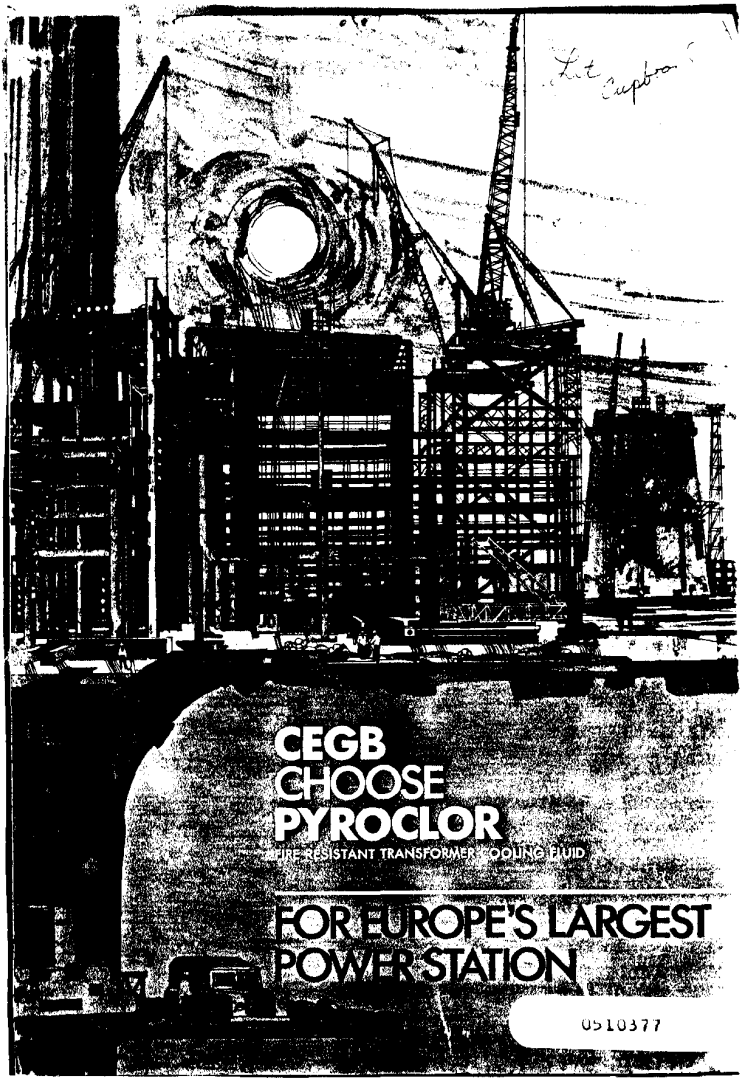


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ISLE OF GRAIN – Britain's most advanced Power Station

When the Isle of Grain Power Station is completed towards the end of 1979, at a cost of some £230,000,000, it will cover 145 acres and its 800ft high chimney will be a Thames estuary land mark. Its net electrical output will be 3,300 MW, one eighteenth of Britain's total power need, and it will stand as a most impressive witness to the Central Electricity Generating Board's bold policy of technical innovation in countless aspects of this Station's design, planning and construction.

One such innovation is the specification of transformers filled with Pyroclor to supply power to the auxiliary services on the main generator units and for general station requirements such as lighting and ventilation.

What were the key factors influencing the CEGB's choice ?

Design flexibility

- [illegible]
- [illegible]
- [illegible]

Maximum reliability

[illegible]

Instant readiness for essential services

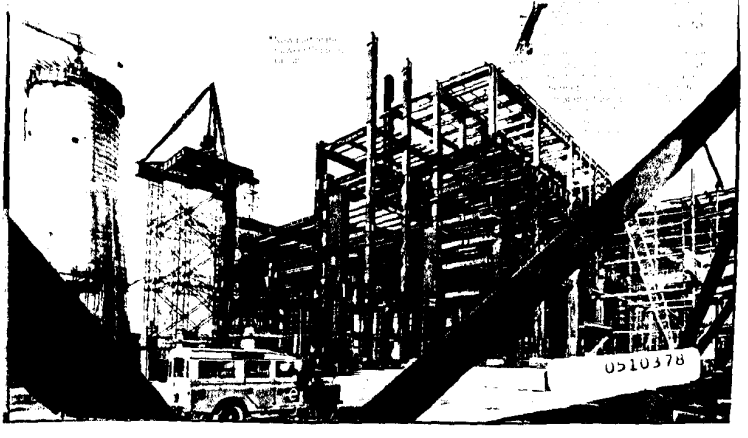
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Cost

[illegible]

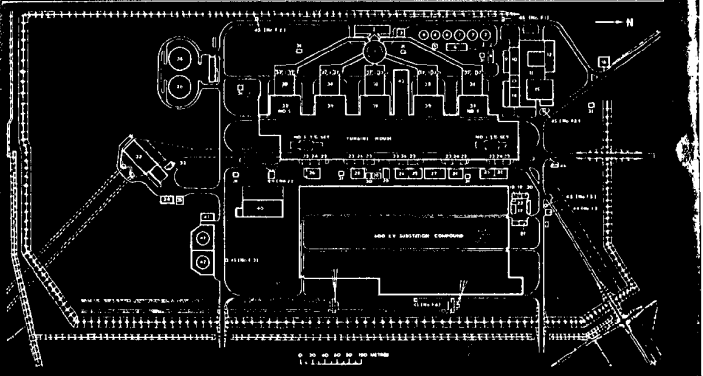
Environmental considerations

[illegible]



