

Bradwell B Consultation Response – Rettendon Parish Council

Question 1.

Certain Councillors would prefer to see an alternative power source utilised such as tidal, wind and solar energy. There was a move, which had been due to become law, to fit solar panels on all new house builds. If this were done the amount of power required would be reduced as each house could provide most of its own electricity. A large number of Councillors also believe that the storage of nuclear waste on-site is the worst possible legacy we can leave to future generations. The A132 from Rettendon Turnpike to South Woodham and beyond cannot cope with the large amount of construction traffic proposed as, in particular it suffers from subsidence between Rettendon Turnpike and South Woodham Ferrers.

In addition, there are to be 1,000 new homes built in the area of South Woodham Ferrers during the same time frame as this construction, creating even greater disruption. There are also other developments in the area which are being considered which would impact on the same roads. These new developments do not appear to have been allowed for in the current plan. There will be chaos when an accident occurs on any of the roads. The other roads in the area will have to take the extra traffic, and since there has been no consideration about these roads and the upgrading of any of them, they will be overwhelmed. The surrounding roads in the area will become rat runs. Some of these roads are small, sometimes single-track roads, with few passing places and no pavements. The addition of extra traffic will put people lives at risk.

Has rail been considered for the movement of the freight? The line already goes to Southminster and could take more traffic, especially at night, which is when the waste was transported from Bradwell initially. The rail could also be used for commuting to the site, with coaches/buses laid on for movement of the workers from Southminster to Bradwell, giving much less traffic on the roads.

While we appreciate the need for replacing existing fossil fuel fired power stations to provide less impact on the environment, and we appreciate that there is an economic case for using nuclear power to cope with the increase in demand caused by the increasing electrification of vehicles, we are concerned about the location of this major construction project on the area of Essex countryside and coast. The volume of road traffic advised will have a severe impact on all of the roads in the area, and of particular concern to the Council would be the effect on the A132 Burnham Road between the Rettendon Turnpike and South Woodham Ferrers, which is already very busy and has no pedestrian or cycle access ways, even though there is a residential area of over 300 homes and also several farms and a small industrial area, trying at various times to gain access and egress from the highway. It should also be noted that there has been a major problem on this section of the A132 with the road surface breaking up due to underlying subsidence. The road as one of the proposed access routes for freight and construction traffic will add to an already serious situation, and the proposed development of a 1000 home housing estate to the north side of the A132 by Chelmsford City Council will further increase the problems. The A132 from Rettendon Turnpike to South Woodham Ferrers also has a speed limit of 60 mph and this would make access to the road extremely dangerous, and therefore, in my opinion, the speed limit along that section should be reduced to at most 40 mph in line with the road from South Woodham Ferrers to Woodham Ferrers, Bicknacre and beyond, and traffic calming measures and even traffic lights or roundabouts should be introduced at all junctions as well as a cycle lane/pedestrian route alongside the main carriageway.

Maximum use of sea transport during the construction phase would be an excellent solution as the materials required would be delivered to existing ports etc in the area and therefore spread the employment and benefits of the project to a wider area.

The Bristol channel could be the answer as it has the largest recorded tidal range in the world: some 42 feet plus (14m). One of our Councillors has studied tidal power and seen it in action in Saint Malo in France. It is totally clean and reliable (the tide ebbs and flows twice in every 24 hours for ever). He has also studied the coastal part of the Bristol area and found an excellent potential site between Cardiff and Penarth on the north bank and a small headland 1 mile south of Weston Super-Mare. The attraction of this site is that there are already two small islands spaced very conveniently in the middle of the Bristol Channel. The power output from such a scheme would be enormous and far more than Bradwell whose output is estimated a 1.6GW. UK carbon emissions would also be reduced considerably, possibly by as much as 16m tonnes and there would be no nuclear waste to store.

A particular point of concern is that the Project is being financed 90% by CGN (a Chinese corporation) and 10% by EDF (a French company). If there was leakage of spent Uranium into the Blackwater River, can any guarantee be provided that the "partnership" would cover the contamination clean-up costs and any other compensation? Also, would it be possible to extend the rail line from Southminster to Bradwell (a distance of approx. 7 miles)? With a large train turning loop at the Bradwell end, this would ease the proposed 700-800 lorry movements per day for some 10 years and would be an argument for not having a very large car and lorry park just up from the Rettendon Turnpike as the employees could travel by train.

