

# Energy and Nuclear Power

- a free talks service  
for England and Wales



Central Electricity Generating Board

## **Concern for energy**

Throughout the world there is increasing concern about the price and availability of energy.

Abundant supplies of energy, at prices people can afford, are needed by industry, transport and in the home. Without these supplies, modern living standards could not be maintained. But the prices of all forms of energy have risen sharply, and the reserves of some forms of energy are being rapidly used up. People are concerned to know what steps should be taken to safeguard future supplies, and to make their voices heard in the public energy debate.

## **Nuclear power and safety**

In Britain about one-eighth of the public electricity supply is generated by nuclear power stations, and more of these stations are under construction. The Government has recognised that nuclear power has a great potential for the future.

But nuclear power is a relatively new form of energy. Understandably, people are concerned that it is safe for themselves and for their descendants.

## **Role of the CEGB**

The Central Electricity Generating Board (CEGB) is part of the publicly owned electricity supply industry of England and Wales. Its power stations supply electricity in bulk to the twelve Area Boards, for distribution to 20 million consumers.

To meet the ever-present demand for electricity the power stations burn coal, oil, gas and nuclear fuel — with the lowest-cost forms of generation used in preference. Now and in the future, assured supplies of energy at economical prices are needed for electricity generation.

The CEGB has operated nuclear power stations since 1962. They have proved themselves to be safe and reliable, and are producing electricity more cheaply than coal - or oil-fired power stations.

As a major energy industry the CEGB welcomes opportunities to improve public understanding of its activities and policies. It also recognises the need to play its full share in the public debate on energy.

