

BRISTOL CHANNEL FEDERATION OF SEA ANGLERS

RESPONSE TO ENVIRONMENTAL AGENCY CONSULTATION --HINKLEY C.

I am responding on behalf of the 24 local member clubs that regard the Bristol Channel as their home patch of water.

The vast amount of papers issued in this consultation makes it very difficult for individuals to understand and respond.

We are not anti - nuclear power stations.

We are focused on ensuring that EA / EDF maintain and improve, particularly in the light of recently revealed mortality statistics, the measures that prevent marine life entering the system. The abandonment of the Acoustic Fish Deterrent without replacing it with an alternative will dramatically increase the amount of marine life entering the system where most of it dies!

Protection of the marine environment was a condition of the permit and EDFs "Fish Friendly Measures " were, we assume, a major factor in the decision to grant approval.

HPC is in one of the most highly rated Protected Marine Areas of the UK.

Any development with the potential to make major irreversible changes to the marine environment must be treated with extreme caution.

We assume that EDFs "Fish Friendly System " proposal was audited, supported and approved by the EA? in order for the permit to be issued?

Why have EDF waited 6 years into the contract to say their proposal is unachievable?

EDF should not be allowed to walk away from a key process. If it does not work surely they must have the responsibility to re-design - at their cost

Does the EA really agree that the remaining two measures will achieve the same result?

In the past EDF have claimed that the mortality rate for the much bigger HPC will be less than HPB.

They must come up with an alternative [s] equal or better than the benefits that they claimed would of been achieved had their submitted and approved proposals worked.

There is such a wide spread of views on the inevitable serious consequences to the environment that the EA must maintain a precautionary stance.

It seems to us that we will not know the outcome until HPC is up and running - what can be done then? Who would be responsible? Should we have a plan B now?

The consequence to the whole Bristol Channel if this is not managed correctly is irreversible.

What we do see is a very much more efficient and cost-effective way of disposing of dead and dying marine life and debris by dumping it straight back into the sea rather than the costly process of dealing with it on land.

Robust and independent processes must be put in place to monitor and measure the kill.

A commitment must be made to continually adopt / install any future developments that will reduce the mortality rate over the working life of HPC [70 years plus?]

The questions / comments we make are;

Why was the original EDF "Fish Friendly Scheme" accepted by the EA as a credible option to reduce marine kill in compliance with their permit conditions. Acoustic Fish Deterrents had been trialed and abandoned at Hinkley before.

EDFs proposed system relied on 3 measures - Acoustic Fish Deterrent, Low Velocity Intakes and a Fish Return System.

In 2012 at a public meeting in Burnham, in response to our questions, EDF accepted that the proposed Acoustic Fish Deterrent was unproven and still "work in progress". They acknowledged our concern that only a small number of the most robust species would survive the ordeal of entering the intakes, travelling 3kms through tunnels, impingement on the 5mm screens and the stress of the fish return system before returning through the tunnels to the sea. [mostly dead and dying]

Now 6 years on EDF finally admit that the AFDs will not work in the "harsh waters of the Bristol Channel". They are no different today than when they ever have been!

They now say that for Health and Safety reasons they can neither install or maintain them anyway! [this does not say much for the pre-contract HS Plan]

They claim that the remaining two measures will still do the job - how can that possibly be true?

Low Velocity Intakes -the station Intake of sea water has now been published as circa 3,500,000,000 gallons a day.

The "innovative" [acknowledged in 2012 as untrials] low velocity side entry intakes [described as being the second line of defense] were described to us as taking water in at walking speed which would allow fish "to swim away from the intakes" which they still maintain.

With an intake of 3,500,000,000 galls a day plus the natural strong flow of the tidal currents the flow around the intakes will surely be stronger alongside of the inlets and all marine life in that area will be drawn in. Small / medium fish, prawns, shrimps etc. go with the current and would not be aware of the danger. Once through the intake the water drops into the tunnels. There is no possibility of anything getting out.

