3 Kori Nuclear Power Plant in South Korea is one of the world's largest nuclear fission power stations.

(Source: © seo byeong gon/Shutterstock)

(a) The reactors at Kori use nuclear fission to generate electricity.

The products released during nuclear fission have high energy in their kinetic store.

Give a product of nuclear fission.

(1)

.....

(b) Give two disadvantages of using nuclear fission to generate electricity.

(2)

1 .....

.....

2 .....

.....

(c) Kori has a maximum power output of 7.49×10^9 W.

(i) State what is meant by the term **power**.

(1)

.....

.....

.....

(ii) Calculate the minimum time taken for Kori to transfer 6.47×10^{14} J of energy.

(3)

minimum time = ... s

(Total for Question 3 = 7 marks)