Also the cost of this extra line would be not too great when compared to the overall cost of the project. It is the view of this Council that transporting the bulk of the materials by sea is the better option, for the following reasons:

- (1) Just off the old discharge barrier, which is quite close to the shore, say by 100yds, there is a very good depth of water 32 ft, at low water and 47ft, at high w, average tides. This would be ideal for establishing a large loading wharf. This is adjacent to a very large good area for ship movements and berthing.
- (2) On the River Crouch for many years Cross Rail had a removable wharf with two very large cranes and offices. This was on Hire. Up to four ships or more a day would discharge 4,000 or more tons of materials. The ships were 180 ft long with a modest draught, the whole scheme worked very well.
- (3) The depth on the River Crouch is 10ft less at 37ft at high water, and 22ft at low water. We are confident this could be easily replicated at Bradwell in which case the proposal for large holding lorry and car parks could be reduced significantly or even scrapped. In the alternative, why not simply extend the Park and Ride area at Sandon (just off the A12?)

The Bradwell B project involves a low-lying coastal site that will be subject to the impacts of climate change as sea-level rises and flooding and storm surges batter the site. However, Bradwell already hosts several wind turbines and an offshore wind farm. The current plan seems to be that if the Project goes ahead, the bulk of the site will eventually be surrendered to the sea leaving the nuclear reactors and spent fuel on a mound as a sea-girt fortress behind a 9m. high wall. Bradwell poses an obvious danger to communities around the Blackwater and beyond. Despite every effort to reduce risks, accidents can, and do, happen. The chances may be small but the consequences are huge, and on the scale of Fukushima, potentially affecting an area of half a million people including large towns like Colchester, Chelmsford and Southend.

In addition, there are specific proposals with which this Council takes issue. The first is the proposal for cooling water, effectively a compromise to avoid either taking water from the estuary, which cannot cope with the volumes (130 cubic metres per second), or direct from the sea, which involves long 11.5k. tunnels. Tall 180m. cooling towers with plumes high up in the atmosphere are clearly unacceptable. It appears that a compromise of indirect cooling is proposed taking less water from the estuary but still impacting on fishing and the oyster beds; combined with squat but still very obtrusive 50m. cooling towers. The hybrid cooling system intended as a compromise affects both the estuary and the landscape.

Secondly, there are no effective proposals for managing highly radioactive spent fuel and other nuclear wastes beyond leaving them on site in so-called 'interim' storage. This is unacceptable for three reasons:

- (i) the store, along with the power station will be vulnerable to the impacts of climate change.
- (ii) beyond 2100 the wastes will be left on a site in unknowable deteriorating conditions for the unforeseeable but far distant future.
- (iii) there are no plans for the long-term beyond the hope that a disposal site will be available. A convincing and credible strategy for managing its highly active wastes must be found for the Bradwell B project.

Generally, the impact of Bradwell B on the estuary and the Dengie Peninsula will also be severe. The estuaries and coastal waters comprise the largest Marine Conservation Zone in the country explicitly to protect the renowned Colchester Native Oyster. Oysters and fish will be threatened by the intake and discharge of cooling water as well as by the port facilities it is intended to introduce to take in bulk materials for the power station. The devastation of marshland and precious habitat will impact on the ecology and especially the wintering habitats for birds, including the 7% of the world's overwintering Brent Geese. The cultural landscape, including St Peter's Chapel and other historical sites, will be overwhelmed. In short, the overall impact will be on such a scale that the existing tranquil, passive, fragile and unpolluted environment of the Blackwater will be replaced over time by a noisy, dangerous and intrusive industrial complex. Bradwell B will not only transform the environment, it will have a profound impact on the economic and social wellbeing of the whole area.

In the hope of gaining public approval, Bradwell B is literally buying its way into the area with the promise of thousands of jobs and millions of pounds of investment, the provision of housing and services, transport infrastructure and associated "sweeteners". Although during construction it is anticipated there will be more than 10,000 workers, only 3,000 are proposed to be taken from within the region, the rest from elsewhere, with many from overseas. An economy tilted towards one dominant industry will inevitably impact on labour markets and is likely to have distorting effects on other activities.

A development of this scale cannot be measured simply in terms of economic benefits. The drawbacks must be measured too. Much more information is needed on the transformative impacts on the economy and community from a new nuclear power station. Issues of balance, diversification, inequality and employment must be addressed.

