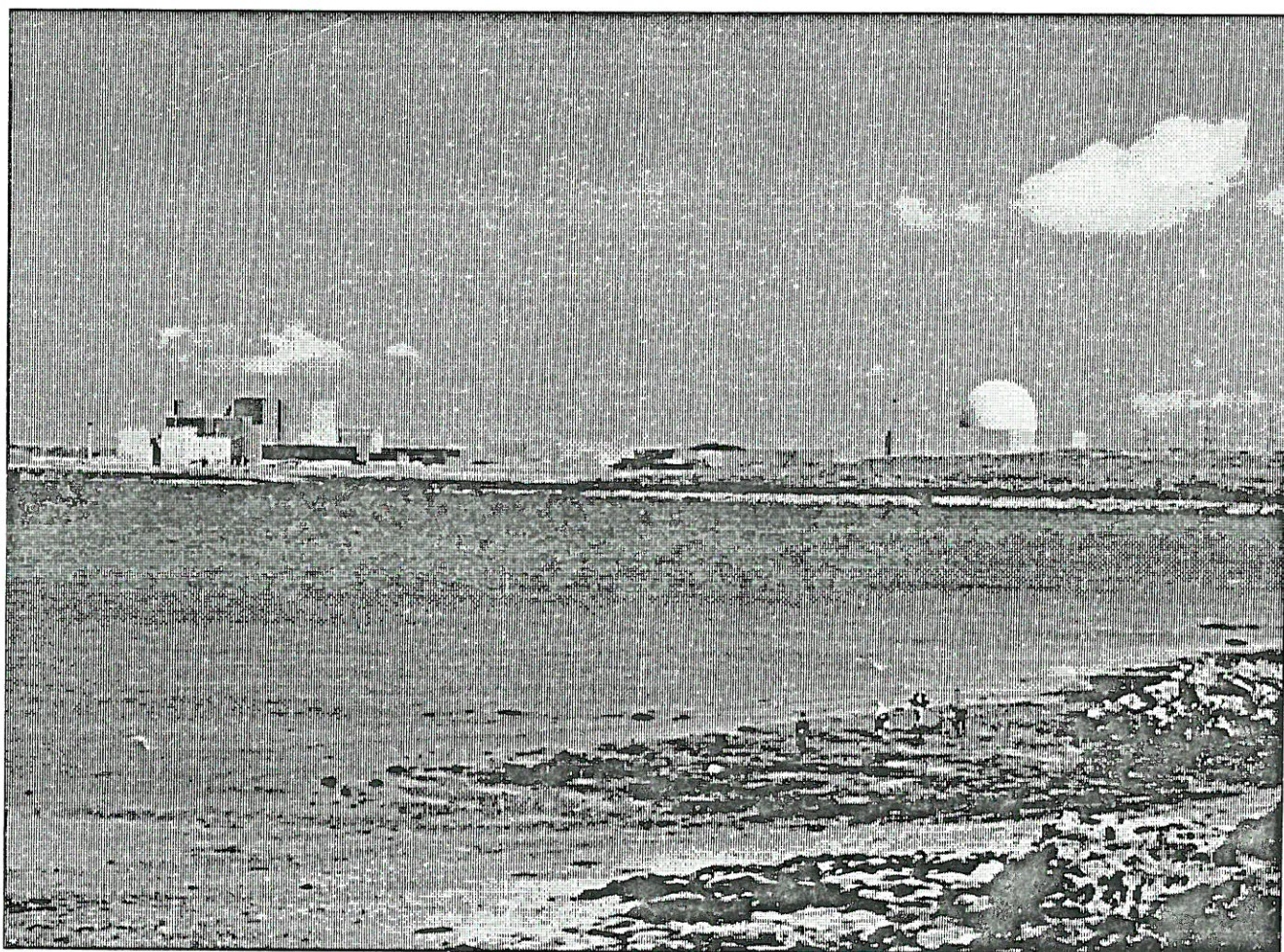


WYLFA 'B'

ISSUES OF CONCERN TO THE BOROUGH COUNCIL



YNYS MÔN
ISLE OF ANGLESEY

MARCH 1989

YNYS MON - ISLE OF ANGLESEY BOROUGH COUNCIL

W Y L F A `B'

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CONTENTS

1. Introduction to the C.E.G.B.'s application.
2. Decisions to be taken by the Borough Council.
3. Matters to be discussed with the C.E.G.B.

WYLFA `B' - A DISCUSSION PAPER ON ISSUES OF CONCERN
TO THE BOROUGH COUNCIL

4. Introduction and Background.
5. The Environmental Issues.
6. Radiological Impact and Safety Issues.
7. Socio-Economic Issues.
8. Additional Matters for Consideration.

Appendix 1 - Proposed nuclear power station, Hinkley Point `C', Somerset.
Conditions and undertakings drafted by C.O.L.A. - The
Consortium of Opposing Local Authorities.

Appendix 2 - Circular 34/76 (D.O.E.) 45/76 (Welsh Office)
Procedure for Construction and Consent for new electricity
generating stations and overhead lines.

