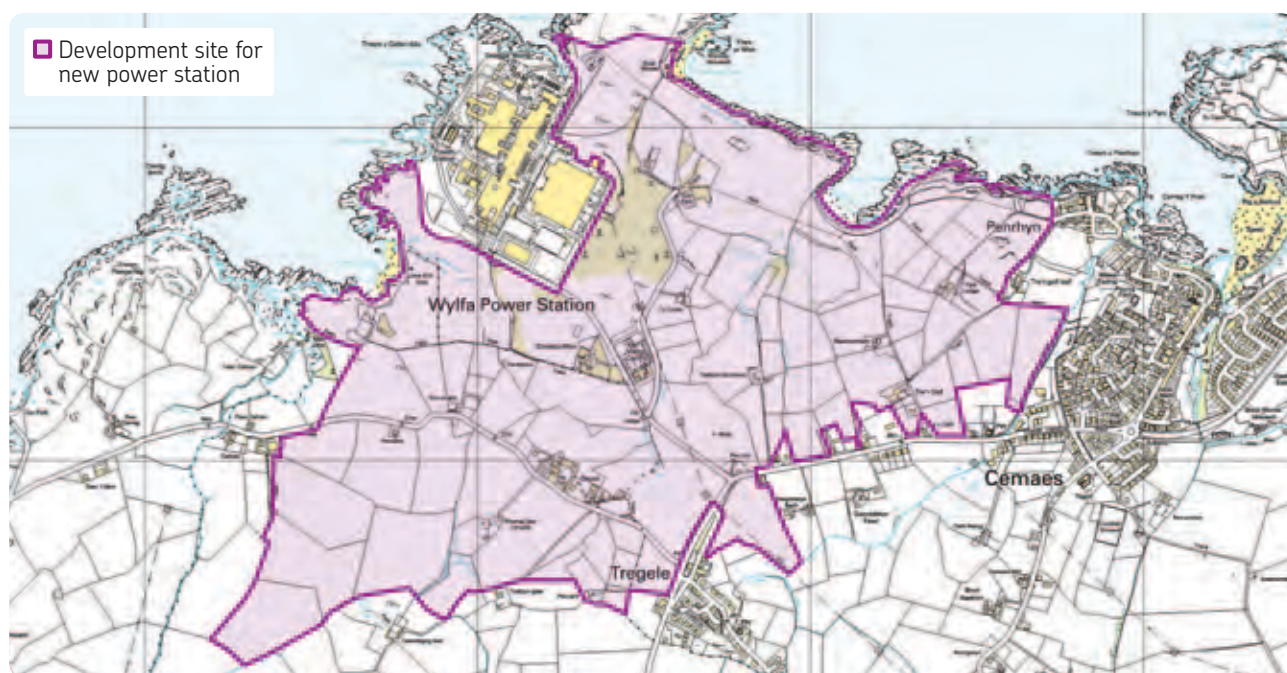
The different components of our proposals are likely to include:

- a power station including nuclear reactors with a combined generating capacity of up to 3.3 GW;
- a marine off-loading facility (MOLF);
- cooling water intake and outfall tunnels;
- electricity transmission infrastructure;
- other associated buildings, such as administration offices;
- interim waste storage facilities;
- access roads; and
- measures and initiatives to manage any impacts during construction and operation of a new power station.

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ABOUT THE WYLFA SITE

Nominated land, ownership and current activity.



The map above shows the area of land which, in 2009, was nominated into the Government's Strategic Siting Assessment process for a potential new nuclear power station.

This proposed 232 hectare development site surrounds Magnox North's existing Wylfa A Nuclear Power Station.

We have already carried out some preliminary ground investigation work in 2009 and more is planned for this winter period on land adjacent to the proposed development site. This includes vertical borehole drilling at Wylfa Head and offshore in order to establish the practicalities of constructing underground water intake and outfall tunnels.

We are also considering the development of a Marine Off-loading Facility (MOLF) on the coast. Of the options being considered, Porth y Ogor appears to be the most suitable. This would allow for the transportation and off-loading of construction materials and some of the larger plant components by sea, significantly reducing road and rail traffic.

For safety reasons, however, there will need to be some restrictions on accessing the area during construction.

