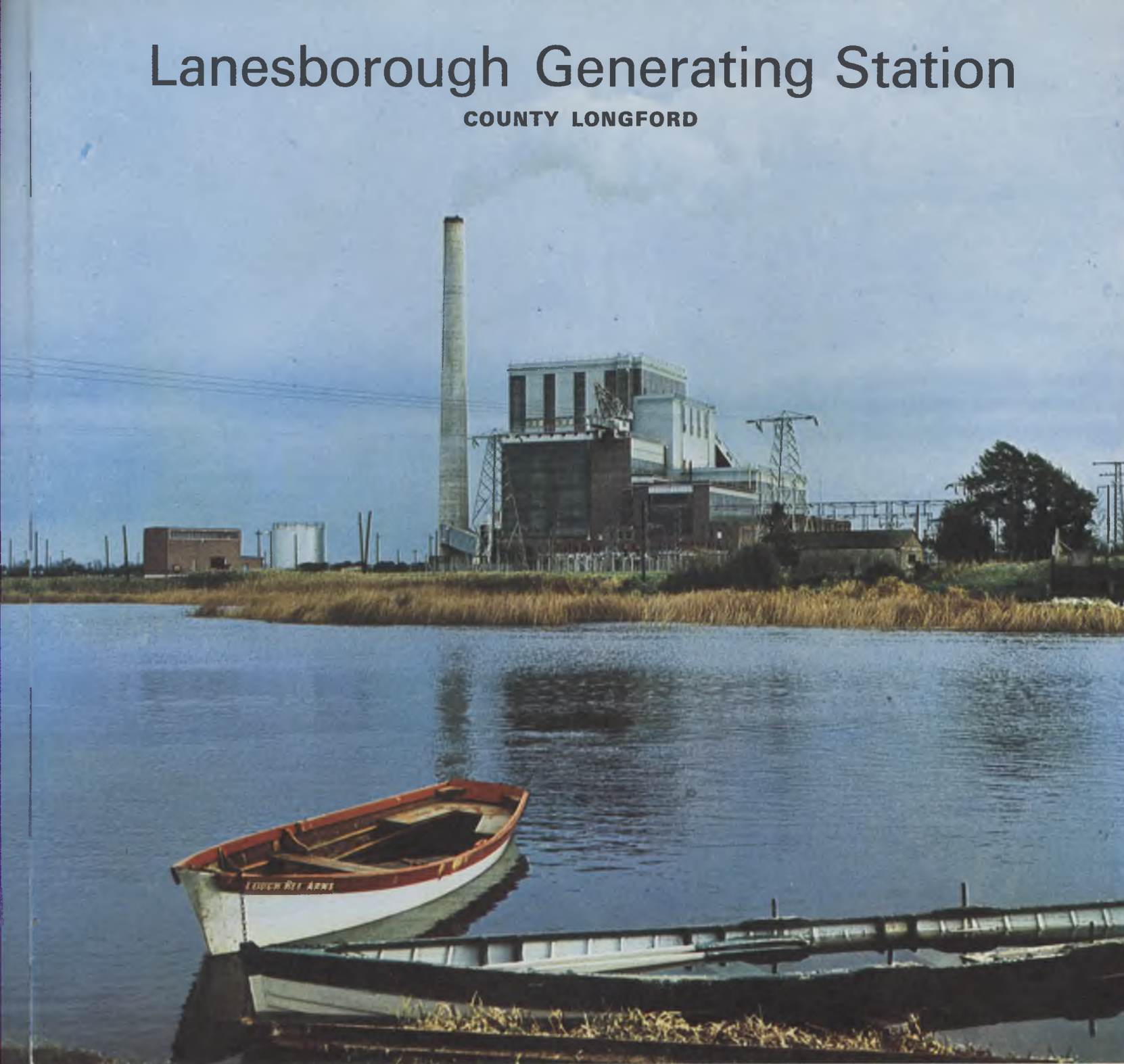


Lanesborough Generating Station

COUNTY LONGFORD



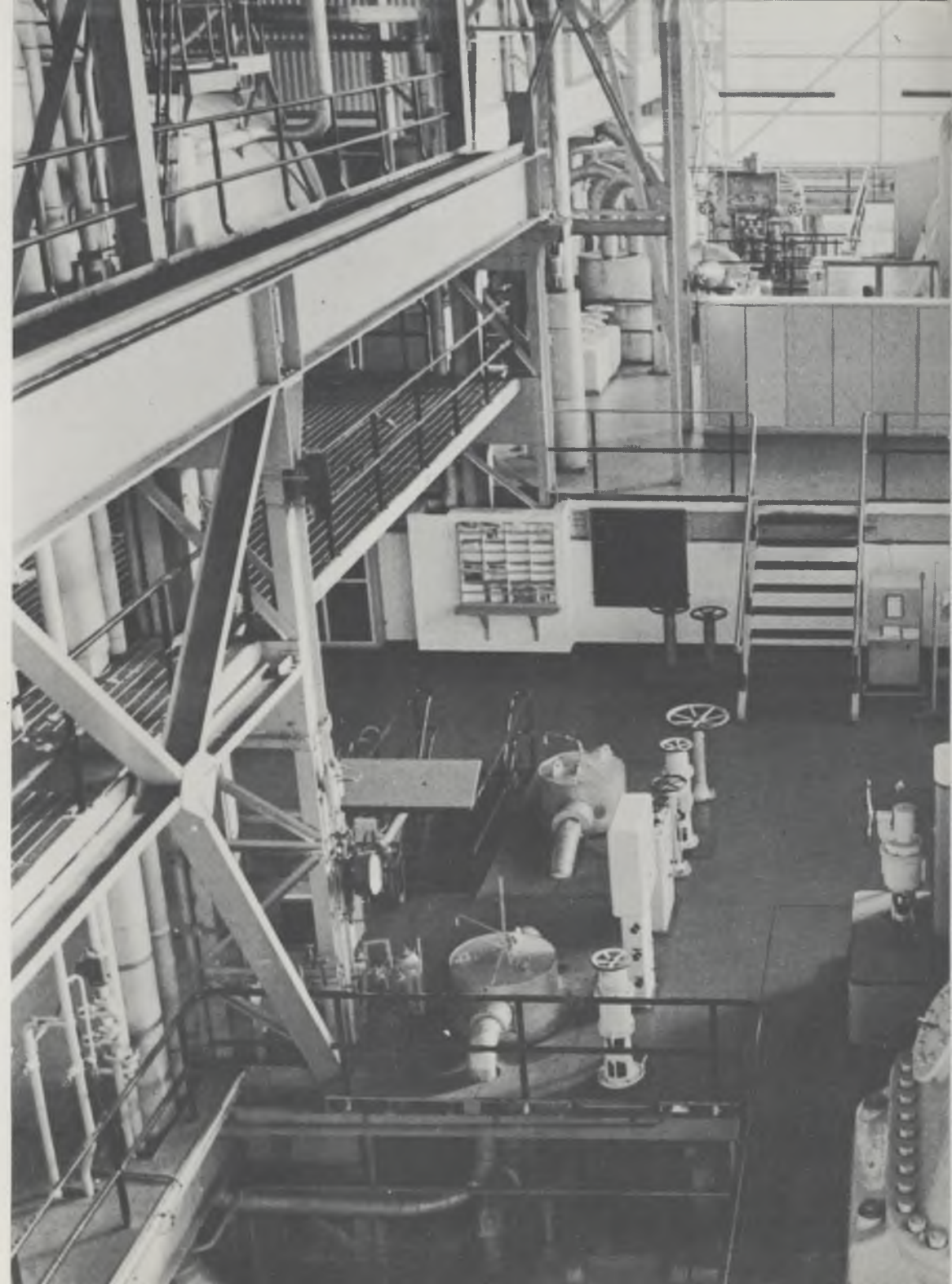
Lanesborough Generating Station

The Lanesborough peat-fired station is located beside the River Shannon at the North end of Lough Ree.