With the removal of the AFD and the reduced if not completely ineffective benefit of the LVI s surely there is little / nothing to prevent the free flow of fish or any other marine life etc. straight into HPC and the ensuing fish kill.

Will the fish then survive the 3 kms trip in turbulent water into the station. Physical battering and trauma will surely kill huge quantities?

How many will then survive the ordeal of then hitting the 5mm / 10mm mesh screen with the pressure of 3,500,000,000 galls of water a day with debris and other fish [already dead and dying?] The undamaged fry [if any] that does go through the mesh then falls victim to the increased water temperature in the cooling process whilst rotating screens lift whatever is left, dead or alive, from the face of the screens into the return tunnel

Deterring fish from entering the system is absolutely critical in any attempt to control the kill. It must have been a major factor in the EA assessment of EDFs proposal?

EA must ensure EDF provide alternative ways to prevent fish entering the system - equal at least to the benefits that the AFD and LVIs were expected to achieve. Once in the system the majority of fish etc. are killed

Why has the work been allowed to continue so far without the fish protection measures being substantiated or agreed.?

Could it be that the focus on design was more for saving the cost of removing dead fish and debris to landfill - rather than fish protection? Out of sight out of mind?

There is a wide difference of opinion between the "experts " on the mortality rates for marine life once in the system.

EDF / CEFAS- claim that the fish kill is around 56 tons a year = similar to a trawler. This is so misleading. The HPC major kill is small fish shrimp crustaceans etc. Trawlers are regulated by minimum landing sizes, catch limits, quotas, net sizes etc. relevant to where they fish and the types of fish they catch.

HPC is indiscriminate taking and killing anything from mysids shrimp juvenile fish up to seals are recorded.

EDF do no give figures for other types of marine life.

Peter Henderson of PISCES, who is a recognized independent authority on the effects of Nuclear power stations on the environment, has officially monitored marine mortality at HPB since it started 40 years ago. He has provided his figures for current HPB and his forecast for HPC. They are alarmingly different.

COPY attached [HPCB current 40 million - predicted 140 million]

EDF give no details of the quantities of other marine life that is killed

Who is right? Presumably Peters HPB figures are a matter of record and his knowledge of great value etc?

As anglers we can relate Peters figures to the dramatically falling numbers of young fish and shrimps that had been abundant until 15 years ago. In more recent times a bait cast out that would of been eaten by "tiddlers" / shrimp in minutes comes back untouched.

Something is very wrong with the current fish life in the upper Bristol Channel. Seasonal vising species are here but the localized stocks of flounder, pout, silver eels are seriously down in numbers.

The fish kill for HP3 has been rated as " insignificant" being assessed as less than 1% of the existing stock?

Apparently, the comparison is based on a formula based on sea areas that stretch far beyond the inner reaches of the Bristol Channel.

We are in a Marine Protected Area and Estuarine environment recognized for its varied population of small fish. Surely as others have said the assessment should be based on the predominantly local populations of fish that will be directly impacted. Have seasonal studies been carried out on the relevant areas?

The intake heads are located in an area that we fish for Bass - both spawning fish and schoolies are particularly numerous in this area. The Bass arrive when the elvers arrive and stay into the early winter.

All of Bridgwater Bay virtually dries out back towards this area. Cod are under serious pressure and in recent years the area has attracted thousands of mini codling that stay from September to April.

Spratt and Herring arrive in the winter to breed - EDF say the intakes are located in 5m water at low tide so even as mid to upper level species they will be vulnerable to the intakes as will the elvers shad salmon congregating to move forward on the flood tide.

Elsewhere in the Bristol Channel and its catchment area the EA and others are spending millions in order to support endangered species of fish that use the Channel as a highway.

Fish populations are being hit by pollution, global warming, over fishing etc. and HPC will inevitably add to that.

The EA have the obligation to act cautiously - taking into account that the original proposal was flawed, the difference of opinions on the total kill, the knock -on effects over the whole Bristol Channel and the concerns being raised by other organisations and individuals

JOHN MAY