Whatever associated development and investigation work takes place on or around the proposed development site, we are committed to minimising impacts and maintaining public access.

We know some people have concerns about the condition of unoccupied properties within the nominated site. We are working with EDF, which is the owner of a number of properties within the nominated site, to resolve their future and address any issues that exist. A range of surveys have already been undertaken to see which properties will require work, although the early indications are that a number may need to be removed.

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ACCOMMODATING WORKERS AT WYLFA DURING CONSTRUCTION

Ensuring proper accommodation for those involved in building a new power station at Wylfa is a key priority for Horizon.



The construction of a new nuclear power station at Wylfa is a significant undertaking, requiring ten years to complete. A project of this size will also require a highly skilled work force of up to 5,000 during peak construction in 2016 and 2017.

Building a new nuclear power station will bring investment and opportunities for jobs and our aim is to retain and provide training for the local workforce. However, to guarantee all the skills required at Wylfa during construction and operation, some workers will inevitably need to come from further afield and we need to plan where they might stay and understand the impact this could have.

A range of solutions is likely to be required, including:

- a large self contained accommodation campus either on or off the development site;
- using some existing accommodation, hotels and B&Bs as well as static caravans;
- developing a range of smaller camps or caravan sites in different locations.

Horizon is carrying out a number of studies including a Health Impact Assessment to ensure additional workers do not affect existing health services, and socio-economic and cultural studies to assess the impact on aspects such as the Welsh language.

The potential for a positive legacy is also an important consideration. Working with Isle of Anglesey County Council, we are assessing how new accommodation facilities could be managed and used to benefit communities in the future.

In addition to our own studies, we would welcome your views which will help us create a plan that works for the community. For instance:

- how and where you think the workforce could be accommodated?
- how could our plans support, and not detract from, local tourism?
- what will we need to consider regarding transport, local facilities and safety and security around any new accommodation areas?

To let us know, please:

- Fill in a feedback form at one of our exhibitions;
- Contact us on **0800 954 9516**; or
- Email us at wylfaenquiries@horizonnuclearpower.com.

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DELIVERING LONG TERM BENEFITS AT WYLFA

Horizon Nuclear Power wants to ensure a new nuclear power station at Wylfa will create a positive legacy for current and future generations.



Developing a new nuclear station at Wylfa is a significant undertaking and one that will create a lasting legacy for more than three generations on Anglesey and in North Wales. From construction to decommissioning, the whole project will last more than 90 years. It is crucial that we maximise opportunities and deliver benefits for as many people as is reasonably possible.

At Wylfa we want to:

- help create long-term education and training opportunities and develop a skilled Anglesey workforce;
- help establish a world-class supply chain;
- make improvements to the road infrastructure where required;
- work with and help develop the Isle of Anglesey County Council's Energy Island programme;
- build a new visitor and education centre; and
- ensure the demand for goods, services and employees benefits the local economy.

We are working closely with local communities and the Isle of Anglesey County Council to ensure the needs of people are considered fully in our plans for a new nuclear station and that we deliver the best possible outcome.

Whether people are interested in employment opportunities, tourism, transport infrastructure or any other potential impact, we are keen to hear your views and answer your questions.

Our planning consultation events in 2011 will give local communities and individuals further opportunities to feed back on our proposals. However, we'd also like to hear from you today. If you have any ideas, questions or comments please contact us at wylfaenquiries@horizonnuclearpower.com or on our freephone number **0800 954 9516**.

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FROM ENGAGEMENT TO CONSULTATION - YOUR CHANCE TO SHAPE OUR PROPOSALS

We have been actively engaging with communities on Anglesey since spring 2009. This activity will continue in 2011, when we will also begin formal pre-application consultation on our proposals.



Recent changes to the UK's planning system mean that any application for a new nuclear power station will be submitted to the Infrastructure Planning Commission (IPC)*. This is an independent body making decisions on applications for nationally significant infrastructure projects.

The new planning system places great emphasis and a formal requirement on community consultation. It advises that local communities should be able – where possible – to influence the development of a project and their views used to help shape the final proposals.

Horizon is working with the relevant local authorities – primarily the Isle of Anglesey County Council – to agree a 'Statement of Community Consultation' (SOCC). This will set out how we will formally consult on our proposals for a new power station at Wylfa.

