

Estimated Impingement and Entrainment at Hinkley B and C

P. A. Henderson

I give below estimates for the total number of fish and larger crustaceans sucked into Hinkley B cooling water intakes. There are two components, animals large enough to be stopped by a 5 mm filter screen (impingement) and small animals that will pass through the cooling water circuit (entrainment).

Annual estimates for Hinkley B with a pumping rate of $30 \text{ m}^3\text{s}^{-1}$

Group	Impingement on 5 mm screen	Entrainment	Total
Fish	6901429	36024387	42,925,816
Prawns and crabs	59801743	20922923	80,724,666
Mysids		1703489815	1,703,489,815

To calculate estimated numbers for Hinkley C multiply by 130/30. Therefore the estimated annual capture of fish would be approximately $42 \times 10^6 \times 130/30 = 182 \times 10^6$ (182 million individuals per year).

I would add I have used conservative estimates and the actual number is probably higher.