CENTRAL NUCLEAR ELECTRIC, A FUTURE OF ROMANIAN ENERGY

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Rezumat: *Statisticile oficiale ne arată cum an de an creşte ponderea energiei electrice produse în centrale electrice nucleare. Cele mai dezvoltate programe energetice nucleare sunt în: Statele Unite ale Americii, Franța, Japonia, Germania şi Canada. Deşi România a fost printre primele țări din estul Europei care a avut un program de cercetări nucleare, trecerea la reactoarele nucleare de putere s-a făcut extrem de greu şi de lent. Implicațiile acestui proces decizional au fost în primul rând de ordin politic şi apoi de ordin economic. Au fost o serie de oscilații între Sistemul WER oferit de URSS şi Sistemul CANDU-PHWR oferit de Canada. Considerând reactoarele nucleare WER insuficient protejate împotriva unui accident nuclear, precum şi controlul total solicitat de fosta URSS asupra ciclului combustibilului nuclear, factorii de decizie de la noi au optat pentru reactorul CANDU, alimentat cu uraniu natural, moderat şi răcit cu apă grea.*

Abstract. *Official statistics show the year increasing the share of electricity produced in nuclear power plants. The most developed nuclear energy programs are: the United States, France, Japan, Germany and Canada. Although Romania was among the first countries in Eastern Europe that had a nuclear research program, switching to nuclear power reactors has been extremely difficult and slow. The implications of this decision-making process were the first political and then economic. There were a series of oscillations between Wer system offered by the USSR and the CANDU-PHWR supplied by Canada. Considering nuclear reactors Wer insufficiently protected against a nuclear accident, and the total requested by the former Soviet Union on the nuclear fuel cycle, the decision of us have opted for CANDU reactor, fueled with natural uranium, moderated and cooled with heavy water.*

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1. Energy Resources [1,2]

1.1. General

Energy isinvolved in daily life in two different ways:

- Energy spent on heating, lighting, provision of means of communication, etc.;
- Energy integrated by manufacturing, the items that we use.

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