In 2011 our SOCC will be published in the local media, distributed to libraries and other community facilities and made available to download from our website www.horizonnuclearpower.com.

Specific details such as timings, locations of events and questions we are asking will be made available before each stage of consultation activity.

Our application for the main development of the nuclear site will be considered by the IPC, but other elements necessary to deliver a new nuclear power station – called associated development – will be considered by other bodies. For instance, in Wales, offshore applications for the creation of a Marine Off-loading Facility will be considered by the Welsh Assembly Government and onshore developments such as road improvements would go to the Isle of Anglesey County Council.

We want to hear your feedback on our plans for a new power station at Wylfa and would like to encourage you to send us your comments at any time. You can contact us on **0800 954 9516** or at wylfaenquiries@horizonnuclearpower.com. We would also encourage you to fill in one of our feedback forms at the public exhibition.

*Following the change of Government in May 2010, the IPC will ultimately be replaced by the Major Infrastructure Planning Unit. Its remit will be broadly similar, though the ultimate decision on consent applications will now be taken by the relevant Secretary of State.

WHAT HAS BEEN HAPPENING AT WYLFA IN 2010?

Developing a nuclear power station is a complicated and lengthy process – even before construction begins.



Through 2010, Horizon Nuclear Power has been conducting a range of detailed studies to assess the practical implications of constructing a new plant at Wylfa and the associated social and economic impacts it may have both during construction and operation in the future.

Site development studies

A new nuclear power plant will have a range of implications for Anglesey and North Wales, and it is our duty to understand what these may be and how they will affect local communities and residents. In 2010, our site development studies have covered several areas, including the assessment of transportation options, where the construction workforce may be drawn from, and the potential options for a Marine Off-Loading Facility (MOLF) close to Wylfa. Each of these studies has been designed to assess the implications of construction and operation and allow us to identify potential solutions. We can then consult on these plans with the wider community.

Ground investigations and environmental studies

Developing a comprehensive breakdown of the land conditions on and around Wylfa has been a focus for our early studies. This information will help in the design, positioning and construction of the new power station. Our ground investigation studies have included groundwater monitoring and borehole drilling both on and offshore. We have also carried out a number of marine investigations and environmental and ecological studies focused on the Wylfa site and surrounding area. These will be continued and expanded upon this winter, including trial excavations and offshore drilling. They will help identify the best location for a new nuclear station and the potential environmental impacts.

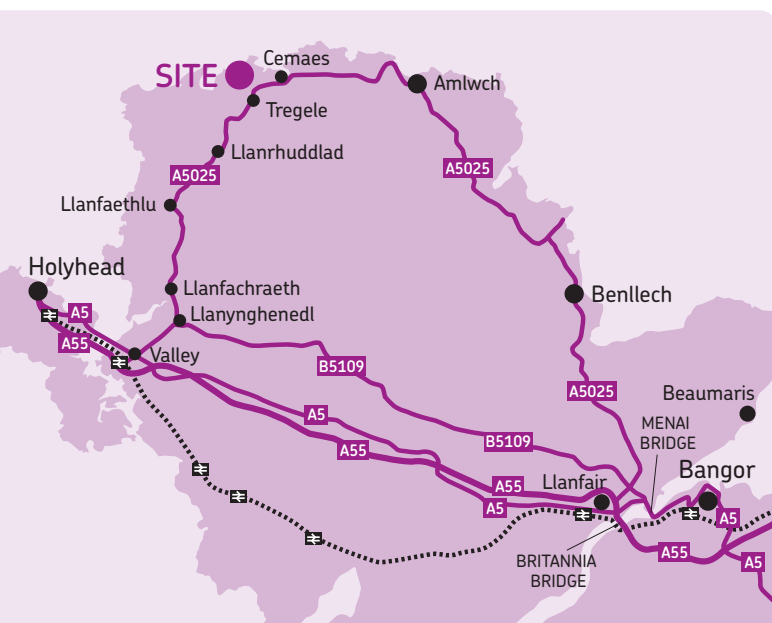
Early Works Agreement

In August 2010, initial assessment work by Areva NP (offering the EPR reactor) and a consortium formed by Westinghouse Electric Company (NPDUK) (offering the AP1000 reactor) began to address how their reactor designs could be developed at Wylfa. These early works and studies will help Horizon with its site layouts and the decision on which design to choose for the site.