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MARCH 1989

1. **INTRODUCTION TO THE C.E.G.B.'S APPLICATION**

1.1 In May 1988, the Central Electricity Generating Board announced its intention to apply to the Secretary of State for Energy for consent to construct a second nuclear power station at the Wylfa site on Anglesey.

The proposed Wylfa 'B' station would be equipped with a Pressurised Water Reactor (P.W.R.), and the construction period would be about 6.5 years, preceded by 1.5 years site preparation, so that the new station would be commissioned and operating by the end of the century.

1.2 Such a major proposal will raise many issues that will be of concern to the local authority, and it is appropriate, therefore, to give early attention to these matters so that the well-being of the area and its people can be given primary consideration when the Council responds to the Board's application. If consent is granted for the new station, then ways must be sought to both maximise the potential benefits, and ameliorate the potential problems, that the scheme would bring to the area. Non-committal discussions should, therefore, take place between the Borough Council and the C.E.G.B. on these matters prior to any decisions being taken on how the authority should respond to the Board's application.

1.3 This report sets out to examine what are the issues of concern to the Borough Council, to raise matters which the Council should discuss with the C.E.G.B., and to consider the options available to the authority in dealing with the Board's application.

The Statutory Background

1.4 The C.E.G.B. does not require a planning permission from the local planning authority before construction any new power generating station. Instead it needs to obtain the consent of the Secretary of State for Energy under Section 2 of the Electric Lighting Act 1909. In giving such a consent, the Secretary of State can then direct that planning permission be deemed to be granted under Section 40 of the Town and Country Planning Act 1971.

1.5 The C.E.G.B. must publicise any application for Section 2 consent, and notify the District and County Councils in whose areas the development is proposed. The councils, acting as local planning authorities, are required, on consultation, to advise the C.E.G.B. (upon Form B of Circular 34/76) whether or not they object to the proposed development, and if so, on what grounds. If either council lodge an objection, then the Secretary of State is obliged to hold a public inquiry under Section 34(i) of the Electricity Act 1957, unless he can meet the objection by modifying or attaching conditions to the consent. In today's climate of opinion, the Secretary of State is likely to hold an inquiry in any case.

1.6 The C.E.G.B. has announced that the application for a Wylfa 'B' station will be made to the Secretary of State in mid/late April of 1989. According to Circular 34/76, local planning authorities are asked to give their views within 2 months of receiving Form B, but the C.E.G.B. has indicated that this period can be extended in view of the magnitude and importance of the proposal. It is currently understood that the Council will have approximately 4.5 months within which to respond to the application.

- 1.7. It is considered, therefore, that the Council should begin to examine the issues relating to the Wylfa 'B' proposals at the earliest possible opportunity.

A copy of Circular 34.76 (Welsh Office 45/76) is attached as Appendix 2.

The Role of the Local Planning Authority

- 1.8 It must be borne in mind that the proposal to build a Wylfa 'B' power station is of more than local interest, and it has to be judged within a national (and inter-national) context. Accordingly, the role of the District and County Councils is uniquely important. In reaching a decision, as principal consultees, the local planning authorities must have proper regard to all the issues, comments, or objections, and not merely those which are of a local nature.

2. DECISIONS TO BE TAKEN BY THE BOROUGH COUNCIL

- 2.1 The C.E.G.B.'s announcement of intention to apply for Section 2 consent to build a P.W.R. power station at Wylfa will confront the Borough Council with the need to take a number of important decisions. Matters upon which decisions will be required are considered below:-

The Borough Council's response to the C.E.G.B.'s application

- 2.2. It is recommended that the Council continues discussions on the relevant issues with the C.E.G.B., within the agreed timescale. This will enable the Authority to consider how it should respond formally to the C.E.G.B.'s notice of application for Section 2 consent.

It would appear, therefore, that at that stage there would be three main options available, namely :-

Option 1.A. - To raise no objection to the C.E.G.B. proposals, having regard to agreements and undertakings received. It must be realised, in respect of this option, that if the Authority does not object, then the right to appear and give evidence at any subsequent public inquiry may be lost.

Option 1.B. - To object outright to the proposals, stating clearly the grounds for doing so.

Option 1.C. - If the Council considers that the assurances and agreements reached do not fully meet its requirements and expectations, then it can resolve to object in principle to the proposals, on clearly stated grounds, but continue to negotiate outstanding agreements and undertakings with the C.E.G.B. to ensure that, in the event of consent and deemed planning permission being granted, the interests of the district and its people will be safeguarded.

