



Submission

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| Submitter: | Donnachadh Byrne |
| Submission Title: | Submission |
| Submission Reference No.: | S009916 |
| Submission Received: | 24 February 2021 |

Application

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| Applicant: | SSE Generation Ireland Limited |
| Reg. No.: | P0606-04 |

See below for Submission details.

Attachments are displayed on the following page(s).

Environmental Licencing Programme
Office of Environmental Sustainability
Environmental Protection Agency
P.O. Box 3000
Johnstown Castle Estate
County Wexford

22 February 2021

**Application by SSE Generation Ireland, Limited for revision to IPC Licence P0606-04 at
Great Island Generating Station, Campile, New Ross, Co. Wexford**

Dear Sir/Madam,

Inland Fisheries note that the receptor for water discharges from this site is the transitional waters of the Rivers Suir, Nore and Barrow SACs. The Nore, Barrow and Suir Estuary is one of the larger and more environmentally important transitional water bodies in Ireland.

Estuaries and inshore waters provide significant nursery habitat for the larval and juvenile forms of (transitional and marine) fish species, in addition to providing shelter and food for many young/adult fish, crustaceans 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 makes them important habitats for juvenile fish such as bass & flounder, and juvenile crustaceans such as crabs which inhabit such sites 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. The waters of the Suir Barrow Estuary represent some of Irelands the most important sea bass nursery habitat.
- 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.

In addition to the above the majority of the Irish populations of Twaite Shad reside in the Nore/Barrow and Suir River systems. This species which is an Annex IV species under the European Habitats Directive spawns in the upper tidal area of these rivers, the transitional waters of these rivers represent the principal nursery habitat for the Irish populations of this important species.

The National Report for Ireland on Eel Stock Recovery Plans published by the Department of Communications, Energy and Natural Resources in December 2008 states that "The latest scientific advice from the International Council for the Exploration of the Sea (ICES) concerning European Eel is that the stock is outside safe biological limits and that current fisheries are not sustainable. A significant proportion of the European eel stock remains in transitional waters and the European Eels of the transitional waters of the Suir/Barrow Rivers represent a nationally important population of this threatened species

IFI have reviewed the section 7-2-1 (Emissions to Surface Water) of the documentation supplied, which highlights the various discharges to waters from the Great Island site. One of these is the cooling water/screen-wash water SW8, which we note is in usage 365 days per year.

Our understanding is that chlorine is added to the cooling water abstracted from the estuary in the vicinity of the abstraction points adjacent to the jettys in the estuary, a relatively short distance upstream of the rotating fish screens.

IFI recognise that there have been issues with the operation/efficacy of the hydro-acoustic fish deterrent system which was installed in the waters of the estuary to deter fish from entering the cooling water system at Great Island and IFI welcome a commitment by the applicant to resolve fish entrainment and impingement issues within the cooling water system at Great Island.

Given that large numbers of various age classes of several different fish species are likely to be returned to the estuary via this cooling water/screen wash water system SW8, IFI request that the frequency of chlorine sampling of these waters be increased, from once per week as proposed in this application. IFI request that continuous on-site monitoring of chlorine concentrations in SW8 be undertaken.

Given the numbers, species range and age classes of fish likely to be encountered here and the proximity to the chlorine dosing point, we believe that we are justified in this request.

It is important that ELV for chlorine at SW8 protects the various age classes of different fish species likely to be encountered in the section of the cooling water system between the abstraction point and return channel from the band screens to the estuary.

IFI ask if the option of transferring the chlorine dosing system from its present location close to the abstraction point, to a different location after the cooling water has passed through the band-screens could be assessed by the applicant

Any long-term solution to fish impingement upon the screening system employed at the Great Island site is also likely to include modifications to the channel which conveys fish from the screening system back to the estuary. These modifications are likely to include/facilitate greater flows through this channel to ensure that fish are safely returned to the estuary and also to mitigate against the threat of predation upon these returned fish in the estuary.

Yours faithfully,

Donnachadh Byrne
Senior Fisheries Environmental Officer.

Please note that any further correspondence regarding this matter should be addressed to Mr. Donnachadh Byrne, Senior Fisheries Environmental Officer, Inland Fisheries Ireland, 3044 Lake Drive, Citywest Business Campus, Dublin 24

Noeleen Keavey

From: Donnachadh Byrne <Donnachadh.Byrne@fisheriesireland.ie>
Sent: Wednesday 24 February 2021 09:22
To: Licensing Staff
Subject: IFI submission re P0606-04 SSE Airtricity
Attachments: P0606-04 IPPC licence revision by SSE Airtricity for Great Island Site on Barrow Estuary.doc

Dear Sir/Madam,

Please see attached a copy of the IFI submission regarding IPC Ref: P0606-04.

Yours faithfully

Donnachadh Byrne
Senior Fisheries Environmental Officer

Iascach Intíre Éireann
Inland Fisheries Ireland

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D'fhéadfaí go bhfuil an ríomhphost seo agus ceangaltáin ar bith atá in éineacht leis faoi rún agus iad beartaithe d'úsáid an duine a bhfuil a s(h)eoladh air amháin. Dearcthaí nó tuairimí ar bith atá curtha in iúl ann, baineann siad leis an údar amháin, agus ní chaithfidh go n-aontaíonn lascaigh Intíre Éireann leo. Mura tusa faighteoir beartaithe an ríomhphoist seo, ná déan rud ar bith mar gheall ar an méid atá ann, ná é a chóipeáil ná é a thaispeáint do dhuine ar bith eile. Déan teagmháil leis an seoltóir, le do thoil, má chreideann tú go bhfuair tú an ríomhphost seo trí earráid.