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TRAFFIC AND TRANSPORT

Getting the right infrastructure in place to enable construction and operation is vital to our plans for a new nuclear power station at Wylfa.



To get material to the site during construction, especially heavy loads, we are looking at the potential for using sea, rail and road. In all cases we need to understand any impacts and what infrastructure improvements might be required.

For workers, both during construction and operation of the new plant we will also be looking at ways to reduce the number of vehicle movements and encourage green travel initiatives such as park and ride and shared car schemes.

We are working with a range of stakeholders including the Isle of Anglesey County Council and Welsh Assembly Government to ensure we are considering all relevant issues and feeding into the work of the Energy Island programme.

Sea

Bringing as much material as possible by sea is the most sustainable option and we are planning for a Marine Off-loading Facility (MOLF) close to the site. From our studies looking at the options we believe Porth Y Ogorf is likely to be the preferred location for a MOLF.

Rail

We are looking at the potential for rail to bring in construction materials, including the disused railway line from Gaerwen to Amlwch. Our studies suggest this would be very costly and unless the line could be extended to the Wylfa site (at further cost and disruption to existing infrastructure) we would still need to bring materials along the narrow roads from Rhosgoch or Amlwch to Wylfa.

Road

The impact of increased traffic and heavy loads on the road system is important in planning for a major new development. Our transport studies are looking at issues such as where the construction workforce might live, how they will travel and the movement of heavy loads overland. In doing so, we have looked at the situation both on and off the island.

We believe that improving the A5025 stretch of road between Valley and Wylfa is vital to ensuring the safe construction and operation of a new nuclear power station. We have begun a series of studies to look at the options. A key part of this involves looking at Valley Cross Roads, Llanfachaeth and identifying any other parts of the road that may need improving.

We are carrying out assessments into a number of possible options and this will be an important part of our formal consultation programme beginning in 2011.

To help us, we would welcome your views on:

- what traffic and transport issues you think we should be looking at; and
- how you think heavy loads and construction materials can best be brought into the site.

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SAFETY & SECURITY

The safety, health and security of the public and our employees is a top priority for Horizon Nuclear Power.



Our shareholder companies E.ON and RWE have more than 50 years' experience in all aspects of safe nuclear operation, spent fuel storage and decommissioning, and we will bring this level of technical detail and knowledge to Wylfa.

UK commercial nuclear plants have safely generated energy for over 50 years and are regularly monitored and evaluated. In England and Wales the nuclear industry is tightly regulated by the Nuclear Installations Inspectorate (NII) and the Environment Agency (EA). The NII ensures that all nuclear stations are built and operated to the highest standards while the EA ensures that discharges and other environmental impacts are correctly managed.

There has never been a nuclear incident at a UK commercial power station that has caused a hazard to the public and less than 0.1 per cent of the entire annual radiation dose you receive is due to nuclear power plants.

The Office for Civil Nuclear Security (OCNS) is the security regulator for the UK's civil nuclear industry and enforces the comprehensive legal and regulatory framework in place to ensure the security of nuclear installations and nuclear materials in transport.

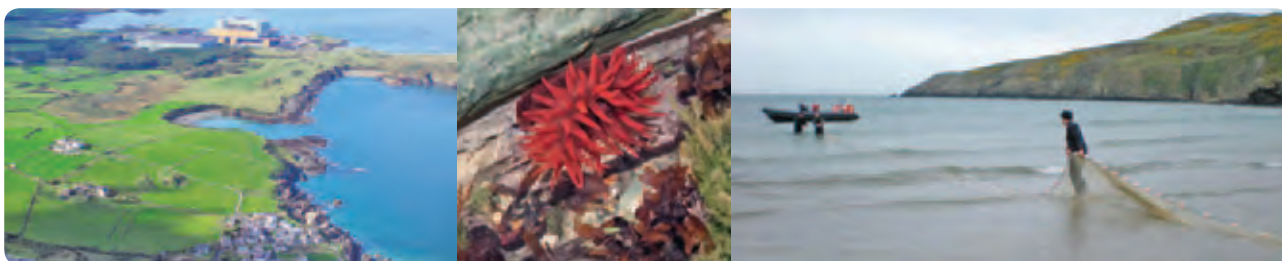
These rigorous procedures ensure nuclear installations in the UK have an excellent safety record. The new generation of nuclear power stations will have the structural resilience to withstand extreme conditions including fires, air crashes and earthquakes.