The same is true of the social impacts of Bradwell B. Among the issues needing thorough assessment are the integration of such numbers in the local community, for example the impact of 4,500 workers, mainly young people, living in campus-style accommodation close by Bradwell with a population of 500, or in caravan parks scattered across the Dengie. There are also the serious

transport impacts to be considered and there can be no hiding the fact that the harm to environments and wellbeing will be substantial and that the proposed scale of lorry movements, commuting and public transport envisaged contributes to the problems associated with this project as a whole. In the circumstances, it does appear that a Social Impacts Assessment is needed to investigate the impacts on the local economy, services, transport, social integration and community wellbeing. Such an assessment could provide conclusive evidence regarding the overall impact Bradwell B will have on the area and the wellbeing of its inhabitants.

Question 2

This is a new design involving a Chinese "prototype" nuclear reactor which as far as we are aware is untested and at present not certified. As it is being built by non-UK companies, the Project is seemingly not under UK control which would be a major concern. Surely there are home-grown designers and construction companies more suited to undertake such a large construction. The area around this plant is remote, rural, historic and of natural beauty. We have very real concerns that if the Project is approved this area will not remain so, nor will the existing wildlife, flora and fauna be preserved. Many people are reliant on the rivers and coastal areas for their livelihood. This could damage the area even with the mitigating plans presented.

There is also about the legacy issue. The waste from this plant will be stored for hundreds of years and still be toxic. As a result, this construction has the potential to cause significant problems for generations to come. Have the weather conditions been considered in enough detail by the consortium? There is the potential for far more extreme weather events happening in the decades and millenia to come. In the circumstances, this does beg the question: is the platform envisaged sufficient for the next few hundred years when the stored waste will still be toxic?

Whilst the impact upon the ecology of the Blackwater Estuary will be significant, it is acknowledged by some Councillors that the new power station is needed and they recognise too that the overall design and landscaping will mitigate and protect as far as possible all existing biodiversity present in the area. However, it is difficult to assess the visual impact of the development from the documents provided. As a result, the impact on the surrounding areas of historic and natural habitat will require careful consideration and monitoring by the relevant authorities.

Question 3

The local infrastructure cannot support "tens of thousands" of construction jobs. The park & ride scheme proposed for Rettendon Turnpike to support this level of workforce is too far from Bradwell to be of any real benefit & will cause problems for local residents trying to access the busy A132.

However, the Council would totally support the generation of local jobs and business opportunities for this rural area of Essex, the scale of employment and business opportunities will lead to significant benefits for this largely neglected part of the County. However, our concern would be that the construction phase will provide an increase in jobs for the area, and will probably be far better paid than the existing work available, this would then encourage workers to transfer from such industries as farming etc to the construction jobs, with the result that existing industry would suffer from labour shortages, and then when construction is complete there would be a surfeit of labour causing more problems. As an example of this, the Oil Refining Industry decimated local industry in a rural community in West Wales during construction, and the area has never recovered.

Question 4.

There is a shortage of homes in the area now, so where are the permanent members of the workforce to live. Will the temporary accommodation be landscaped after the construction to the level it was before? Will there be further expansion due to the need for homes near the site, impacting on the small villages in the area.

The accommodation strategy as outlined in the consultation document seems entirely misguided, and would, if implemented, cause major problems within the area concerned for both the labourers and the existing residents. Having seen these type of accommodation areas on construction sites, they create many more problems than they solve. It would be better to investigate better transportation links, preferably rail, to allow the labour force to live in areas with suitable entertainment amenities, building if necessary accommodation that could later be used for affordable housing.

Localised temporary worker accommodation will obviously be required to minimise travel impact to the site. A mixture of caravan and campus type facilities will be appropriate and opportunities to re-use facilities post construction will benefit the community and perhaps may align with a satellite use for Anglia Ruskin University for a nuclear science laboratory.

Improve or extend the railway line into Bradwell instead so workers can commute like every other worker in the Dengie.

Question 5

Both scenarios proposed appear to be very bad news for local residents. How do these proposals compare with Hinckley and how was it worked there?