Financial and Manpower Implications

- 2.3 Dealing with the C.E.G.B.'s application will make heavy demands on the Borough Council's financial and staff resources, particularly if the authority decides to be an objector and wishes to be represented at a public inquiry. Adequate provision of manpower and finance will have to be made available in order to ensure that the Council gives proper attention to the matter within the limited period of time allowed. The following options are put forward for consideration:-

Option 2.A To set up an officers working party with responsibility for steering the Council, through the process of responding to the C.E.G.B.'s consultation. Virtually all authority's departments would have to be represented on the team since the application would have

implications for planning, housing, finance, law/ administration, environmental health, leisure and economic development. Dealing with Wylfa 'B' matters would become a full-time job for some officers, at certain times, and consequently other aspects of the authority's work could suffer through manpower shortage. This option would probably keep costs to a minimum, although the paperwork involved, as well as other expenses incurred, could have a significant impact on expenditure by some departments. Adequate financial resources would, therefore, need to be allocated to the team specifically to deal with the Board's application. It should be noted that Gwynedd County Council has already established a panel of officers to advise the authority on Wylfa 'B' matters.

Option 2.B To appoint additional temporary staff to deal specifically with Wylfa 'B' matters.

Staff of a high calibre with specialist knowledge and experience would need to be recruited, who could undertake the task of representing the authority at a lengthy and complicated public inquiry. This option would be more costly to the authority than Option 2.A above, but having the additional manpower would be advantageous, provided that persons with the right abilities could be found.

Opinion 2.C To appoint independent private consultants to undertake the task of guiding the Borough Council through the process of dealing with the C.E.G.B.'s application, and to represent the authority at any public inquiry that may be called. Employing consultants, who would need to work closely with an officers' team set up within the authority as outlined in Option 2.A above, would be more costly to the Council, but the assurance of having expert advice available at all times has obvious advantages. Specialist expertise would also be of benefit to the authority if agreements and undertakings are to be negotiated with the C.E.G.B.

Option 2.D To become part of a consortium.

Local authorities that have objected to the proposed Hinkley Point 'C' power station in Somerset have joined together to form a consortium known as COLA - The Consortium of Opposing Local Authorities. The members are predominantly county councils, including Dyfed and the South Wales counties, but there are several district members as well. The membership costs are £50,000 for a county, and £10,000 for a district. The consortium has employed a firm of energy consultants to gather and prepare evidence to be submitted at the public inquiry which is currently being held into the Hinkley Point scheme. It is quite possible that local authorities from the North West and North Wales area, which are opposed to the Wylfa 'B' scheme, will form a similar consortium and engage consultants to act on

their behalf. Gwynedd County Council has already written to several authorities including Ynys Mon to make tentative enquiries about such joint action. If such a consortium is established, and the Borough Council emerges as an objector to the Wylfa 'B' proposals, then consideration can be given to becoming a member. The main advantage of group membership is that costs are shared, and the financial burden on individual authorities is reduced.

2.4. Section 2 - Decisions

DECISION 1 - The Council's Strategy

The Borough Council will have to decide, within the agreed period, whether to object or not to the C.E.G.B.'s proposals. A strategy for responding can be evolved from the three options described in paragraph 2.2. above.

Recommendation -

At this stage, it is recommended that all options should be left open, so that the outcome of negotiations with the C.E.G.B. can be reported to the Council to provide a basis for a final decision whether to object or not.

DECISION 2 - Consultants/Membership of a Consortium

The Borough Council will have to consider seeking expert advice on energy matters before responding to the C.E.G.B.'s consultation, and consideration should also be given to becoming a member of a consortium of opposing authorities if such a consortium is established.

Recommendations -

For the present, the Council is recommended to :-

- 1) Make a specific allocation of funds to deal with Wylfa 'B' matters.
- 2) Set up an officers working party, with representatives from all the main departments, to report to the Council on all aspects of the C.E.G.B.'s application.
- 3) To investigate and report back to the Council on the possibility of appointing independent energy consultants to provide the Council with specialist expert advice.

2.8 It should be noted that Gwynedd County Council has already resolved to approach Kennedy & Donkin, Energy Consultants, to act on the authority's behalf. It should also be borne in mind that the experience of local authorities in Somerset has shown the value of co-operation between councils.

3. MATTERS TO BE DISCUSSED WITH THE C.E.G.B.

3.1 Most of the issues of concern to the Borough Council will be dealt with in the Environmental Statement which will accompany the C.E.G.B.'S application. However, on some important matters, it is essential that the Borough Council should enter into discussions and negotiations with the C.E.G.B. prior to responding to the Board's application. The purpose of such discussions would be twofold -

- a) to obtain additional information that would assist the authority in its deliberations on the application, and
- b) to discuss, without prejudice, what agreements and undertakings the Board would be willing to enter into in the event of consent and deemed planning permission being granted for the new station. Even if the authority resolves to object in principle to the proposed station, the possibility must be faced that the Secretary of State could still approve the project, and such agreements and undertakings would then be valuable as safeguards to protect the interests of the district and its people.

3.2 The main questions that need to be answered by the C.E.G.B. relate to the matter of entering into legally binding agreements. Such agreements could be made under Section 52 of the Town and Country Planning Act 1971, and under Section 111 of the Local Government Act 1972 and Section 33 of the Local Government (Miscellaneous Provisions) Act 1982. The Borough Council should, therefore, seek answers to the following questions as a matter of urgency:-

- 1. What agreements and undertakings would the C.E.G.B. be willing to enter into with the Borough Council under the statutory powers available?
- 2. Would such agreements and undertakings be legally binding on successors to the C.E.G.B.

