Romanian CANDU operator sees a bright future building on strong past performance at Cernavoda CANDU plant

On July 2, Societatea Nationala Nuclearelectrica (SNN) celebrated two decades of safe, clean and reliable operation of its Cernavoda NPP two-unit CANDU nuclear power plant and FCN Pitesti, a nuclear fuel facility. The company was formed after a reorganization of the former state-owned company RENEL in 1998.

As well, in 2014, SNN became sole owner of Energonuclear, the project company responsible for development of the Cernavoda Units 3 and 4 project implementation.

Since the commissioning of Cernavoda’s two units, SNN has produced and delivered 168 649 752 MWh of electricity. As a result, the company says, Romania has avoided the release of 150 million tons of CO2 into the atmosphere, compared to generation types with significant CO2 emissions.

In a press release on the anniversary, the company said, Cernavoda NPP has had excellent performance based on factors that include: investments in nuclear safety, extensive pro-active maintenance programs, and highly-qualified nuclear specialist including industry experts recognized internationally.

Cernavoda’s CANDU 6 units are both 700 MW installed power output. Together they provide about 20% of Romania’s energy needs.

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Looking to the future

Building from the strong performance, a planned refurbishment of Cernavoda NPP Unit 1 -- scheduled to move forward in 2026 -- will allow the safe operation of the unit for another 30 years. The refurbishment will produce a significant savings compared to new generation and will strengthen the return on the original investment in the plant, making it even more economical for electricity users.

SNN's achievements over the past 20 years has resulted in performance which, “at present (is) a worldwide benchmark for professionalism and high level of nuclear safety,” said SNN CEO Cosmin Ghita.

The performance of the past two decades has provided the foundation for further nuclear development. The company plans to move forward with two additional units, to further support a low-carbon electricity system for decades to come.