Sub (1).

Iascach Intíre Éireann
Inland Fisheries Ireland

ENVIRONMENTAL PROTECTION AGENCY
12 APR 2012

Bea Claydon
Office of Climate, Licensing and Resource Use
EPA HQ, PO Box 3000,
Johnstown Castle Estate,
Wexford.

Your Reference – NA
Our Reference – BB/DD/01

April 5th, 2012

Re: P0486-02: Synergen Generating Station - License Review.

Dear Ms. Claydon,

Our sincere apologies for the delay in responding to your letter. Regarding the above review; please find IFI Blackrock's observations outlined below:

- The development is within the catchment of the River Liffey, one of the foremost salmonid fisheries in this region. The plant, cooling water intakes and assorted foreshore elements located adjacent to and in the tidal section of this system have significant potential to impact on aquatic ecology
- The ERFB (now IFI) has collected data from nearby Poolbeg water intake and has recorded up to 28 species of fish over a sampling season. It is likely that these and many other species utilise the area in and around the development site. IFI has direct experience of both the belt screens at the Synergen plant and the drum screen at the Poolbeg installation. The drum screen at Poolbeg is a far superior screening solution from a fisheries perspective. A large proportion of the fish life impinged is preserved at this structure and returned to local surface waters unharmed (or relatively so) – which is what would be required in any future similar structures in Synergen.
- All measures necessary should be taken to ensure protection of local aquatic ecological integrity, in the first place by complete impact avoidance and as a secondary approach through mitigation by reduction and remedy.
- The potential for pollution of the River Liffey estuary from contaminants is significant. On-site attenuation ponds should allow for the settlement of fine/particulate materials. Class 1 petrol/oil interception, silt/grit traps and hydrobrake controls should be in place on surface water discharges to protect the receiving aquatic environment. Silt fencing of discharge streams would

also be essential during construction. SUDS concepts should be implemented where possible according to international best practice.

- It is recommended that the "Requirements for the Protection of Fisheries Habitat during Construction and Development Works at River Sites" (http://www.fishingireland.net/environment/constructionanddevelopment.htm) be consulted when planning to undertake any works on this site. The maintenance of habitat integrity (both in-stream and riparian) is essential in safeguarding the ecological value of this important urban natural resource. Any works directly affecting watercourses or riparian habitats in the area must first be submitted to IFI for assessment and approval.
- The Liffey system supports a regionally significant population of Atlantic salmon (*Salmo salar*), a species listed under Annex II and V of the EU Habitats Directive in addition to lamprey, eel and many other sensitive species. Estuaries serve as the natural linkage for species such as salmon and sea trout migrating between freshwater and ocean environments, providing the necessary habitat for their transition. Thus, fisheries ecology is an important element for consideration in any development in this area.

Fisheries Ecology

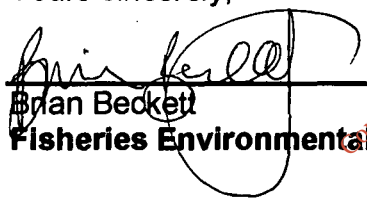
Estuaries provide a nursery habitat for the larval and juvenile forms of (transitional and marine) fish species, in addition to providing shelter and food for many young and adult fish and shellfish. These in turn provide food resources for other levels of the trophic chain including shore birds, waterfowl, larger fish and marine mammals. Intertidal areas host high densities of benthic fauna in particular worms and molluscs. This in turn can make them important habitats for juvenile fish such as flounder, and juvenile crustaceans such as crabs which may inhabit such habitats in high numbers. The majority of fish in estuaries feed primarily on the benthos and thus live a demersal existence. Estuarine fish can generally be divided into a number of groups:

- Estuarine dependant (opportunists) species typically enter estuaries from the sea for a period each year but do not stay permanently. The majority of these species drift into estuaries as larvae and when as young fish they become demersal, they take advantage of the rich benthic food sources available in sublittoral and intertidal estuarine habitats. Estuaries contain large numbers of '0 group' fish that use them as nursery grounds before migrating to the sea as recruits to adult populations.
- Marine stragglers enter estuaries irregularly and are often restricted to the seaward end (usually low in numbers of individuals)

- Riverine species come from the freshwater end of the system and are mainly found in low salinity waters.
- Truly estuarine species (residents) comprise only a small number of species although they may form a high overall biomass. The gobies are most typical of this group as they are found in estuaries around the year.
- Migratory species use the estuary and inshore waters as a route from rivers to the open sea or vice versa. Most of these species are anadromous (breed in freshwater) e.g. the lampreys, the shads and the salmon (*Salmo salar*) / sea trout (*Salmo trutta*). Eels (*Anguilla anguilla*) are catadromous and breed in the sea. These species are of particular conservation importance.

All of these fish groups are likely to utilise estuarine habitat in the vicinity of the development at some time during their life cycle. Thus it is essential to consider the potential impact of the development on fisheries, particularly on species of conservation importance. IFI is available for further consultation to ensure representation of environmentally sustainable and sympathetic fisheries targets for freshwater and estuarine habitat and species keeping general biodiversity protection in mind.

Yours sincerely,



Brian Beckett
Fisheries Environmental Officer