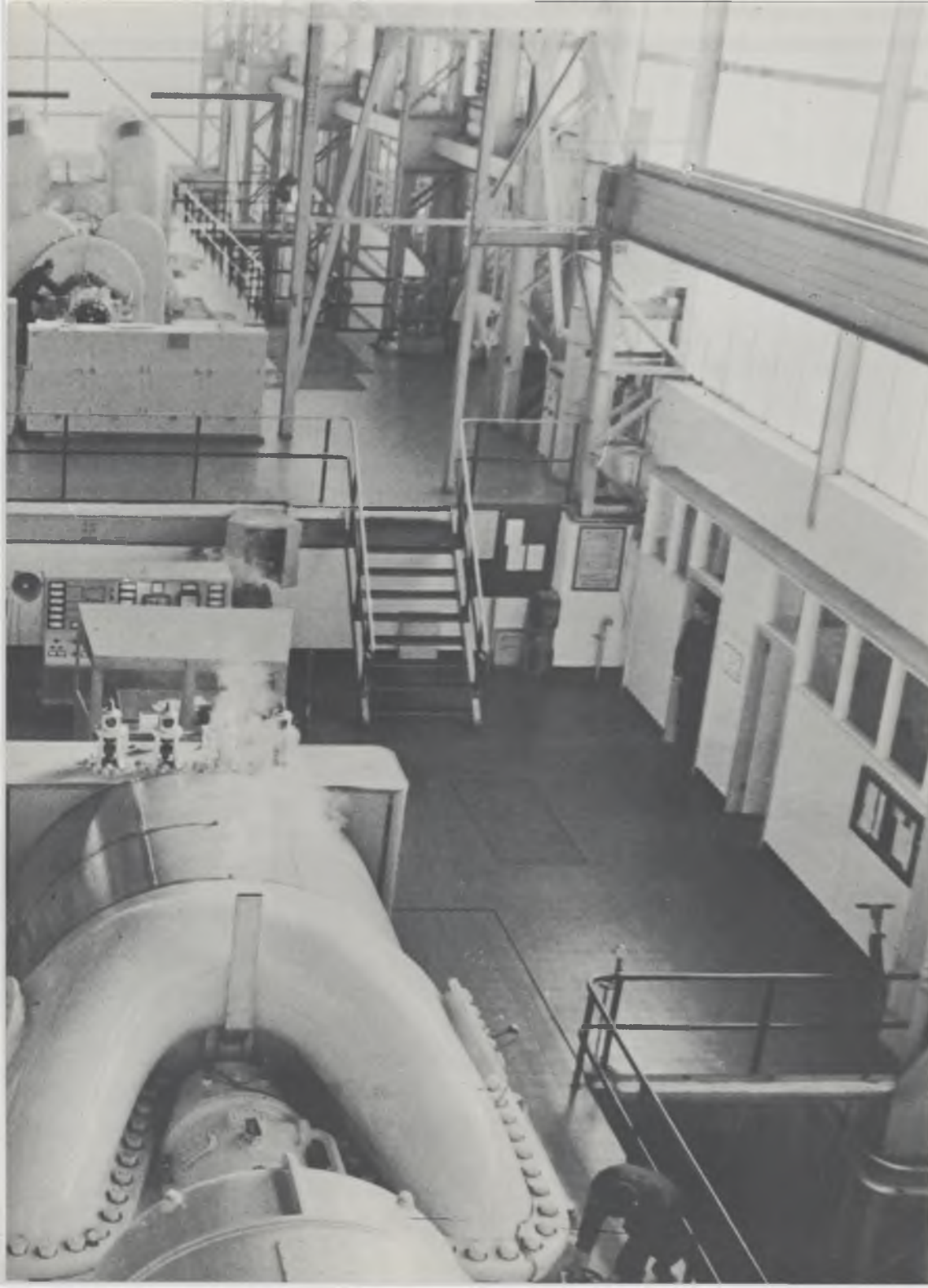
The station consists of two separate developments. The original 'A' station of 20,000 kW capacity, which went into commission in 1958, was designed to burn sod peat. The extension – 'B' station – of 40,000 kW capacity which went into commission in 1966, is designed to burn milled peat.

The 'A' station is equipped with a chain grate stoker fired boiler supplying steam to a 20,000 kW turbo alternator. It consumes about 110,000 tons of sod peat per annum. The milled peat is brought to the station by narrow gauge railway direct from the local bogs, one in Co. Roscommon and two in Co. Longford. Each wagon contains about 5 tons of turf and when it arrives at the station it is passed through a tippler, where it is dropped into a pit and is taken from there to the bunker via a conveyor belt system. The bunker holds about 600 tons for overnight generation.

The power from both turbo-alternators is stepped from 10 kV to 110 kV and fed into the national grid via three transmission lines, one to Athlone; one to Carrick-on-Shannon and one to Finglas. The main transformer on the 'A' station also supplies power to local 38 kV grid via two transmission lines, one to Roscommon and the other to Longford 38 kV sub-stations.



Generating Hall



PRINCIPAL TECHNICAL PARTICULARS

	'A' Station Sod Peat	'B' Station Milled Peat
Fuel		
Moisture Content	35 per cent	55 per cent
Net Calorific Value	5,500 B.T.U./lb. at 34% moisture	3,100 B.T.U./lb. at 57% moisture

Boiler		
Maker:	Walther & Cie	Walther & Cie
Firing Equipment	Chain Grate	Mills & P. F. Burners
Normal Rating	176,000 lb./hr.	305,000 lbs./hr.
M.C.R.	220,000 lb./hr.	382,000 lbs./hr.
Steam Pressure	425 p.s.i.	925 lbs./
Steam Temperature	825°F	960°F

Turbo-Alternator

Maker:	Siemens-Schucker	C. A. Parsons
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Type: Impulse Reaction. Axial Flow

Steam Pressure	400 p.s.i.	890 p.s.i.
Steam Temperature	800°F	950°F
Capacity	20,000 kW	40,000 kW
Speed	3,000 r.p.m.	3,000 r.p.m.
Voltage	10,500	10,500
Power Factor	0.8	0.8

Electrical Equipment

Main Transformers:	A.C.E.C.	A.E.G.
	10/38/110 kV	10/110 kV 47 MVA
	25/15/22 MVA	
	A.E.G.	Unidare
	10/3.3/0.38 kV	10/3.3/0.38 kV
	2.1 MVA	5 MVA

Switchgear and Control Gear, both Stations:
 Brown Boveri 110 kV and 38 kV.
 Voight & Haeffner 3.3 kV and 380V.

Lanesborough Generating Station

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