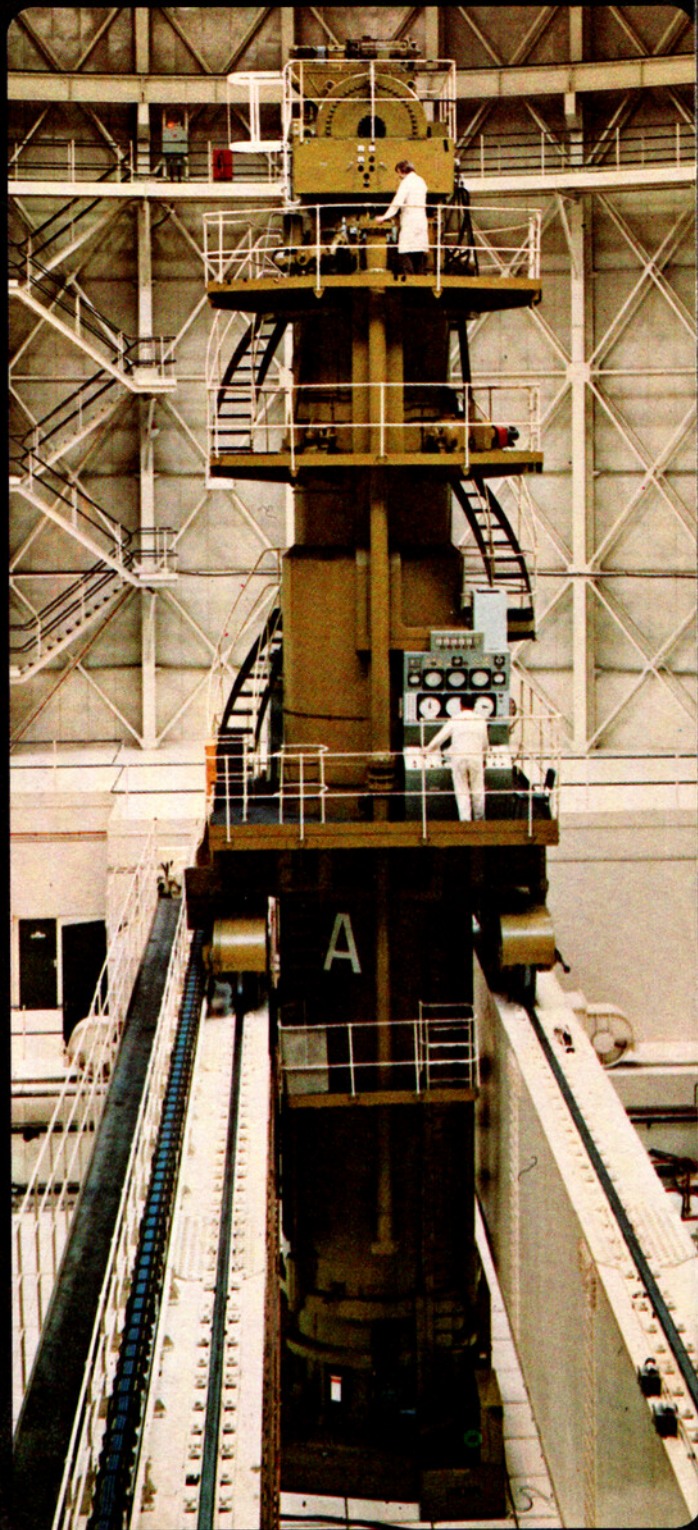
## **The talks service**

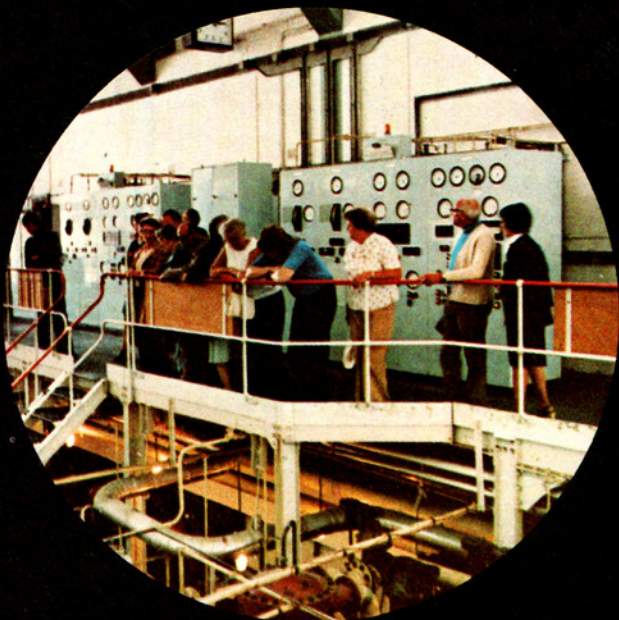
The CEGB maintains communications with the public through publications, exhibitions, films, open days and other means.

To supplement these services a free talks service on energy and nuclear power has been set up.

Speakers for the service are drawn from various parts of the CEGB's organisation. Their talks are illustrated with supporting material and are designed to help the public to reach a better understanding of the issues involved.

Requests for talks are invited from clubs, societies, schools, colleges and other groups of people anywhere in England and Wales. Please use the tear-off slip attached to make the arrangements.





Left: At Oldbury-on-Severn nuclear power station near Bristol, this machine inserts and withdraws nuclear fuel from the reactor located beneath the floor.

This page: Open days at Dungeness nuclear power station in Kent have proved very popular with summer holiday-makers.





## **Some common misunderstandings**

**Myth:** A nuclear power plant is a potential atomic bomb.

**Fact:** There is no way such a plant can explode like an atomic bomb. The arrangement and dilution of the nuclear fuel are entirely opposite to the conditions needed to produce such a reaction.

**Myth:** Low-level radiation from nuclear plants may cause disease and death.

**Fact:** Cosmic rays and natural background radioactivity expose us to many times more radiation than that released by nuclear plants. Each of us receives about 100 units of radiation exposure a year from such natural sources, which have been present since time began. Nuclear plants contribute on average an additional dose of 0.2 units. This is 150 times less than the extra background radiation received by people in the granite city of Aberdeen compared with those living on London clay.

**Myth:** Plutonium is the most deadly substance on earth.

**Fact:** Plutonium, a valuable by-product of nuclear power, is a potentially dangerous substance and must be handled with care. However, there are other more hazardous non-radioactive substances on earth such as anthrax, diphtheria and botulinus toxins, lead arsenate (a common ingredient of pesticides), potassium cyanide, etc. It is not true that in all circumstances very small amounts of plutonium are lethal.

## **Questions people are asking**

Why do we need nuclear power?

What about alternative sources of power generation?

Are nuclear power plants safe?

How effective will the SAVE IT campaign be?

Can nuclear waste be disposed of safely?

Won't North Sea oil solve our problems?

How about radiation hazards at nuclear plants?

What government controls are there over nuclear power?

These are the type of questions dealt with by the CEGB talks service, which is presented as a contribution to public understanding.

Published by

**Central Electricity Generating Board**

Press and Publicity Office, Sudbury House,  
15 Newgate Street, London EC1A 7AU.

Designed by Main Titles Ltd.

Printed by George Berridge & Co. Ltd.

G947 Reprinted March 1980

**Please type or complete in block capitals**

I am interested in:

- Arranging a talk on "Energy and Nuclear Power"
- Organising a visit to a nuclear power station
- Receiving lists of CEGB publications and films

(Please tick the appropriate boxes)

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Telephone: day \_\_\_\_\_

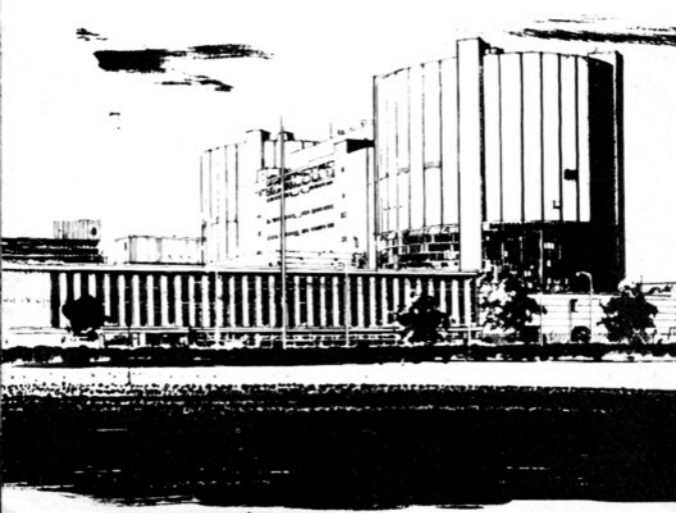
evening \_\_\_\_\_

Representing (club etc.) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please send this slip to the nearest CEGB Regional Office  
(addresses are given overleaf)



### Visits to nuclear power stations

Arrangements can be made for parties of adults and children (over 14 years old) to visit CEGB nuclear power stations. The map below shows where these stations are located.

### Publications and films

The CEGB distributes a range of publications on electricity and related subjects. Copies of CEGB 16 mm and 35 mm sound films are available on free loan.

CEGB nuclear power stations



Public Relations Officer  
CEGB North Western Region  
Europa House  
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