



## OVERVIEW

ScottishPower is planning to build a Combined Cycle Gas Turbine (CCGT) power station to repower Cockenzie Power Station, which will close in its current format by December 31, 2015. The

company is consulting local people and statutory organisations on proposals for the new station and associated gas pipeline.

This factsheet provides an overview of the project, as

we appreciate that not everyone could attend the public exhibitions held in June and September, or has access to the project website

[www.cockenziepowerstation.com](http://www.cockenziepowerstation.com) where exhibition materials

are available to view.

We welcome constructive input and will incorporate feedback, as appropriate, in our plans before we apply for consent to the Scottish Government in November.

## SECURING THE FUTURE OF THE NATION'S ENERGY SUPPLIES

ScottishPower is part of the IBERDROLA group of Spain, one of the world's largest electricity utilities and a world leader in renewable energy. Our sister company, ScottishPower Renewables, is the UK's leading onshore wind energy developer.

The companies aim to meet customers' electricity needs through a balanced generation portfolio including renewable technologies – such as wind, wave and tidal energy and hydro-electric power – clean coal, pumped storage and gas. This mix of generation sources helps ensure both the UK and Scotland's energy supplies remain secure and sustainable.

The proportion of electricity demand met from renewable power sources, such as wind, will grow by 2020.

However, other power generation sources will be needed to meet the nation's electricity needs when wind levels are low or demand is high.

Gas generation is ideal for this, as it is efficient, flexible – it can be switched on and off as necessary – and has significantly lower levels of carbon and other emissions than coal.

To meet this demand, we are proposing to replace the coal-fired units at Cockenzie with efficient CCGT gas-fired units. The output of the CCGT would be the same or less than the existing station, which can produce 1,200 Megawatts (MW) – enough to supply the electricity needs of half a million homes.

ScottishPower took its outline proposals to the community at the first opportunity to allow local people to raise any concerns at an early stage.

We did this to ensure the views of the community on site selection could be addressed and issues raised about the proposal could be explored during the subsequent detailed environmental impact assessment (EIA).



■ Cockenzie Power Station, viewed from Cockenzie Harbour

## EIA WILL PUT PROJECT UNDER THE SPOTLIGHT

The Environmental Impact Assessment (EIA) is an in-depth study of the potential effects of the proposed power station and associated pipeline on the environment and communities in the area. The assessment is a compilation of studies undertaken by experts across a range of disciplines.

The EIA process involves assessing potential impacts of the construction, operation and decommissioning of a major development.

These factors include air quality, noise, landscape and visual impact, ecology, water quality, geology, hydrology, traffic and infrastructure, socio-economic impact and cultural heritage. This includes the likely number of jobs created, effects on tourism and other impacts on the local economy.

If any unacceptable effects are likely, ScottishPower will adapt its proposals to avoid negative impacts, or take steps to minimise or offset potentially adverse effects.

For example, this might involve a deviation in the route of the pipeline to avoid an environmentally sensitive area or historic monument, or constructing a dedicated access road to minimise noise or traffic nuisance for local residents, or to protect wildlife.

## THE ENERGY GAP

Within the UK many power stations, including older coal stations like Cockenzie and several nuclear plants, will close over the next 15 years. This will result in a loss of generation capacity of 19 Gigawatts\* – equivalent to the output of around 15 power stations of Cockenzie's size.

These closures, along with increasing energy demand, means that by 2015, the UK will face an energy gap.

The Scottish Government has sought to address this issue by identifying continued power generation at Cockenzie as a priority 'national development' in its National Planning Framework. This means the principle of continued generation at Cockenzie is deemed acceptable by the Scottish Government.



## A LANDMARK FOR OVER 40 YEARS

Cockenzie's coal-fired power station was opened in 1967 and has played a vital role in providing electricity for homes and business for more than 40 years.

Over its lifetime, this power station has contributed significantly in terms of economic and social input, providing local jobs and support for communities.

Cockenzie strives to be a good and trusted neighbour to local residents and meets community representatives on a regular basis.

The station plays an active role in the community, not just as an employer, but as an educational and community resource for school visits, arts events and a contributor to local biodiversity and heritage projects.