Question 6

Prior to the closure and the de-commissioning of Bradwell Power Station, the nuclear flask (about 100 tons) in weight, was transported to Southminster Station by special train, where the flask was lifted onto a giant low loader for the short journey to the power station, contaminated material doing the same journey in reverse. Bearing in mind it is Government policy that as much use as possible is made of the railway system for the transport of bulk material such as aggregates, which must form a major part of what the vast number of lorries would be carrying. Therefore, it would seem both feasible and desirable that in order to drastically reduce the number of HGV's on the roads around Rettendon and the long-running adverse effect on the locality, serious consideration should be given to the re-instatement of the freight facility at Southminster. The ex-nuclear unloading facility at Southminster is still there and securely locked up, all in apparent good order. The materials could then go there, possibly at night, in a bulk train of maybe 2000 tonnes. If this could be done, the lorries would only have a short journey to the power station site from Southminster, and Rettendon would be subjected to far less long-running disruption. No doubt other supplies and equipment could also be delivered by rail if the will was there. In our view, it would be relatively easy, in the overall scheme of things, to adapt the facility for the delivery of bulk materials that could then be transferred the short distance to Bradwell.

Accordingly, the current proposed overall approach appears wholly inappropriate given the obvious impact and effect on residents for the next 10 - 15 years from Rettendon to Bradwell and every

village in between. Surely more efficient (& simpler) to improve / extend the rail link from Wickford to Bradwell and increase sea traffic.

Adding sites of temporary homes may actually cause more traffic if the workforce try and leave and arrive all at the same time. Has staggered working been thought of to reduce this effect? Expanding the rail network to Bradwell village itself could well be the solution, or at least ensure that there are more trains to Southminster with an adequate bus system from Bradwell to Southminster to avoid these lengthy and protracted traffic problems. There does not seem to have been any thought about updating the roads from Rettendon Turnpike to South Woodham Ferrers, but the roads are not in good condition and need improving. It appears the road transport system is preferred rather than rail, but adding the rail network into the system would help reduce the need for the HGVs on the roads, especially when there are so many other developments in the pipeline for this area. Has the increased air pollution been considered? With extra traffic there will be extra carbon emissions. This may actually harm the environment, and the living conditions of the people in the area. How much more pollution will be added and will it be above the Government limits?

The overall approach is inappropriate as it seems to discount the use of rail facilities in favour of road as far as employees and construction traffic is concerned. The level of road upgrading etc in the area would be enormous and cause severe travel problems during the required upgrading. A rail link should be investigated to provide access for both freight and personnel from outside the immediate vicinity.

Recommend maximisation of delivery of all materials by sea route to be secured and investment of funding to improve road and rail infrastructure to support the project.

Question 7.

Increasing transport of freight by sea would obviously cut down on disruptive road traffic and its knock on effects. From the Turnpike on the A132 to SWF there are 300 homes with 500 residents with severely restricted access to the road. A further 1,500 homes are planned to the west of SWF & the A132.

Option 1: Beach landing facility APPROPRIATE

Option 2: Bulk material jetty. APPROPRIATE

Option 3: Marine offloading facility APPROPRIATE

Option 4: Aggregate pipeline and settlement lagoon. INAPPROPRIATE

A small foot ferry could be added for workers, from local coastal areas or across the estuary. However, there may be a problem with the tidal flow, with lots of mud instead of water, but this should at least be considered.

Maximum use of sea transport during the construction phase would be an excellent solution as the materials required would be delivered to existing ports etc in the area and therefore spread the employment and benefits of the project to a wider area. Proposed use of Beach, Jetty and other facilities are appropriate.

Question 8

700 HGV movements a day does not represent "some freight". More should be brought in by rail & sea to reduce road traffic and mitigate disruption to local residents and businesses. The current

infrastructure will simply be overwhelmed by the number of "movements" proposed which could turn out to be an underestimate. The road surface on the A132 is so bad that the speed limit has recently been reduced from 60mph to 50mph for "safety reasons".

The roads in the area are entirely unsuitable for HGVs. They are winding, small roads with hedges. I can see there will be traffic problems and accidents all the time, causing chaos.

According to the consultation document, the Western section does not extend far enough, and should be extended to include the A132 from the junction of the A130 and Rettendon Turnpike as this is already an area of major traffic congestion at peak times and will be further exacerbated by the proposed construction of a minimum of 1,000 homes in South Woodham Ferrers, the threat to the Turnpike of a "lorry park" / "park and ride facilities and the existing / planned construction going on in and around Burnham on Crouch, Hockley, Hullbridge and Rayleigh.

Strategic Route 1 appears to offer the least impact upon the countryside and provides by-passes in the Western and Eastern Sections which only removes traffic from the settlements of Latchingdon, Mayland and Steeple.

