HORIZON
NUCLEAR POWER

NOVEMBER 2009

ENERGY WORKING FOR BRITAIN

A UK company of E.ON and RWE

ENVIRONMENTAL IMPACT ASSESSMENT SCOPING REPORT SUMMARY

PROPOSED NUCLEAR POWER STATION NEAR OLDBURY-ON-SEVERN SOUTH GLOUCESTERSHIRE

E.ON UK and RWE npower have formed a joint venture company called **HORIZON NUCLEAR POWER** to develop new nuclear power stations in the UK.

Horizon Nuclear Power would like to develop around 6 gigawatts (GW) of electricity capacity on land adjacent to the existing nuclear power stations at Oldbury and Wylfa on Anglesey. The move creates a strong partnership which benefits from the backing of two companies with extensive experience of operating nuclear power stations, and the resources and skills to deliver new nuclear plants. The companies have stakes in 23 nuclear reactors around the world, including jointly owning three reactors in Germany.

The Oldbury site (shown above) is located on the eastern bank of the Severn Estuary within the administrative area of South Gloucestershire Council. The nearest settlements are Oldbury on Severn, Shepperdine and Thornbury. The site is located immediately north east of the existing Oldbury nuclear power station.

e·on RWE The energy to lead

WHAT IS AN ENVIRONMENTAL IMPACT ASSESSMENT SCOPING REPORT?

Undertaking of an Environmental Impact Assessment (EIA) is an important part of the planning process for a development such as a new power station at Oldbury.

The purpose of the EIA is to examine the potential impacts of a new power station development at Oldbury. It will also set out what steps and measures we believe are required to mitigate any major impacts. The conclusions of a EIA are drawn together in an 'Environmental Statement' (ES) which is formally submitted with a planning application.

A Scoping Report is the first step in this process. It enables us to set out the key elements of the proposed development and follows the discussions we have had to date with a wide range of groups and organisations.

THE MAIN OBJECTIVES OF THE REPORT ARE:

- To provide an overall description of the project;
- To illustrate what we see as the key environmental issues;
- To highlight the key impacts, both positive and negative, and show how these might be addressed;
- To identify where we believe there are gaps in information about the project and what work we propose to fill these gaps;
- To outline the legal and regulatory issues and what formal permissions are required for the project to proceed; and
- To explain the next steps and how we will produce our full EIA

The Scoping Report has been issued to the Infrastructure Planning Commission (IPC) to support a formal request for a 'Scoping Opinion'. Once received, the Scoping Opinion will provide further information on the studies needed to support the Environmental Impact Assessment for the Oldbury Project. The IPC is obliged to seek the views of a number of statutory bodies before reaching its conclusions.

This summary document has been produced to provide some further information about the Scoping Opinion request and Scoping Report and highlights some of the key areas in which we expect further studies to be needed.

PROJECT OUTLINE

A new nuclear power station at Oldbury will use "pressurised water reactor" (PWR) technology. However, at this stage, the reactor supplier and the overall number of reactors has not been determined.

Two reactor designs are being reviewed by the UK regulator as part of a process called "Generic Design Assessment" – further information is available in the full scoping report available at e.on-uk.com/Oldbury.

THE PRECISE DETAILS MAY NOT BE FINALISED FOR SOME TIME SO THIS LIST HAS BEEN DRAWN UP TO PROVIDE A GENERAL OVERVIEW OF THE EXTENT OF THE PROJECT. HOWEVER, WE DO EXPECT TO MAKE A NUMBER OF THE MAJOR DECISIONS, SUCH AS THE CHOICE OF REACTOR TYPE AND THE NUMBER OF REACTORS DURING 2010.

HOWEVER, AT THIS STAGE A DEVELOPMENT AT OLDBURY IS EXPECTED TO COMPRISE:

- A power station comprising up to three nuclear reactors with a combined output of up to 3300 megawatts (MW);
- Up to four cooling towers of between 70m and 200m in height;
- Interim waste storage facilities;
- Electricity transmission infrastructure;
- Access roads and highways improvements and a possible "Park & Ride" type facility;
- A marine off-loading facility (MOF), and any other such construction transport options (subject to the outcome of a Transport Options Study)
- Construction of flood defences (a range of options are being assessed);
- Construction areas and facilities;
- Ancillary development such as other buildings and infrastructure associated with the nuclear site; and
- Landscape and biodiversity initiatives and mitigation measures associated with the construction and operation of a new power station.

