



Contribution ID : 103

Type : **Oral Presentation**

## Chornobyl NPP Cooling Pond: Decommissioning

*Tuesday, 31 October 2017 09:30 (15)*

The Cooling Pond of Chornobyl NPP (hereinafter referred to as CP) was formed by constructing an embankment on the flood plain of the Prypiat River, its area made about 22.9 km<sup>2</sup>; its water volume making 151 million m<sup>3</sup> was calculated for cooling Chornobyl NPP four units in mode of electric power generation. When CP was operated the water level was maintained up to the design level which made 111m of BHS (meters as per the Baltic height system).

The average annual water level in CP within its operation was 7 meters higher than the water level in the Prypiat River.

The special feature of the Cooling Pond is its location within the area of Exclusion Zone and Absolute (Obligatory) Resettlement Zone - the area which was radioactively contaminated resulting from Chornobyl NPP Unit 4 accident in 1986.

Due to the reduction of cooling water demand after termination of the electric power generation such a facility is not required any more and now its decommissioning programme is implemented.

The Cooling Pond decommissioning activities cover radiation and ecological monitoring, namely:

- radiation condition in the surface layer of the atmosphere;
- exposure dose rate within the dry sections of the Cooling Pond;
- radionuclide content in groundwater;
- water level, radiological and chemical changes of the Cooling Pond water;
- the changes of the hydrobiological condition and geobotanical changes.

The presentation demonstrates the results of radiation and ecological monitoring.

### Summary

**Primary author(s)** : Mr NOVIKOV, Oleksandr (SSE Chornobyl NPP)

**Presenter(s)** : Mr NOVIKOV, Oleksandr (SSE Chornobyl NPP)

**Session Classification** : Safeguards, Decontamination & Decommissioning

**Track Classification** : Decommissioning