The Government is pressing ahead with privatisation proposals for the electricity industry, and it is almost certain that the C.E.G.B. will cease to exist within the next two years. Power generation will then be the responsibility of two private companies, the larger of which - NATIONAL POWER - will take over all the nuclear power stations. If the private sector were to proceed with the construction of an approved Wylfa 'B' station, then the Borough Council would require reassurance that any agreements made with the C.E.G.B. would be honoured. In the event of such agreements not being adhered to by a private company, the Borough Council would also wish to know what enforcement action could be taken, and who would take responsibility for such action?

- 3. Will the C.E.G.B. enter into agreements with the Borough Council, even if the Secretary of State does not require the Board to do so as a pre-condition before granting consent and deemed planning permission for a new station? It must be appreciated that the local authorities do not have the powers to compel the C.E.G.B. to enter into agreements and undertakings. Such agreements would be voluntary, unless the Secretary of State were to insist that such agreements be made as a means of overcoming any objections lodged against the Board's proposals.

3.3 Other matters for discussion with the C.E.G.B. arise from the issues background paper that completes this report.

3.4. WYLFA 'B' - A SUMMARY OF THE MATTERS TO BE DISCUSSED WITH THE C.E.G.B.

Matters that need to be discussed between the Borough Council and the C.E.G.B., in order to assist the Authority in its deliberations on the Board's consultation and to secure satisfactory agreements and undertakings, are summarised below. The matters listed are considered in further detail in the discussion paper that follows.

3.5. SUMMARY

1) Landscaping -

Details of the landscaping proposals for the site upon completion of the station, including the re-instatement of agricultural land.

2) Public access to Wylfa headland -

The possible impact of construction work on public access to the amenity areas of Wylfa headland and surrounding areas.

3) Noise and disturbance -

The likely impact of noise and disturbance on the locality during both the construction and operational phases of the proposed station.

4) Transmission Lines -

The possible need for additional transmission lines and their likely impact on the landscape.

5) Road improvements and Traffic Volumes -

The impact of heavy traffic volumes on the road network, and the need for highway improvements to accommodate the increased traffic flows.

6) The Port of Holyhead -

The possible use of Holyhead's port facilities to take delivery of abnormally large or heavy loads, as an alternative to installing Ro-Ro facilities near the Wylfa site.

7) The Safety of P.W.R. reactors -

An assessment of the safety aspects of P.W.R. station design and operation.

8) Storage of Radioactive Materials -

Details of the proposed storage of radioactive materials on the site of the proposed 'B' station, after commissioning, in order that expert advice can be sought on the matter.

9) The means of disposal of radioactive waste -

Details of the anticipated discharge of low level radioactive wastes from the proposed 'B' station, and the transport of highly radioactive solid wastes from the site, in order that expert advice can be sought on the matter.

10) Emergency Arrangements -

The C.E.G.B.'s proposed arrangements for ensuring the safety of the station workers, and the public, in the event of an accident with radiological consequences.

11) Employment -

Estimates of the number of workers required for the construction of the proposed 'B' station, especially the number of workers to be recruited locally, and the likely duration of the jobs created by the scheme. Also the number of long-term jobs that would be available after the commissioning of the station. An exact definition of the term 'local' needs to be agreed.

12) Training -

Programmes for training local people in the skills required for employment on the Wylfa 'B' scheme, including the number of places likely to be available on training schemes.

13) The Local Economy - Opportunities for Local Businesses

The means by which linkages can be established between the C.E.G.B. and local businesses, so that the local economy can gain maximum benefit through the supply of goods and services to the project.

14) Industrial sites

The development of industrial sites for uses allied to the Wylfa 'B' project. Such sites could be located on the Council's industrial estates, or on other land such as the former Shell site at Rhosgoch. Development could be for depots, maintenance workshops, or the establishment of small sub-contractor businesses.

15) Tourism

The means by which conflicts between the proposed Wylfa 'B' scheme and the development of the tourist industry can be minimised, and the possible contribution that the C.E.G.B. could make to the development of tourist facilities in the locality.

16) Workers Accommodation

The housing requirements of the workforce, and the means by which sufficient housing can be made available to satisfy the needs without causing environmental problems or long-term disruption to the local housing market.

17) Site Hostel

To determine the preferred location for a site hostel, in order to minimise its impact on the local community, and to consider possible long-term uses for the building.

18) Health Facilities

The demands that the workforce and their families would make on the district's health facilities, and the provision of additional facilities, to ensure that all needs are adequately met.

19) Schools

The impact of the incoming workers' families on the local schools, and the need for additional school facilities, particularly more language units.

20) Recreational Facilities

The need for additional recreational facilities to cater for the incoming workers and their families, and the opportunities for joint ventures between the Borough Council and the C.E.G.B. to provide such facilities.

