

## **Inverkip Power Station**

David Reat

Inverkip power station is an oil-fired power station located on the eastern shore of the Firth of Clyde on the west coast of Scotland - between Inverkip and Wemyss Bay in Inverclyde.

The coastal location meant the station could draw its cooling water from the sea, obviating the need for the large parabolic towers normally associated with such installations. Resultantly, the most imposing feature of the station is its 778 foot (236 m) high chimney - the third tallest chimney in the UK, and Scotland's tallest freestanding structure.

Ostensibly composed as a concrete and glass facsimile of another famous oil-fired power station – Bankside, built thirty years earlier – Inverkip was completed in 1976. This crystalline cathedral for energy conversion was designed by Robert Matthew, the founder of RMJM (then Robert Matthew Johnson-Marshall), later the Scottish representative architects on the New Scottish Parliament buildings. Matthew was commissioned to undertake a series of Highland power stations - Lochay (1957-9) and Cashlie (1957-60), and others in the Lowlands, whereupon he began a series of much larger palaces of power for the South of Scotland Electricity Board (SSEB).

Kincardine (designed from 1954 and built 1958-60) signified a fundamental shift architecturally from traditionalist designs with its deconstruction of hierarchy. The control room was redeployed as a ‘straightforward piece of industrial design and finishing’, with more gravitas bestowed upon the utilitarian components. Upon being questioned by the SSEB’s chief engineer why he wanted drawings of the boilers, Matthew retorted: ‘if you want me to design an elephant house, I have to know what an elephant looks like.’

Kincardine was followed by a succession of RMJM commissions for power stations. The first, Longannet, opened in 1966. Its vast 2400 MW output expressed in the single-chimneyed solidity of its design foretold Cockerzie (1962-8) and ultimately Inverkip (1970-9).

The strict, no-nonsense, platonic purity deployed at these stations was perhaps foretold in the words of Michael Laird when describing Matthew’s seminal Edinburgh airport terminal with its ‘sharply cut rectangular shapes... vigour and restraint’ and ‘the chaste quality which permeates the building to the smallest detail...’.

Construction began on Inverkip, on what was to be Scotland's first oil-fired power station, in 1970. However, the soaring price of oil as a result of the oil crisis of 1973, with the price of a barrel of OPEC oil quadrupling by 1974, rendered operation of the station uneconomic.

Inverkip became Scotland's only oil fired power station.

It was therefore never utilised to anything near capacity with 1200MW being mothballed and the remaining capacity being used to satisfy peak demand. A notable exception was during the miners' strike of 1984/5 when low coal supplies prompted operation at capacity. In a calculated manoeuvre, Prime Minister Margaret Thatcher unleashed the station's full potential in a political coup de grace against her trade-unionist adversary, Arthur Scargill - the ramifications of which are still felt today. Through realising the station's maximum potential, she circumvented the striking coal-miners' endeavours to deprive the area of energy. The triumphalism metaphorically displayed through the supercilious one-fingered salute of the smoking chimney. Power generation ceased in January 1988 when the plant was placed on 'care and maintenance', and classified as a strategic reserve – although it has never been used.

The four main flues were intended to serve the boilers for four steam generator sets; unfortunately only three were completed, before the fourth was cancelled. The main turbo-generator and many of the major components were interchangeable with the turbo-generators at Hunterston B around 13 miles south, on the Firth of Clyde.

The gargantuan glass-encased buildings, which conceal the intricate turbines and generators, are a scintillating sight in themselves - a big brother to Chipperfield's BBC building up-river perhaps, albeit after a considerable course of anabolic steroids.

On entering, one can truly appreciate the formidable structures and machinery. Within the switchgear room - the main control centre of the titanic turbine and boiler rooms - one encounters vast panoply of switches, lights and knobs. A nerve-centre designed in a configuration more reminiscent of NASA mission control, or indeed, the machinations within the lair of a despotic Bond villain.

During construction it created some consternation in close-by Greenock, a few miles potentially downwind of the new station to the North East. The SSEB, at pains to convince people that the height of the chimney would spew any fumes well overhead of anyone in the town, purportedly devised a subterfuge with the promise of hydroponic cladding of the chimney. A vertical garden composed of ivy being planted at the top and bottom of the chimney - in the hope that both the encroaching flora on the building, and the local residents at odds with the company, would both eventually meet in the middle.

The foreboding fate of the plant should provoke us to seek a scenario for its re-use. One cannot help but lament for Inverkip's colossal cuboid cousins further up the Clyde - Glasgow's granary buildings. The beautiful, brick-built bastions brutally wiped out in the commercial crusade of speculative residential development. Perhaps a more fitting analogy could be witnessed at the Bregenzer Festspiele, resplendent with its Seebühne back-dropped by Zumthor's glass box and sound of creaking masts in the marina nearby. This is perhaps a romanticised vision, but certainly one to stimulate debate...

The station is scheduled for demolition in 2009.

**David Charles Reat**

*David is a practicing architect and director of Stone Opera Architects. He is a part-time studio design tutor at the University of Strathclyde, where he also teaches Architectural Engineering and Building Technology Environment. David is a perennial guest lecturer of Architectural History and Theory at the University and is currently undertaking a PhD at the school in the field of architectural language and semiotics.*