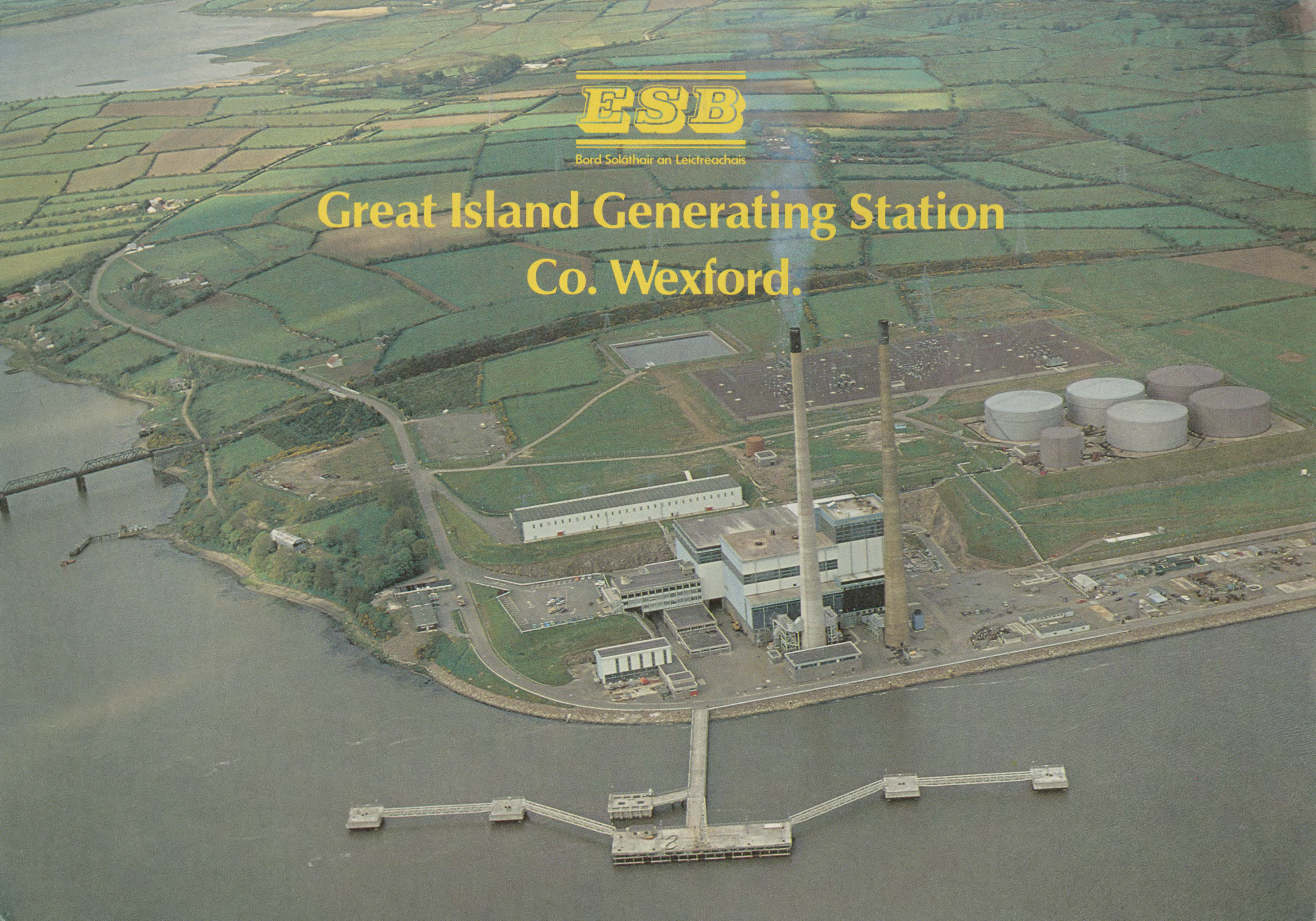




Bord Soláthair an Leictreachais

# Great Island Generating Station Co. Wexford.





The Generating Hall.



Electrical Control Room.

## The Station

Construction of the Great Island Generating Station commenced in 1963 and the first 60 MW (60,000 kilo watts) generating unit went into service in December 1967. The second unit, also 60 MW, was commissioned in April 1968. This completed the first stage of development.

On November 4th 1968, Mr. P. J. Lawlor, TD Parliamentary Secretary to the Minister for Transport and Power, performed the official opening ceremony and His Lordship Most Reverend Dr. Herlihy, Bishop of Ferns, blessed the station.

The second stage provided for a further single unit of 120 MW and installation of this more technically advanced generating plant was completed and commissioned in May 1972. The station as a whole is capable of producing 6m units of electricity every day.

There was a total capital investment of £14m in the Great Island development.



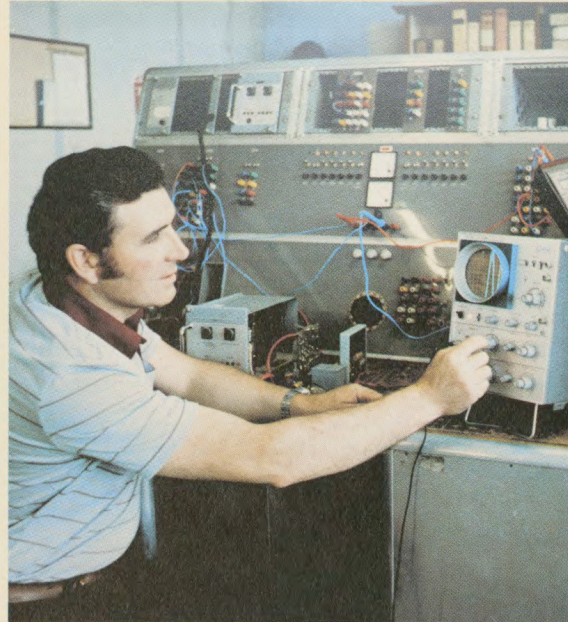
To transmit electricity from Generating Stations to the major load centres, voltage is transformed upwards to 110,000 or 220,000 volts in transmission compounds such as this one at Great Island.

## Boilers

Each of the two "A" station boilers produce 220 tonnes of steam per hour using 15 tonnes of oil in the process. The single "B" station unit consumes 26 tonnes of oil in generating its hourly quota of 360 tonnes of steam. Operating pressures and temperatures are:

	Pressure	Temperature
"A" Station	82Kgs/cm <sup>2</sup>	510°C
"B" Station	128Kgs/cm <sup>2</sup>	538°C

The efficiency of "B" station is approx. 7% better than "A" station and is comparable with any similar unit anywhere in the world.



## Control

The station has Thermal and Electrical Control Rooms.

- The function of the Thermal Control Room is to continuously monitor the condition of plant and equipment within the station. Operation of the station plant is also controlled from this centre.
- The Electrical Control Room is the link between the station and national system or grid. Electricity output of every Generating Station on the ESB network is controlled centrally by the Load Despatch Office in Dublin. Instructions are issued from this central control and station output is adjusted in accordance with system demands.



During the construction phase a staff of 850 was employed and today 170 people are working on a permanent basis in Great Island Station displaying a wide range of skills.

The ESB's generating programme has been very flexible. Of the 29 Stations built by the Board 9 are hydro, 11 peat, 4 oil, 3 natural gas, 1 pumped storage and 1 uses native coal.

The Board's 30th station and its biggest, will be at Moneypoint, Co. Clare using foreign coal.