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Plan view



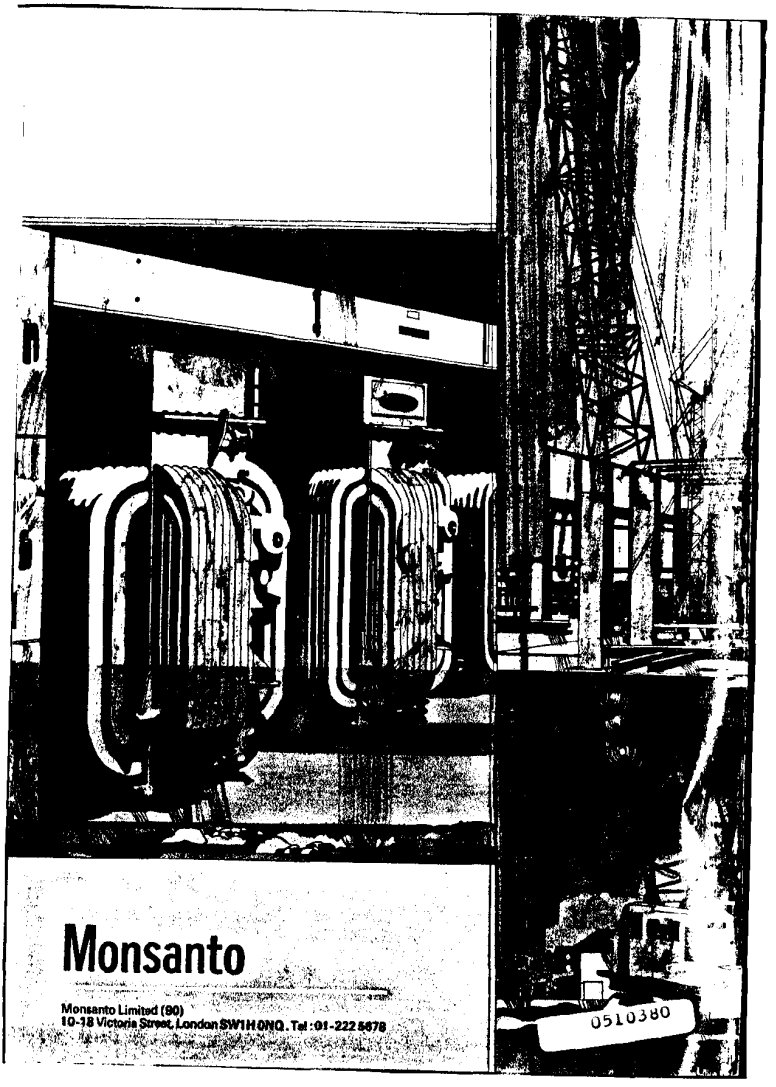
1. CHIMNEY
2. AUXILIARY BOILER HOUSE
3. PROPANE GAS STORAGE AREA
4. TOWN WATER TANKS
5. AIRHEATER WASHING TANKS
6. AUXILIARY PUMPHOUSE
7. P.T.W. TANKS
8. GARAGES
9. FIRE STATION
10. HEAVY STORES
11. CANTEEN, WELFARE AND AMENITIES
12. OFFICES
13. ELECTRICAL WORKSHOP
14. MECHANICAL WORKSHOP
15. LIGHT STORES
16. GATEHOUSE
*17. COMPRESSORS
*18. MEDIUM VOLTAGE A.C. SUBSTATION
*19. BATTERIES
*20. TELECOMMUNICATIONS
*21. WORKSHOP
*22. DIESELS AND PERMIT OFFICE
23. RELAY ROOMS
24. UNIT TRANSFORMER
25. STATION TRANSFORMER
26. GENERATOR TRANSFORMER
27. STATION SWITCHGEAR
28. MAIN OIL SUMP
29. HYDROGEN STORE
30. CO2 STORE
31. FLOODLIGHT TOWERS
32. C.W. PUMPHOUSE
33. C.W. PUMP SWITCH HOUSE
34. CHLORINATION PLANT HOUSE
35. CHLORINE TANKS
36. MAIN FUEL OIL TANKS
37. I.D. FANS
38. AIRHEATERS
39. BOILER HOUSE
40. GAS TURBINE HOUSE
41. GAS TURBINE FUEL OIL PUMPHOUSE
42. GAS TURBINE FUEL OIL TANKS
43. CONTROL ROOM
44. STORM WATER PUMPS
45. FOUL WATER PUMPS
46. MAIN SEWAGE PUMP HOUSE

*400kV SUBSTATION PLANT

0510379

Why not consider fitting a [illegible] to the [illegible]?

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