For more information about nuclear regulation, visit:
www.environment-agency.gov.uk
www.hse.gov.uk/nuclear.

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MANAGING ENVIRONMENTAL IMPACTS

We want to minimise the environmental impact of a new nuclear power station at Wylfa.



As part of a planning application, Horizon is required to provide a supporting Environmental Impact Assessment (EIA) identifying and setting out how we will manage any impact that construction, associated development, long-term operation and decommissioning may have on the surrounding environment. At Wylfa, our EIA will cover the following areas:

- air and water quality;
- the marine environment;
- health and well-being;
- public access and recreation;
- geology, hydrogeology & soils;
- hydrology & flood risk;
- terrestrial ecology (e.g. habitat and protected species);
- landscape and visual effects;
- archaeology and cultural heritage;
- noise and vibration;
- traffic and transportation;
- Welsh language and culture; and
- social and economic effects.

During 2009 and 2010 our ecological studies have focused on:

- birds;
- bats;
- otters and water voles;
- reptiles;
- amphibians;
- invertebrates; and
- botanical studies.

These surveys will be repeated in 2011, at which point the studies will be extended to cover local Biodiversity Action Plan species such as:

- polecats;
- hedgehogs;
- brown hare; and
- field mice.

An extensive programme of marine investigation has also been underway during 2010 and will continue into 2011. This includes:

- water quality surveys;
- hydrographic surveys;
- fisheries surveys;
- benthic (sea bed flora and fauna);
- phytoplankton and zooplankton surveys; and
- marine bird surveys.

Part of our studies also includes the drilling of exploratory boreholes and trial pits to establish the geological and technical make-up of the land. We are also studying the archaeological heritage of the site, including previous buildings and settlements that existed at Wylfa.

We have been discussing the scope of these surveys and our overall proposals with a wide range of statutory and non statutory stakeholders, including the Countryside Council for Wales (CCW), Environment Agency, and the Isle of Anglesey County Council. This will help to ensure, at the earliest stage, that our plans and studies address their concerns.

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WASTE & DECOMMISSIONING

Secure storage of spent fuel and safe disposal of waste will be an integral part of the proposed new development at Wylfa.



The UK has a strong, robust and independent nuclear regulatory regime which will play a key role in ensuring secure final disposal of waste and spent fuel arising from the new generation of nuclear power stations.

We have agreed with Government that, as investors in new nuclear power stations, we will meet the full costs of decommissioning and the management of new waste created by our stations. Government is in the process of finalising the details of the financing arrangements required for new nuclear operators.

Through our shareholders, E.ON and RWE, we have more than 50 years experience in the nuclear industry, including experience of decommissioning nuclear power stations and treating and storing waste.

At Wylfa we will need to consider the management of low level waste, intermediate level waste and spent fuel.

Low Level Waste – This includes items such as disposable gloves and lab tissues which may have become contaminated. It is generally stored securely on site prior to safe disposal at the UK's low level waste repository, near Drigg in West Cumbria.

Intermediate level waste – This includes purification and filtration equipment (such as filters and ion exchange resin) and reactor components. Its radioactivity is higher than lower level waste and it needs to be shielded, but does not generate significant levels of heat.

Spent fuel – There will be no wastes associated with reprocessing (High Level Waste) generated at Wylfa, only spent fuel. The secure storage of spent fuel at Wylfa will be an integral part of the proposed new site and will be within the nuclear licensed area. It will only leave the site once a central repository is ready to accept it.

Decommissioning is also important when developing a nuclear power station, and our shareholders have first hand experience in decommissioning Pressurised Water Reactors (the type of technology that will be used at Wylfa).

Nuclear reactors are now designed specifically with decommissioning in mind: in fact, PWR technology typically takes around 10 years to decommission, as opposed to the 50-100 years required to decommission a Magnox or AGR nuclear power station. The amount of waste generated by new nuclear power stations is small compared to the nuclear waste that already exists: studies undertaken for the Government have estimated that the waste generated from the operation of 10 new nuclear power stations in the UK for 60 years, generating 25% of the UK's electricity, would add 8% to the existing volume of nuclear waste in the UK*.

