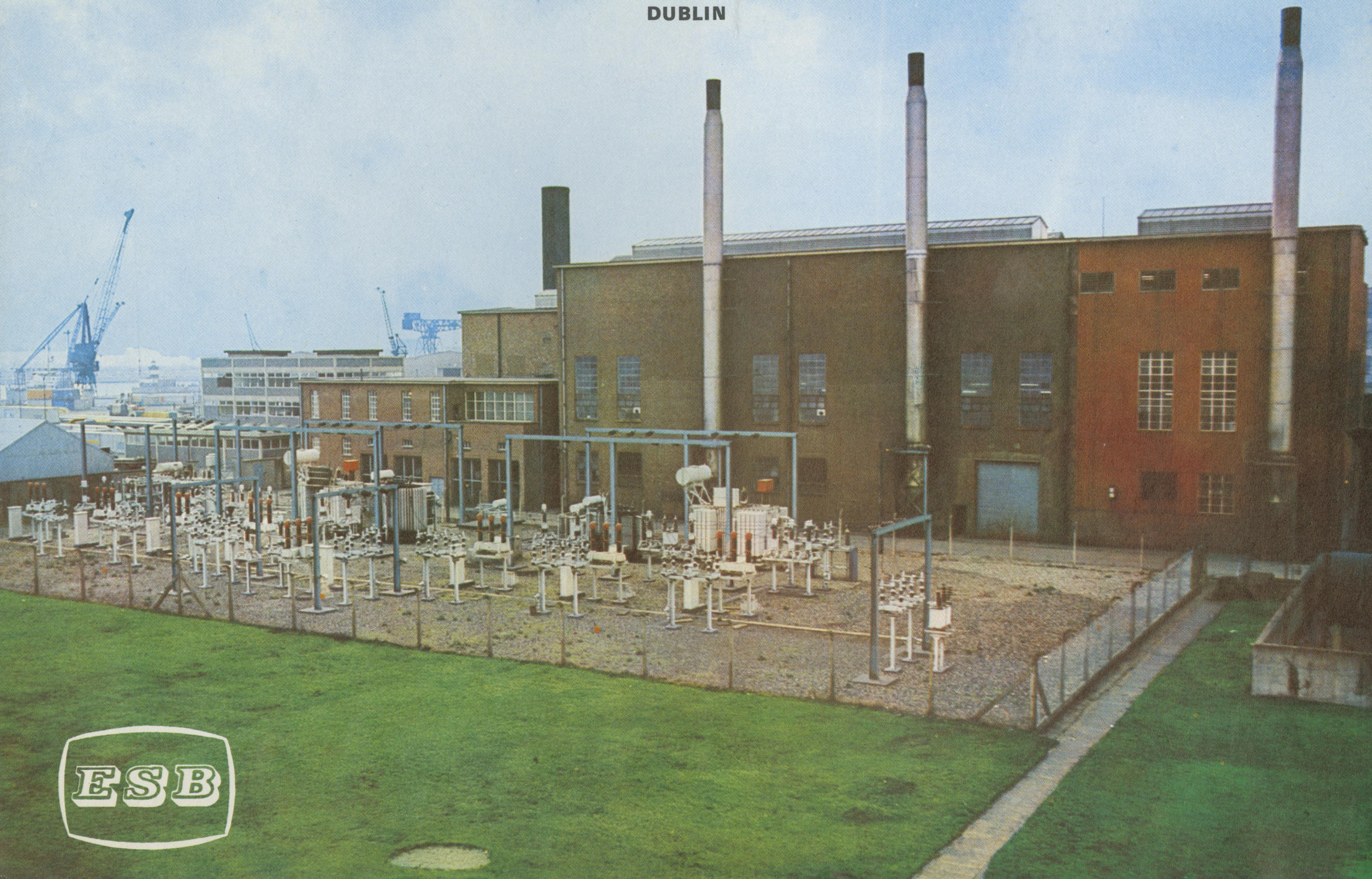


North Wall Generating Station

DUBLIN



North Wall Generating Station

The North Wall (Dublin) generating station was commissioned initially in 1949. The plant comprised four small boilers (erected as part of an intended oil refinery and purchased by the Board in 1947) and a $12\frac{1}{2}$ MW turbo-alternator then on order for the Portarlinton generating station.

In 1953 additional plant, comprising two Velox boilers and two 16 MW turbo-alternators, was commissioned, thus bringing up the capacity of the station to $44\frac{1}{2}$ MW. Later on, however, the $12\frac{1}{2}$ MW turbo-alternator was transferred from North Wall to Portarlinton and replaced by a further 16 MW turbo-alternator and Velox boiler. This was commissioned in 1963, thus making the capacity of the station 48 MW.

The Velox boilers permit quick starting-up from cold; their combustion air is obtained from gas-turbine compressors driven by the exhaust gases and Ward Leonard set.

In the initial and final development of the station the output from the alternators is fed through 38kV transformers and cables into the Dublin city network.

Generating Hall





PRINCIPAL TECHNICAL PARTICULARS

Fuel

Oil, nett calorific value 17,400 B.t.u./lb

Boilers

		2, 3 and 4
Maker		Brown-Boveri
Normal rating, each k lb./hr.		165
Pressure	p.s.i.	440
Temperature	°F	815

Turbo-Alternators (There is no turbo-alternator No: 1)

		2, 3 and 4
Maker		Brown-Boveri
Type		Impulse reaction
Capacity	MW	16
Speed	r.p.m.	3,000
Pressure	p.s.i.	400
Temperature	°F	800
Voltage	kV	10.5
Power factor		0.8

Electrical Equipment (Ratings, etc. given in Line Diagram)

10/38kV transformers	A.E.G. and Brown-Boveri
38/10kV transformers	A.S.E.A. and Marelli
10kV/380V transformers	Parsons and Unidare
10kV and 380V switchgear	Brown-Boveri
38kV, switchgear	E.I.B.
Control room equipment	Brown-Boveri

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