

# Aluminium Foiled

The sorry history of the Invergordon aluminium smelter project charts the slide into nightmare of the "white heat of technology" dreams held by planners in the Sixties. Nuclear power would provide vast quantities of cheap and reliable electricity, government would set up large investment schemes in "remote" [ie. remote from Whitehall] areas, the economy would boom. Particularly, aluminium smelters and nuclear power were used to justify each other, as at Wylfa on Anglesey and with the deal between British Aluminium and the SSEB over the building of the Hunterston B Advanced Gas-cooled Reactor.

It was the reality of nuclear power — expensive and unreliable — which brought the dreamers down to earth with a bump, and with disastrous consequences for the Highlands. But, as Pete Roche and Mike Holderness explain below, the consequences go much further. They make the case for abandoning Torness now stronger than it's ever been.

The long-running saga involving both Scottish Electricity Boards and British Aluminium has finally ended with the closure of the aluminium smelter at Invergordon, at a cost to the taxpayer of £113 million. The loss of 890 jobs is disastrous in an area where there is little prospect of further employment. However the story is not yet completely over, and the knock-on-effect throughout the Scottish economy may cause further redundancies.

The Invergordon smelter was one of the main employers in the Highland Region and Scotland's biggest single electricity user. The smelter came into operation in 1972 and has used almost a quarter of the North of Scotland Hydro-Electric Board's entire output since 1974.

British Aluminium contributed to the establishment of Hunterston B nuclear power station. They agreed with the South of Scotland Electricity Board to pay a proportion of the station's running costs, in return for receiving electricity at a cheap rate. This complex contract, however, did not prevent the imposition of a series of crippling electricity price increases.

Delays in construction meant that Hunterston B was completed four years late at a capital cost 15 per cent higher in real terms than expected. Since then the SSEB have experienced several problems at Hunterston. In 1977, 1,800 gallons of salt water was accidentally allowed to flood the pressure vessel. The reactor eventually came back on stream two and a half years later, by which time the total cost of the accident had mounted to £57 million.

This led the NSHEB to instigate proceedings against British Aluminium to recover £47M worth of disputed charges (see Bulletin No.25). BA disputed the charges because they did not believe that they were liable to pay extra charges due to a seawater leak and the rocketing price of nuclear fuel reprocessing.

The Chairman of British Aluminium blames the closure squarely upon high power costs. The Government had offered to write off the £47M claimed by the NSHEB and to subsidise BA's fuel bill with £16M for the next three years in the hope that world demand for aluminium would pick up by 1984.

But the company held out for a similar subsidy right through to the year 2000 — which would have cost the taxpayer a further £288M, because the promise of cheap electricity from Hunterston had not been realised.

## More Jobs at Risk

The SSEB has lost, at a stroke, 7.5 per cent of its sales. This will probably mean that the Board will make even less use of its coal and oil-fired power stations. Inverkip, an oil-fired station which was only opened 2 years ago at a cost of £140M and the Kincardine coal-fired station are the most vulnerable. Already two of Inverkip's three generators are mothballed and the plant's output has been as low as 5% of its capacity. At Kincardine two of the five coal-fired generators are shut down. Closure of either station would put hundreds out of work.

Another consequence of the smelter's closure will be a ten per cent reduction in the SSEB's annual coal requirement. It seems certain that this will mean a cut-back in Scottish coal production, and perhaps the closure of more pits.

The Government must act now to avoid the knock-on-effects of the smelter closure. As well as the effects on the energy industries, Highland railway lines are now under threat.

A new development policy is needed for the Highlands, based on small locally-based enterprises. In the Islands there are signs of a new determination to insist on more local control of economic affairs. Community co-operatives have proved that economic problems can begin to be solved. Small-scale renewable energy systems will fit easily into such a development strategy.

On January 6 workers at the Invergordon plant voted to occupy the plant to stop it being dismantled, but success looks unlikely.

## Overcapacity

The failure of the Invergordon scheme has not only risked devastating the High-

lands, but has also left the SSEB with a lot of egg on its face.

It's already well-known that the SSEB has an embarrassing overcapacity of generating plant. In 1980/81 they had equipment installed to generate 9564 megawatts. Their all-time peak demand for electricity (in February 1979) was 5517 MW — including the 250 MW taken by the smelter. Thus without the smelter, but assuming that the Board still doesn't adopt industrial pricing policies which could curb the rare "spikes" of peak demand, they have an overcapacity of 81%. Shutting both Hunterston nukes tomorrow would leave a very comfortable 24% overcapacity.

This is bad enough — and expensive enough for the Scottish consumer — but it is perhaps not the most significant point for nuclear plans. Nuclear power stations are notoriously inflexible — it can take days to start one up from cold. So they tend to be run 24 hours a day between fuelling (or breakdowns!), contributing what is called "baseload power".

The SSEB didn't produce figures for their baseload demand — effectively the amount of electricity used at five in the morning — before we went to press. A reasonable estimate would be 40% or less of their peak demand — maybe 2200 MW in winter with Invergordon, certainly less than 2000 MW in winter without, and perhaps 1000 MW on summer nights.

But if Torness was finished the SSEB's nuclear capacity (usable only for baseload) would be 2730 MW — in other words, they'd have to keep a large part of their nuclear plant shut down even in winter, and only ever use coal-fired plant in the daytime.

We can expect them to produce a spate of advertising for night-storage heaters and the like to try to sell themselves out of this fix.



That's if they carry on their fixation with nuclear power. The consequences for Scotland would be severe — in loss of jobs in coal-mining, and in higher prices to consumers as fuel was wasted starting and stopping coal-fired plants designed for baseload, and the loans to build unnecessary plant were paid off.

Torness has already failed to live up to the expectations of local people as far as employment is concerned. With the closure of Scotland's biggest electricity user, and the effects on the Scottish energy economy, it looks set to become a major economic disaster in its own right. The Government must cancel the project before it is too late.