## CONTACT US

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\* Department of Energy and Climate Change, August 2009

# COCKENZIE CCGT POWER STATION COMMUNITY FACTSHEET

## GAS SUPPLY FOR THE NEW STATION

The proposed new power station would need to be supplied with gas, sourced from the National Grid.

This would involve laying a pipeline between the station and the nearest national transmission pipeline near the Museum of Flight at East Fortune.

The 17km pipeline, which is proposed to be 600mm in diameter, would be installed through mainly arable land.

The majority of it would be buried about 1.2 metres underground.

Construction would take between six and nine months, during which a working width of up to 30 metres would be utilised along its length.

The detailed route is being carefully planned in consultation with wildlife conservation and heritage experts to combine engineering excellence with environmental responsibility.

After the pipeline has been installed, any excavated land will be completely regenerated as is the case with existing pipelines that cross East Lothian.

Apart from Above Ground Installations at either end of the pipeline, it will not be visible to local residents.

The pipeline would be built to stringent UK standards and subject to continual monitoring and regular inspection during operation.

On the changeover to gas, there would be no need to continue lorry or rail movements to provide Cockenzie Power Station with fuel.



The new Cockenzie CCGT power station would be built in line with the phased decommissioning of the existing coal station.

Units 1 and 2 of the coal-fired station would come out of service to enable construction of the new station. Coal-fired generation at Cockenzie will stop by December 31, 2015 at the latest and the new power station would be fully operational by 2016.



■ Cockenzie from the air, and, above left, the station at night

## REDUCED IMPACT ON THE ENVIRONMENT

We considered several site and layout options and listened to local people's views before opting to reuse as much of the existing power station fabric as possible for the new power station, rather than building on a new site.

Re-using parts of the existing station is also more sustainable than a new build.

Although the environmental assessment is ongoing, indications are that the new station would have less of an impact, including:

- Less than half the carbon dioxide (CO<sub>2</sub>) emissions
- Less than one-third the oxides of nitrogen (NO<sub>x</sub>) emissions
- Virtually no sulphur dioxide (SO<sub>2</sub>) emissions
- No dust and no ash by-product
- The coal conveyor would be removed.

Other issues under consideration, include assessing the feasibility of heating local homes using waste heat from the station.

The new station's design will include the potential for Carbon Capture and Storage to be fitted in the future.

This emerging technology enables virtually all of the CO<sub>2</sub> emissions to be captured and piped for storage in offshore rock formations.

## CONSENT PROCESS

The decision on whether or not to grant consent for the new power station lies with the Scottish Government under Section 36 of the Electricity Act. They will also determine the separate application for the gas pipeline.

They will take on board representations offered by statutory consultees that have scrutinised the plans.

Statutory consultees include East Lothian Council, Scottish Natural Heritage, the Scottish Environment Protection Agency, Marine Scotland and Historic Scotland.

In addition, we are consulting on our plans with local communities and plan further public information events in November 2009.

Formal comments on the proposal must be lodged with the Scottish Government within 28 days of the submission of the application being advertised.

## OUR STRONG TRACK RECORD AS A CCGT OPERATOR

ScottishPower has a strong track record as an environmentally-responsible operator of gas power stations, owning and operating three CCGTs in the south of England.

These are Damhead Creek, an 800MW power station on the Hoo Peninsula in Kent; Rye House, a 793MW facility built on the site of a former coal-fired power station in the market town of Hoddeston in Hertfordshire, 18 miles north of London; and Shoreham Power Station, a 420MW CCGT near Brighton, in West Sussex, which was built on the site of the former coal-fired Brighton 'B' power station.

Like the new CCGT proposed for Cockenzie, these stations operate under strict environmental conditions, relating to noise and air quality.

The new power station at Cockenzie will require a PPC permit to operate, issued by the Scottish Environment

Protection Agency. This will specify limits for emissions to air, based on stringent European legislation.

These limits are based on extensive scientific research and were developed in consultation with independent experts, such as the World Health Organisation, to protect human health and ecological systems.



■ Damhead Creek Power Station