Question 9

According to the consultation document, the Western section does not extend far enough, and should be extended to include the A132 from the junction of the A130 and Rettendon Turnpike as this is already an area of major traffic congestion at peak times and will be further exacerbated by the proposed construction of 1000 homes in South Woodham Ferrers, and the construction going on in and around Burnham on Crouch, Hockley, Hullbridge and Rayleigh. Any road upgrading etc proposed would be appropriate but the A132 must be the first priority. Generally, the proposals for new roads in Western and Eastern sections would lead to significant loss of valuable farm land which should be avoided.

A pedestrian crossing on that at the entrance to Hayes Country Park must be included or 500 residents will be virtually cut off behind the railway bridge. The road subsidence issue on the A132 must also be dealt with. Subsidence is a regular occurrence along that stretch which renders the road unsuitable for very large volumes of heavy construction traffic.

Option 1 This is the B1010 which has right-angled bends in it, difficult for the HGVs to negotiate and may cause accidents.

Options 2 and 3 . Although these will be built over farmlands, they will ease the traffic on the rural road, and have straighter routes. This may mitigate the level of potential accidents. All options should be looked at and rail transport considered.

Question 10.

Currently, the proposals for new roads in Western and Eastern sections would lead to significant loss of valuable farm land which should be avoided. Also, all the roads leading into the Eastern Area, no matter which option is chosen, will require extensive improvement and adequate traffic control measures.

Question 11.

The proposed improvements appear to be logical and would be required. This proposal seems sound.

Question 12.

The facilities proposed around Rettendon Turnpike and South Woodham Ferrers are wholly unsuitable and too far removed from Bradwell which is at least 50 minutes away by road. SWF currently has a minimum of 1,000 homes planned for the east side of the B1418 plus a site for travelling show-people and business / retail units. The proposed facility to the west would block any further development of this fast-growing town.

There are problems with all areas being considered. The traffic around the Rettendon Turnpike is bad enough now, so would be worse with additional loads. Not sure why this area is being considered for storing the HGVs when it appears there is to be a one-way route system, and the Turnpike is on the outward-going route. The other areas of consideration are more rural and there would be problems with the small villages in the area being flooded with HGVs at certain times. Search area 1 makes more sense as it is closer to the proposed route of the HGVs inward from Maldon. But there are still concerns about the problems with local traffic and accidents, incidents and road works.

Use of freight management facilities is excellent, and this will enable the marshalling of loads close to major roads, to then reduce these down to smaller quantities that can be used according to the construction plan. If these are properly managed then use of night time deliveries to site could also reduce the impact on the roads. The use of rail transport should also be considered with a line extension to the construction site. Alternatively, if more materials can be brought in by sea, ships are available to carry the bulk of the construction materials and a mobile port might well assist.

The Council completely disagrees with the selection of Area 3 proposal. Search Area 1 and 2 are clearly more acceptable. The Rettendon Turnpike area, if selected, would have a seriously major impact upon valuable farmland and a HGV park would impose unacceptable traffic movements to a acutely busy and already intensely congested area of road network.

Question 13.

While the Council can see the logic in providing basic car / lorry parks for vehicles to avoid traffic problems, this will still cause problems in all areas. The Turnpike area is already a bottleneck at certain times of the day. The facilities proposed around Rettendon Turnpike and SWF are wholly unsuitable and too far removed from Bradwell which is at least 50 minutes away by road. Areas 1A and 1B should be the preferred option as they are nearer to the facility, but they are still in rural areas. Area 1A might also be preferable as it is near to the proposed route from Maldon. However area 4 is in the Maldon area which would be more suitable as the town can take more expansion than either the Cold Norton or Mayland areas.

Rail travel direct to site would be this Council's preferred option.

Question 14.

Considering the problems caused by the current pandemic, the process was generally good. It is hoped the organisers will ensure that any future phases excel given the nature of the Project. On the

downside, many people in the area affected by this Project do not have access to the internet or to computers. This was the reason why a "local" Exhibition was so important. Residents have commented that it was difficult to be obtain the relevant documentation to view the consultation and properly respond to it. No exhibition was planned for any venue local to Rettendon or South Woodham Ferrers, even though they are closer to the proposed HGV route than Rawreth, (which had been ear marked for one of the now cancelled exhibitions). Finally, whilst the extended time limit gave this Council extra time to bring this consultation to light, even now a large number of people are still generally unaware of it