More information on what the Government is doing about radioactive waste can be found on the Government's Managing Radioactive Waste Safely pages, available at <http://mrws.decc.gov.uk>.

* Nuclear Consultation, s8.22-8.23 (p131/2).
<http://www.berr.gov.uk/files/file39197.pdf>

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WORKING WITH LOCAL BUSINESSES

Horizon Nuclear Power is committed to supporting the North Wales economy and ensuring local businesses can benefit from a new nuclear station at Wylfa.



In addition to direct employment, a power station development such as that planned for Wylfa can inject many millions of pounds per year into local economies through indirect employment and increased demand for goods and services. With its potential construction and operation spanning many decades, there will be significant long-term opportunities.

A series of socio-economic studies are currently underway to assess how to maximise this opportunity and bring the very best economic benefits to businesses across North Wales. Our goal is to:

- **develop and safeguard local supply chains** – by working closely with businesses and our preferred reactor supplier and construction partner (once identified), to maximise local, national and international opportunities if plans for a new station go ahead.
- **boost local employment** – 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. We will work hard to ensure that as many of the existing skilled workforce at Wylfa and Trawsfydd as possible are given the chance to be involved in the new station.

How to get involved

This is a community that we hope to be part of for many decades to come, and we're keen to be able to support the local economy.

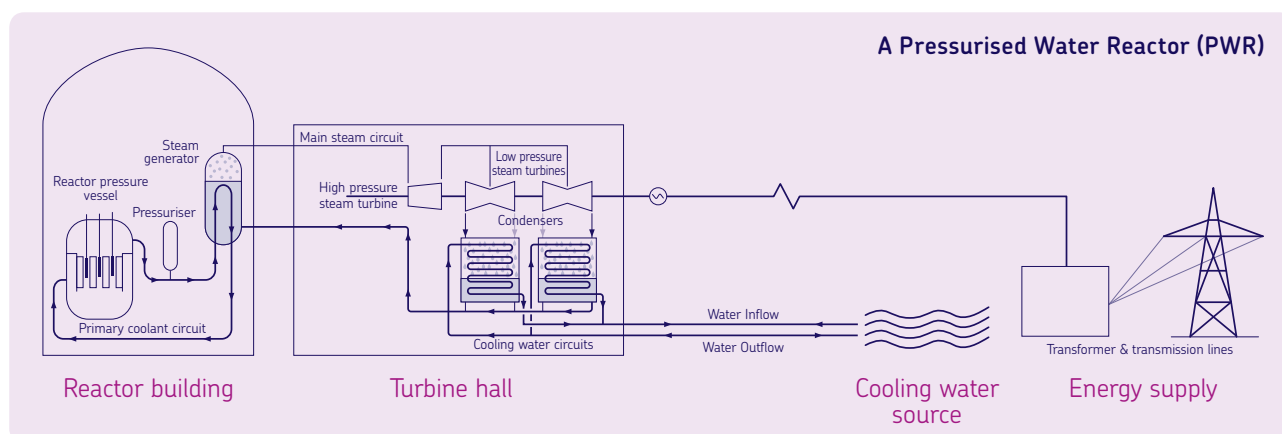
If you're a local business... please contact: suppliers@horizonnuclearpower.com or come along to one of our regular local events. We welcome and encourage approaches from all types of business and will ensure companies registered are kept up to date on the project.

If you're looking for a job... Why not log on to www.horizonnuclearpower.com/careers.php to register your interest and search for vacancies.

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WHAT NUCLEAR TECHNOLOGY WILL BE USED AT WYLFA?

A new power station at Wylfa will use the most modern, efficient and safest nuclear technology available.



Nuclear technology in the UK is regulated by the Nuclear Installations Inspectorate (NII) and the Environment Agency (EA) which are jointly conducting a 'Generic Design Assessment' (GDA) to evaluate the safety, security and environmental implications of new nuclear reactor designs. The GDA is due to be complete by June 2011.

