**Translation Practice C**

**Nuclear Industry Development in Argentina**

**Introduction**

Nuclear power is not a prevalent source of energy in Latin America. Currently, there are just seven nuclear power reactors in operation, producing just 2.2% of total energy consumption in Latin America: three in Argentina, two in Brazil and two in Mexico. However, it seems that nuclear power around the Western hemisphere is driven by a desire to find alternatives to low fossil fuel prices and CO2 emissions altogether.

Even though Argentina has a diverse set of natural energy resources, such as oil, natural gas, coal and uranium during the late 1980s and 1990s, Argentina paralysed its hydroelectric and nuclear development. Later in August 2006, reactivation of the nuclear sector was politically declared in the country. The main goal of this decision is to diversify the matrix of power generation with greater participation from the nuclear, hydro and other renewable sectors.

According to the 2015 National Energy Balance, 87.4% of total primary energy sources in Argentina are fossil fuels. Just over half (52.3%) of these fuels correspond to natural gas, 33.4% to oil, and 1.7% to mineral coal. The remainder includes hydroelectric energy (4.4%), nuclear energy (2.7%), and renewable resources such as wood (1.1%), bagasse (1.1%), biofuel (2.6%), vegetable alcohols (0.5%), wind energy (0.2%), solar energy (0.002%) and other primary resources (0.5%).

Since 2015, three nuclear power plants have been in operation reaching a total installed capacity of 1032 MWe. The Argentine government projects an increase of generated nuclear power from 5% of the current electricity mix to 9–11% by 2025.

**Nuclear Power Plants (NPP)**

**Centarl Nuclear Atucha (CAN) Unit I**: Located in Lima, Zárate, 115 km away from the Autonomous City of Buenos Aires. Its commercial operation started in March 1974. It is a pressurised heavy water reactor (PHWR) with a net electrical power of 240 MWe and is cooled and moderated with heavy water. Its fuel assemblies use slightly enriched uranium and allow the replacement of the fuel assemblies without interrupting the service of the plant.

**Central Nuclear Embalse**: Located on the south coast of Embalse de Río Tercero, in province of Córdoba. Chronologically, it is the second Argentine NPP. In operation since 1984, this CANDU reactor uses PHWR technology. It uses natural uranium as fuel and, similar to the Atucha I Unit, the loading and the unloading of the fuel is performed during operation. In addition to generating electricity, CNE also produces Cobalt-60, which is used in medical, industrial and research applications

**CNA Unit II**: Located beside CNA Unit I, Unit II maintains a net electrical capacity of 692 MWe. It has been in operation since June 2014, with a gradual entry into the electrical network until it reached 100% of its nominal power in February 2015. It is a PHWR reactor that uses natural uranium.

**Future Nuclear Power Plants**

Atucha III will be the third Argentine nuclear reactor within the Atucha complex and it is a joint project between three countries: China, Canada and Argentina. Nuclear energy is expected to increase as planned power plants become operational.