21) Cultural Impact and the Welsh Language

The effect that a large influx of migrant workers and their families would have on some local communities, particularly those where the Welsh language retains a strong and dominant position in community life. The careful location of facilities such as the workers' hostel and any additional schooling units that may be required, in order to minimise their impact on communities.

22) Community Liaison

The establishment of a consultative committee to keep local interests informed of progress on the scheme, and to provide a forum for the exchange of information between the C.E.G.B. and the local communities.

23) Project completion

The impact of project completion, and the consequent run-down of the construction workforce, on the local economy, particularly its level of unemployment. To explore means by which investment could be undertaken to cushion the locality against the worst effects of project completion.

24) Decommissioning

Details of the C.E.G.B's proposals for the decommissioning of Wylfa `A', including the timescale, employment prospects, schemes for the re-instatement of land, and the long-term use of the site.

3.6. Section 3 - Decisions

DECISION 3 - Expert Legal Advice

In respect of paragraph 3.2. above, a decision is required regarding the possibility of seeking expert legal advice before entering into any legally binding agreements with the C.E.G.B.

Recommendation -

It is recommended that the Borough Council should resolve to seek expert legal advice, as a matter of priority, before entering into any agreements with the C.E.G.B.

DECISION 4 - Preliminary Discussions and Negotiations

The Borough Council is requested to reach a decision upon the matter of allowing the officers to enter into preliminary discussions and negotiations with the C.E.G.B., to explore the possibilities for entering into agreements.

Recommendation -

It is recommended that the officers be authorised to commence discussions and negotiations with the C.E.G.B. regarding the matters described above, and to report back to the Council upon progress made.

WYLFA 'B' - A DISCUSSION PAPER ON ISSUES OF CONCERN TO THE BOROUGH COUNCIL

4. INTRODUCTION AND BACKGROUND

In May 1988, the C.E.G.B. announced its intention to apply to the Secretary of State for Energy for consent to construct a second power station at the Wylfa site on Anglesey.

Such a major proposal will raise many issues that will be of concern to the local authority. The aim of this paper is to set out what the main issues are likely to be in order to initiate the process of discussion within the authority.

Following this introduction, which briefly explains the background to the C.E.G.B. application, the issues are grouped together under three main headings - the Environmental Issues, Radiological Impact and Safety Issues, and Socio-Economic Issues. Additional matters, including the need for further electricity generating capacity, and the possible effects of privatisation, are considered at the end of the paper. A brief synopsis of the relevant subject matter is given for each separate topic.

4.1. The Environmental Statement.

Increasingly over the past few years developers in the U.K., as elsewhere, have considered and made public the likely effects on the environment of their major development proposals, and this process of environmental assessment has gradually become more formalised. In June 1985, the Council of the European Communities issued a Directive which makes environmental assessments compulsory for certain types of project, including nuclear power stations, and in June 1988 this Directive took legislative effect in the U.K. Furthermore, since its creation in 1956 the C.E.G.B. has had a statutory duty to consider amenity, and the process of environmental assessment is not new to the Board.

Therefore, the application which will be made for Section 2 consent and deemed planning permission will be accompanied by a statement reporting on the environmental assessment carried out in respect of the proposed Wylfa 'B' power station.

The Environmental statement will be available to the local authorities to assist them in formulating their views on the C.E.G.B.'s application, and also to members of the public to inform them of matters in which they may be interested or about which they may be concerned.

The local authorities have been consulted in advance about the list of topics for inclusion in the Environmental Statement to ensure that no topics of importance have been omitted. A similar statement, already published, in respect of the proposed Hinkley Point 'C' P.W.R. power station in Somerset would be used as a model for the Wylfa 'B' statement.

4.2. The Pressurised Water Reactor.

Following the consent to construct the Sizewell 'B' station in Suffolk, it is the C.E.G.B.'s intention to build a small 'family' of P.W.R. stations of the same basic design. Accordingly, the P.W.R. proposed for Wylfa 'B' would as far as practicable be a replica of the power station licensed and under construction at Sizewell.

Therefore, the Wylfa 'B' station would be equipped with a 1,200 MW (Megawatt) Pressurised Water Reactor which would be different in design and operation to the two 840 MW MAGNOX reactors installed in the present 'A' station.

All nuclear reactors rely on nuclear fuel to produce the heat which generates steam to drive the turbines. The heat is generated by a process known as nuclear fission, during which nuclei of heavy atoms, such as Uranium 235, are split as a result of the absorption of smaller particles known as neutrons. It is necessary to slow down the neutrons in the reactor in order to sustain the chain reaction which produces nuclear fission, and the slowing down is accomplished by a substance known as the moderator, which in the case of the P.W.R. is the pressurised coolant water.

The nuclear fuel, low enrichment Uranium Oxide, is placed in an assembly called the reactor core, which is housed in a steel reactor pressure vessel. Reactor coolant, which is demineralised water under pressure, passes through the core and takes up heat from the fuel. With a temperature of about 300 degrees celsius the reactor coolant then passes to a steam generator where it goes through tubes surrounded by the secondary system water. The heat is, therefore, transferred to the secondary system water resulting in the production of steam which drives the turbines that generate electricity.

