

 Early Warning System

EBRD-51570

Cernavoda - Tritium Removal Facility



Quick Facts

Countries	Romania
Financial Institutions	European Bank for Reconstruction and Development (EBRD)
Status	Approved
Bank Risk Rating	A
Voting Date	2022-01-12
Borrower	Nuclearelectrica S.A.
Sectors	Energy
Investment Type(s)	Loan
Investment Amount (USD)	\$ 158.30 million
Project Cost (USD)	\$ 200.52 million



Project Description

According to the bank website, the project consists of a senior unsecured corporate loan of up to EUR 150 million to S.N. Nuclearelectrica S.A. to finance the construction of a tritium removal facility (the Project).

Nuclearelectrica operates two CANDU (Canada Deuterium Uranium) units at its Cernavoda Nuclear Power Plant (Cernavoda NPP): Unit 1 commissioned in 1996 and Unit 2 commissioned in 2007. CANDU type reactors, of which these are the only examples operating in Europe, use heavy water (deuterium oxide) as a moderator and coolant. Over time the radioactive hydrogen isotope tritium accumulates in the heavy water.

By now Cernavoda NPP has accumulated high volumes of such radioactive, tritiated water in its reactors. Removal of the tritium and placing it in safe, long-term storage, is an essential part of the decommissioning process. The alternative to this treatment is to store large volumes of highly radioactive water in tanks on-site for many decades. This would be very costly and entail potential environmental risks.

The proposed construction of a tritium removal facility (TRF) at Cernavoda NPP will extract tritium from the tritiated heavy water. The process will result in stable, non-radioactive heavy water, and a very small volume of concentrated tritium. The concentrated tritium can then more easily be stored to ensure its containment according to the applicable nuclear safety regulations. In addition, the processed heavy water can be reused as moderator and coolant, saving energy for the production of new heavy water.

The Project will focus on environmental improvement. This entails the following: i) the management of radioactive waste by reducing the amount of radioactive material and avoiding the hazards of storing it in large containers on site; ii) improvement of operational safety by reducing exposure to radiation for the staff working in the plant; and iii) ensuring compliance with the applicable regulations.



Investment Description

- European Bank for Reconstruction and Development (EBRD)



Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	Nuclearelectrica S.A.	Client	-



Contact Information

COMPANY CONTACT INFORMATION

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ACCESS TO INFORMATION

You can request information by emailing: accessinfo@ebrd.com or by using this electronic form:
<https://www.ebrd.com/eform/information-request>

ACCOUNTABILITY MECHANISM OF EBRD

The Project Complaint Mechanism (PCM) is the independent complaint mechanism and fact-finding body for people who have been or are likely to be adversely affected by an European Bank for Reconstruction and Development (EBRD)-financed project. If you submit a complaint to the PCM, it may assess compliance with EBRD's own policies and procedures to prevent harm to the environment or communities or it may assist you in resolving the problem that led to the complaint through a dialogue with those implementing the project. Additionally, the PCM has the authority to recommend a project be suspended in the event that harm is imminent.

You can contact the PCM at: pcm@ebrd.com or you can submit a complaint online using an online form at:
http://www.ebrd.com/eform/pcm/complaint_form?language=en

You can learn more about the PCM and how to file a complaint at: <http://www.ebrd.com/work-with-us/project-finance/project-complaint-mechanism.html>



Bank Documents

- [Environmental and Social Impact Assessment](#)
- [Translation: Cernavoda - Tritium Removal Facility \(Romanian\)](#)