



National Commission for Nuclear Activities Control

Security of supply in Covid-19 times

The importance of nuclear

A regulatory perspective

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Cernavoda NPP

**Units 1 & 2 in operation ; Units 3 & 4 are deferred projects waiting for restart of construction
All units are pressurized heavy water reactors (PHWR) CANDU-6 type.**



Other major nuclear facilities in Romania include a nuclear fuel production plant and facilities for uranium ore mining, milling and processing, and an interim dry storage for the nuclear spent fuel (on Cernavoda site).



**TRIGA-type Material Testing Reactor
(operational)**

The state of emergency due to Covid-19 pandemic has been established at National Level on the 15th of March 2020, first for a month and then it was prolonged until the 15th of May 2020. On the 15th of May 2020, the state of alert was declared at national level, for one month and it was extended for another month.

The regulator (CNCAN) and the licensee responsible for Cernavoda NPP had already been preparing for this situation.

Cernavoda NPP updated their plan to cover all measures for ensuring nuclear safety and business continuity in case of epidemic/pandemic.

Reference document: NEI 06-03 [Rev 2] - Pandemic Threat Planning, Preparation, and Response Reference Guide.

The licensee maintained contact with WANO (World Association of Nuclear Operators) and COG (CANDU Owners Group) to seek experience exchange and good practices for responding to such situations.

CNCAN maintained contact with WENRA, ENSREG, IAEA, CNSC and US NRC, for the same purposes.

Starting with the evening of 17th of March 2020, the licensee for Cernavoda NPP has implemented the preventive measure of isolation of the essential personnel. This measure has been in place until the end of May.

The rest of the protection measures implemented are similar to those taken by all the nuclear industry (temperature checks, wearing masks, frequent disinfection, distancing as far as practicable, enhanced use of videoconferences, testing of personnel with rapid tests and RT-PCR tests).

So far we haven't had any cases of illnesses in the nuclear facilities or the regulatory authority.

CNCAN has been monitoring the implementation of the licensee's plans for business continuity and the assurance of sufficient staffing levels and the compliance with the operational limits and conditions.

For Cernavoda NPP there has been continuous surveillance by 3 site inspectors, who were in preventive isolation with the licensee's staff and worked as usual (plant walk-downs, inspections to the MCR, system inspections, document reviews, etc.).

During that period we have postponed some of the more complex team inspections (thematic inspections, inspections on processes) that would normally involve more CNCAN staff and licensees staff from different work group.

The conclusion from the regulatory oversight is that the licensee has implemented adequate measures, has been proactive and in this way successful in preventing any problems that could have been caused by the pandemic.

CNCAN has already made changes to a regulation on response to transients, accidents and emergency situations, to explicitly require that all the necessary measures are available and feasible also in case of epidemic / pandemic; also general requirements have been introduced on the preparedness for epidemic / pandemic situations. The revised regulation has entered into force at the end of May.

The licensee is continuing the implementation of its preventive measures against the pandemic and has taken into consideration and prepared for a variety of scenarios.

Organizational resilience is key for overcoming this difficult period. This requires well planned resources, anticipation of adversity, monitoring of the situation, preparedness and quick reactions.

The nuclear industry is particularly resilient, because of its safety culture, tradition of preparedness for emergency situations, strict regulation and adherence to rules.