A large prestressed and reinforced concrete containment envelope is provided around the reactor coolant system. During normal operation it serves to contain minor leakages from the enclosed systems, but in the event of an accident it would contain any radioactivity released from the fuel or the reactor coolant system, and would protect the external plant from the large energy release. To provide further control of leakages a reinforced concrete secondary containment is provided.

The reactor building would be capped by a hemispherical dome some 50 metres in diameter, and the concrete shell providing secondary containment would rise to about 72 metres above ground level at its highest point.

4.3. Timescale.

The Secretary of State would decide, on the basis of representations made by local authorities and others, whether a public inquiry should be held. Assuming that an inquiry will be called, the C.E.G.B.'s programme is expected to be as follows:-

Consent period (period between application and consent)	2.5 - 3 years
Site preparation	1 - 1.5 years
Construction	6.5 years
Total	<u>10 - 10.5 years</u>

It is expected that with this programme, Wylfa 'B' should be commissioned by the end of the century.

5. THE ENVIRONMENTAL ISSUES

5.1. Visual Impact - Architecture and Landscape.

The site for the proposed Wylfa 'B' station is located directly to the south of the existing 'A' station. The main buildings would be grouped together and surrounded by boundary fencing, and outside this zone, on the south-east side of the station, would be situated the car park and an area for use by maintenance contractors. This location is considered by the Board to be the most suitable from an environmental point of view.

The architectural appearance of the proposed 'B' station would be governed by the design of the P.W.R. reactor and its containment envelopes. Therefore the building, which would be slightly higher than the existing 'A' Station, would be dominated by a large hemispherical dome, and its appearance would be very different to the present station which is squarish in shape.

Consultant architects and landscape architects have investigated in detail the most visually acceptable layout and ameliorative landscaping for the power station. According to the Board the station would be located to minimise the visual impact, and landscaped as appropriate. Landscaping would take the form of land shaping, off site planting and screening to minimise the visual impact of the station and construction area.

The design of the station building will be closely based on that for the Sizewell 'B' station, and therefore there would appear to be little scope for negotiation on the architectural aspects of the scheme. However, it is certain that the local authorities will be fully consulted on the landscaping proposals for the site, and discussions have already taken place with officers regarding the most important viewpoints to be considered.

5.2. Agricultural Land Take.

The C.E.G.B. currently own 114.5 hectares of land in the Wylfa area, including the 49 hectares occupied by the 'A' station site, and 55 hectares leased to tenant farmers. Also owned by the C.E.G.B. are a sports ground, a small rock garden, three derelict houses, and the station's sports/social club and visitor centre.

A total of about 25 hectares of additional land would be required for the 'B' station project, all of which is currently in agricultural use. About 3 hectares of this land would have to be retained eventually for operational use, and a small area would be used for landscaping. The remainder would be restored for agricultural use after the completion of the construction phase of the project.

The temporary loss of agricultural land, and the displacement of farmers, may have some impact on the community in the immediate vicinity of the station site. It is anticipated that between 4 - 6 land owners would be affected, as well as a number of households.

5.3. Ecological and Amenity Impact.

In drawing up its plans, the C.E.G.B. will consider means by which the amenity and scientific interest of the area can be preserved. To the west of the site is an Area of Outstanding Natural Beauty (A.O.N.B.) onto which the proposed development will encroach slightly.

About 0.3 hectares would be required for permanent works, and about 4 hectares for temporary contractors' areas. Discussions regarding the A.O.N.B. will be held between the C.E.G.B. and the Countryside Commission. Within the A.O.N.B. is an area of National Trust land which would not be affected by the scheme, and the adjoining coastline, which is designated as a Heritage Coast, is also sufficiently far from the site not to be affected. The rock garden to the west of the construction area would also be preserved and maintained. Approximately 1 kilometre to the North-east of the proposed station site is a Site of Special Scientific Interest (Tre'r Gof) which would not be affected.

The area comprising Wylfa headland was originally owned, by the C.E.G.B. but was given to Llanbadrig Community Council in 1969 for the enjoyment of the local community. The Porth-yr-Ogof area on the headland may be required for the construction of a heavy load berth and access road if the Wylfa 'B' Scheme goes ahead.

According to the C.E.G.B. efforts would be taken to minimise the impact that the project could have on the ecological and amenity value of the adjoining countryside. However, public access to these areas, particularly Wylfa headland and Porth-yr-Ogof, could be affected on a temporary, or permanent basis, and this issue would have to be clarified through discussion between the Council and the Board.

5.4. Noise and Disturbance.

Discussions have already taken place between the C.E.G.B. and the Council's Environmental Health officers regarding the measures that the Board intend to take to minimise any noise nuisance that could emanate from the Wylfa 'B' site during both the construction and operational phases. Briefly, the C.E.G.B. will undertake surveys of background noise at selected locations around the proposed site during each of the four seasons of the year. These measurements will be taken during selected 24 hour periods in conditions of low wind speed to ensure the noise measured is representative of the community background noise and is not due to the aerodynamic noise of wind acting on the microphones.