The two designs currently under assessment for a UK nuclear reactor licence are AREVA's EPR and Westinghouse Electric Company's AP1000. Once the designs have satisfied the GDA process, they can be considered for licence at any of the sites nominated in the UK as potentially suitable for a new nuclear power station. Both designs use Pressurised Water Reactor (PWR) technology to generate energy. In a PWR reactor, water is pumped under high pressure to the reactor core where it is heated, generating power by the steam turning a steam turbine. It is then partially cooled before beginning the cycle again.

Horizon is currently working with both AREVA NP and Westinghouse Electric Company (NPDUK) with a view to making a preferred technology choice early in 2011. Once this decision is made we will begin our formal pre-application consultation.

AREVA's EPR reactor is currently under construction in Finland, France and at two sites in China. It has been selected for construction in the UK at Hinkley Point and Sizewell. Horizon is in discussions with AREVA NP, a consortium comprising Areva and German power company Siemens. For more information visit: www.areva.com

Nuclear Power Delivery UK is a team comprising Westinghouse Electric Company, Shaw Group, Laing O'Rourke and Toshiba, established to bring the Westinghouse AP1000 reactor to the UK. The AP1000 is one of two designs currently being assessed by UK regulators for potential new nuclear build, and the world's first AP1000 plant, at Sanmen in China, is scheduled to produce electricity in 2013. Further plants are in development in Georgia in the USA. For more information visit www.nuclearpowerdeliveryuk.com.

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WHAT IS ASSOCIATED DEVELOPMENT?

A new nuclear power station at Wylfa will require a number of changes to the infrastructure surrounding the site to ensure its successful long-term operation.



Associated development is the term used to describe any further work required outside the main site boundary to support its construction and operation. We believe this could include improvements to the road network, providing workers' accommodation and park and ride facilities.

In Wales, associated development is not considered under the Infrastructure Planning Commission (IPC)* system. Offshore consents are granted by the Welsh Assembly Government and in many cases, onshore works are covered by the Isle of Anglesey County Council under the Town and Country Planning Act.

At Wylfa, we expect that associated development could include the following areas:

- the road network (including surfaces, traffic calming, signage, site access and landscaping);
- Marine Off-loading Facility (MOLF);
- the provision of workers' accommodation offsite;
- park & ride facilities;
- rail improvements;
- utility requirements including sewerage, water and telecommunications; and
- measures to manage any ecological impacts.

Horizon takes these additional areas of construction seriously. We understand that any changes we propose to make as a result of a new nuclear station need to be communicated properly to the local community. Associated development will be an important element of our formal consultation in 2011.

*Following the change of Government in May 2010, the IPC will ultimately be replaced by the Major Infrastructure Planning Unit. Its remit will be broadly similar, though the ultimate decision on consent applications will now be taken by the relevant Secretary of State.

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WORKING WITH THE LOCAL COMMUNITY

Horizon Nuclear Power is working hard to keep you informed and involved.



The construction, operation and decommissioning of a new nuclear power station at Wylfa could span 90 years. This means we hope to be part of – and play our part in – the local community for generations to come.

Since 2009 we have worked hard to become a familiar face in the local community and keep residents across Anglesey informed of our plans every step of the way. These engagement activities have included:

- several rounds of local exhibitions;
- 'Community Update' newsletters;
- monthly Cemaes Open Surgeries;
- exhibiting at the 2009 and 2010 Anglesey Shows;
- responding to email and telephone messages; and
- presenting to a range of town and community councils.

While in 2011 we will formally consult on our plans for a new nuclear power station, we want to keep talking, listening and responding to the communities around the site throughout the development, construction and operation of a new station. As part of this we are creating a Project Liaison Group to help us talk with community groups and representatives. This group would be distinct from the existing Wylfa Site Stakeholder Group, but would use its structure and make-up as a point of reference.

In addition, we are continuing to work with local authorities and wider stakeholders to ensure consistent communications and avoid confusion. We are part of the Energy Island programme – led by the Isle of Anglesey County Council – and work closely with Magnox North and National Grid.

How to get involved

If you are interested in learning more about our plans for Wylfa, you can visit Horizon Nuclear Power's website at www.horizonnuclearpower.com/wylfa.php or contact us on **0800 954 9516** or at wylfaenquiries@horizonnuclearpower.com. We would welcome the opportunity to talk to you in more detail.