ENVIRONMENTAL IMPACT ASSESSMENT

Below we have set out some of the future studies and activities that will be undertaken to assess the likely environmental impacts of a development at Oldbury. Some survey work has already been carried out or is ongoing, such as baseline ecological work.

SUMMARY OF SURVEYS AND INVESTIGATIONS

TOPIC	SURVEYS AND INVESTIGATIONS
Geology, hydrogeology and soils	Assessment of the depths of topsoil and subsoil resources on the site through a survey of soil types. This will enable a soil management strategy to be produced Desk Based Assessment of geotechnical and ground engineering issues, soil contamination, geology and hydrogeology, geomorphology. Analysis of existing borehole and sample data, with further investigations as required, to characterise the hydrogeological regimes, potential ground contamination and any remediation requirements.
Surface water and flooding	Full and detailed Flood Risk Assessment.
Landscape and visual amenity	Assessment of landscape character and visual resources from desk study and field survey. Valued landscape and visual resources will be identified at international, national and local levels within the study area which is taken to be up to 35 km from the proposed site boundary.
Ecology and nature conservation	Further ecological surveys to characterise the ecology of the site. These will include both ecology on land and surveys within the Severn Estuary.
Archaeology and cultural heritage	Collection of additional baseline data relating to known and potential cultural heritage resources. Existing and available geological and geotechnical information would be examined. Site surveys would be undertaken to identify previously unrecorded sites of potential interest. If necessary, additional archaeological surveys would be undertaken.
Traffic and transport	A Transport Master Plan will be developed which will examine all potential routes for both construction workers and materials and components in to the site. A full Transport Assessment will be prepared. Traffic counts will be taken on all the routes affected which would be affected. An abnormal loads study will be undertaken.
Air quality and dust	Data on existing air quality would be obtained from the UK Air Pollution Information System (APIS) website (www.apis.ac.uk), and the UK Air Quality Archive (www.airquality.co.uk). If necessary this would be supplemented by a monitoring programme at the site. An assessment of the potential air quality impact of emissions from construction and daily worker traffic on access roads would be undertaken, as would the effects of any rail or marine transport of materials.
Noise and vibration	The requirements for ambient noise monitoring will be agreed with South Gloucestershire Council (and if necessary Forest of Dean District Council) and the necessary monitoring undertaken. An assessment of construction noise will be undertaken using predictive noise calculations and modelling based on noise propagation data for typical construction plant, and also more site specific data. Noise from the operation of the power station will be assessed. The Calculation of Road Traffic Noise methodology will be used to assess the noise effects of both construction and operational traffic on local roads.
Public access and recreation	Assessment of the level of use of the rights of way within and around the site of the proposed new power station to inform the evaluation of their importance as a recreational resource, and the assessment of the significance of the potential impacts of their closure and/or diversion.
Socio-economic	Baseline study to obtain information about the existing situation and how it would change in the absence of the proposals. It will address employment at the site, labour market characteristics, population/ demographic characteristics and information about the housing stock and existing services and facilities. Potential effects on agriculture, commercial fisheries, and Sharpness Docks will also be assessed.

Work to determine the design of a new power station will continue alongside these studies and assessments.

Our proposals for the construction and operation of a new nuclear power station will be shaped by the EIA work, technical studies and a variety of formal and informal consultation and engagement activities that will be carried out over coming months.

A FULL COPY OF SCOPING REPORT WHICH ACCOMPANIED OUR REQUEST TO THE IPC FOR A "SCOPING OPINION" IS AVAILABLE TO DOWNLOAD AT: (E.ON-UK.COM/OLDBURY)

IF YOU WOULD LIKE TO COMMENT ON THE SCOPING REPORT PLEASE RESPOND:

By e-mail to:
oldburyenquiries@eon-uk.com

By post to:
Tim Proudler - Planning and Consents Manager
Horizon Nuclear Power
5210 Valiant Court
Gloucester Business Park
Hucclecote
Gloucester
GL3 4FE

Any comments should be received by 31 December 2009.

If you feel that some or all of your response should be treated in confidence, then please clearly state that in your response and the reasons why. Please be aware that we may be legally required to hand over information we receive to others (such as the Infrastructure Planning Commission), and as a result we cannot give an assurance that confidentiality can be maintained in all circumstances.