Statistical analysis of these measurements will establish the Environmental Noise Criterion. From this criterion a more detailed statement is derived which sets out overall and frequency based limits to the noise from the proposed station, and this will be the Station Design Criterion.

The selection of locations at which noise measurements will be recorded will take account of the noise produced by the existing operational station adjoining the proposed site. The aim is to ensure that, in the long term, background noise in the area will not be increased through the addition of the new source of noise from the new station.

5.5. Transmission Lines.

There are two aspects to the transmission works required for the Wylfa 'B' project. These are the connection of the new station to the national grid, and the reinforcement of the national grid to enable it to cope with the additional flows of electricity in a secure manner. The Board has established that it is unlikely that an additional transmission line would be required across Anglesey. A new substation would be needed at Wylfa, and there would be a need for minor modifications to some existing lines on the mainland. However, it appears that a major intrusion into the landscape, which could generate considerable public opposition, can be avoided.

5.6. Traffic Volume and Impact on the Road Network.

Transport consultants acting for the C.E.G.B. are assessing the potential effects of the traffic associated with the construction and operation of the proposed Wylfa 'B' station. Traffic is assessed in terms of changes in traffic volumes, and the capacity of existing roads and junctions to cope with these changes. The environmental aspects of increased traffic flows which need to be considered are:-

- i) The increase in congestion and noise levels.
- ii) The effects of vibration on property.
- iii) Disturbance caused to communities.

The main access road, which passes within 1 kilometre of the Wylfa site, is the A5025 which runs around the northern perimeter of Anglesey and joins the A5(T) at two points, one being at Valley and the other near to the Britannia Bridge. The A5(T) connects to the A55(T) south of Bangor.

The transport of personnel to and from the Wylfa site is an important traffic issue, and expected traffic flows throughout the day have been assessed in detail. Construction work can be organised in shifts, with staggered work times, in order to reduce daily peaks in personnel traffic movements. The existing roads giving access to the site are considered by the Board to be satisfactory for normal vehicles. Also the expected transport of materials to the site is considered to be unlikely to cause unacceptable noise effects, and the increased volumes of traffic are not expected to cause excessive demands on the road network.

The C.E.G.B. understands that there are plans for improvements to the road network in North Wales to accommodate the increased traffic flows expected in future, irrespective of whether a second power station is built at Wylfa. It appears, therefore, that although the Board considers that the construction of a Wylfa 'B' station would not place any excessive additional strain on the existing road network, it would be advantageous if road improvements were carried out to reduce the environmental problems that traffic causes, particularly if the proposed station is built. The Council is anxious to see road improvement schemes undertaken particularly to the A5(T), in order to improve the district's economic infrastructure. The authority should, therefore, enter into discussions with the C.E.G.B. to ascertain which road improvements would be most beneficial if the Wylfa 'B' is built, and to examine the possibilities for making a joint approach to the appropriate highway authorities to have schemes brought forward as a matter of priority.

Most of the plant would be brought to the site by road, but during construction about 80 abnormally large or heavy loads would need to be delivered to the site. In order to minimise the implications of heavy load transport on the road network of Anglesey and North Wales, the C.E.G.B. proposed to construct a special Roll On/Roll Off facility, to be located at Porth yr Ogof, at the west end of Cemaes Bay, to transport heavy and abnormal loads to the site. This Ro-Ro berth would be mainly required for the construction phase, but it could be retained to facilitate the delivery of large replacement items during the 'B' station's operation. It would also be available for the removal of items during the decommissioning of the 'A' station.

Some concern has been expressed locally that the construction of a purpose built berth would deprive the port of Holyhead of an opportunity to carry out a similar function, and the Council could consider raising this matter with the C.E.G.B.

6. RADIOLOGICAL IMPACT AND SAFETY ISSUES

6.1. Safety of the P.W.R. Reactor.

The safety of nuclear power stations, and Pressurised Water Reactors in particular, is a highly controversial issue of international importance. Public awareness of the potential hazards of nuclear reactors has been heightened by media reports of the accidents involving a P.W.R. at Three Mile Island in the United States in 1979, and at Chernobyl in the Soviet Union in 1986. Public opinion on this issue is highly polarised, with some groups being fiercely opposed to the continuation of Britain's nuclear energy programme.

The P.W.R. proposed for Wylfa 'B' is similar in design to the one currently under construction at Sizewell in Suffolk with some changes to deal with site specific environmental and technical requirements. The safety of the Sizewell design was assessed in detail and approved after a long Public Inquiry, and the Nuclear Installations Inspectorate would need to agree to any minor site specific changes to the Wylfa 'B' design.

The question of reactor safety is likely to emerge as the major issue of public concern when the application for Wylfa 'B' is made, and the matter would again be thoroughly examined if a Public Inquiry is called. The Council will need to seek independent expert advice if it wishes to participate in any debate on this issue.

6.2. Radioactive Waste Disposal.

This is also a major issue of public concern which has international significance. Fears that Anglesey could become the location for a "NIREX" underground store for highly radioactive waste material have, however, been dispelled with the announcement that the company has taken Anglesey off its list of potential sites.

Various radioactive wastes are produced in gaseous, liquid, and solid form as a result of the operation of a nuclear power station. Equipment is provided to collect, process, and store these wastes prior to their discharge from the station, under strictly controlled conditions in the case of gaseous and liquid wastes of low radioactivity, or transport from the site for disposal in the case of solid wastes.

Some low level radioactivity will be released into the environment, and the public will require reassurance that discharges from the proposed Wylfa 'B' will not constitute an environmental hazard. There will also be public concern over the means of transport of solid wastes from the station, and the exact means and location of the disposal of highly radioactive waste.

The Council will need to obtain further details from the C.E.G.B. regarding its proposals for the disposal of radioactive wastes from the proposed Wylfa 'B' station, and these details should be assessed and evaluated by independent experts who could advise the authority on this particularly sensitive issue. The matter would certainly be debated in a Public Inquiry.

6.3. Emergency Arrangements.

Although the C.E.G.B. in its approach to nuclear safety aims to prevent accidents which might have radiological consequences for its workers and the public, emergency arrangements are provided at all the C.E.G.B.'s nuclear power stations for responding to such accidents.

The site licence for every nuclear station requires the C.E.G.B. to make provision for responding in the event of accidents. To comply with this condition the C.E.G.B. must have an Emergency Plan document which is approved by the Nuclear Installations Inspectorate. This document is supported by the much more comprehensive Emergency Handbook which is a detailed working document.

These two documents describe how the C.E.G.B. discharges its responsibilities within the emergency arrangements as a whole. Other organisations are also involved in the emergency arrangements and they each have their own plans. These other organisations include the Police, Fire Services, Health Services, Local Authorities, the Water Authorities, and certain Government departments such as the Ministry of Agriculture, Fisheries, and Food. The nuclear site licence requires that the C.E.G.B. carries out regular rehearsals of its own emergency arrangements, and if the N.I.I. is not satisfied with the standard of the C.E.G.B. performance at the exercise, it can call on the C.E.G.B. to repeat it.

Further details of proposed emergency arrangements for the Wylfa 'B' station will be published in the Environmental Statement which will accompany the application for Section 2 consent, and the issue is likely to be the focus of public debate if a Public Inquiry is called.

6.4. Community Liaison.

At present, the Wylfa Local Community Liaison Committee provides a forum for discussion and the exchange of information between the C.E.G.B. and the local population. This Committee is primarily concerned with the operation of the existing 'A' station, and emergency arrangements feature prominently in the discussions. The C.E.G.B. has stated its intention of establishing a similar Consultative Committee to consider matters relating to the proposed Wylfa 'B' station, and further details are given in Section 4.10 of this paper.

7. SOCIO - ECONOMIC ISSUES

7.1. Employment.

The construction of a Wylfa 'B' station would bring the prospect of employment opportunities into an area of high unemployment. A second generating station would also safeguard the jobs currently held by the present 'A' station's operating staff well into the next century.

The construction of the proposed power station is expected to take 6.5 years preceded by one year on site preparation. An estimated total of 3,500 people at peak would be employed on the construction site, but this number would change over time, and the numbers of different types of workers would also vary. The civil peak would occur in Year 2 of construction, and the total peak would occur in Year 4. The expected composition of the workforce is as given over:-

Estimated Composition of the P.W.R. Construction Work Force.

	Civil Peak (Year 2)	Total Peak (Year 4)
Site Services and Security and Clerical Staff	380	360
Supervisory/Managerial and Professional Staff	620	490
Civil Operatives	1100	600
Mechanical and electrical operatives	800	2050
TOTAL	2900	3500

Approximately 470 people would be employed at the operational station, and a wide range of skills would be required. The expected composition of the workforce at the station would be as follows:-

Estimated Composition of the P.W.R. Operational Work Force.

Managerial and technical	110
Clerical and administrative	30
Industrial -	
Foremen	45
Skilled	165
Semi/unskilled	120
Total	470

The C.E.G.B. would encourage contractors to employ as many local people as possible, but consultants have determined that there is a low level of skilled labour available locally, and this will affect the amount of local labour employed during the construction of the station.

During the construction period it is estimated that approximately 1,500 - 1,800 local jobs would be recruited from Anglesey and Arfon. A higher proportion of civil workers will be recruited locally than mechanical and electrical operatives due to the different level of skills required for the jobs. During the eventual operation of the new station, over 70% of the workforce might be expected to come from Anglesey.

Therefore, although the Wylfa 'B' project would offer a major opportunity to bring about a significant reduction in unemployment in this area, it is already clear that problems will emerge. As stated above, there is a shortage of skilled labour available locally and this is likely to be particularly true of the mechanical/electrical engineering skills required. Examination of the estimated workforce figures for the construction phase shows that during Year 4, when the workforce will reach its peak, almost half the workers will need to be in the mechanical/electrical engineering sector, and local recruitment may be difficult. During