Nuclear decommissioning assistance programmes in Bulgaria, Lithuania and Slovakia 2014-2020

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The Commission presents its report on the implementation of the work under the nuclear decommissioning assistance programme to Bulgaria, Lithuania and Slovakia in 2018 and previous years.

In June 2018, the Commission established the mid-term evaluation report of the European Union nuclear decommissioning assistance programmes in Bulgaria, Lithuania and Slovakia.

The present report follows up the evaluation and reviews the further accomplishments obtained in 2018.

Progress and performance

Bulgaria - Kozloduy programme

The Kozloduy programme made significant progress in the dismantling of equipment in the turbine hall and in the controlled area. Important waste management infrastructures – key in order to proceed with the decommissioning – became operational in 2018. In parallel, construction works are underway for the National Disposal Facility, i.e. the low and intermediate level waste surface repository, which will receive large quantities of the decommissioned materials.

The mid-term evaluation report showed that the Bulgarian authorities concluded that the overall cost of the Kozloduy programme (estimate at completion) needed to be revised upward (+23%) and Bulgaria has correspondingly increased its national contributions. The end date of the programme (2030) was confirmed.

Slovakia – Bohunice programme

The Bohunice programme has substantially progressed in 2018. Decontamination & Dismantling (D&D) works in the turbine halls and auxiliary buildings were finalised in 2018 with the demolition of the four V1 NPP cooling towers. Furthermore, important D&D works have also been performed in the reactor-building: in 2018 the decontamination of the spent fuel pools and other tanks in the controlled area was finalised, while the dismantling of large components of the reactor coolant systems started.

Based on the revised decommissioning plan, the mid-term evaluation report concluded that the overall cost of the decommissioning programme (estimate at completion) is slightly decreasing and the completion date remains fixed at the end of 2025. This estimate is supported by a state-of-the-art plan for risks and contingencies, which provides a high level of confidence in the estimations made.

Lithuania – Ignalina programme

The removal of spent fuel assemblies from both reactor buildings (units 1 and 2) started in September 2016. The second reactor was defueled fully in February 2018, i.e. 9 months earlier than planned. Both reactors are defueled and transfer operations of spent fuel from the ponds to the Interim Spent Fuel

Storage Facility continue steadily. As at 31 December 2018, more than 50% of spent fuel assemblies were safely loaded into casks and put into storage. According to the schedule, all spent fuel assemblies will be removed in July 2022.

Main conclusions

The report concluded that in line with the expectations set for the current MFF, Bulgaria, Lithuania and Slovakia continued making effective and efficient progress in decommissioning their reactors in 2018. The management system has increasingly proven to cope with challenges and setbacks due to the complexity of the programmes. The preparation and endorsement of the respective decommissioning plans in 2014 was a major milestone and defined the limits of the assistance programmes, with the financing needs to achieve the decommissioning end state eventually established. At the mid-term stage, these needs were confirmed for the Bohunice and the Ignalina programmes; for the Kozloduy programme, the due revision of the decommissioning plan resulted in an increase in cost estimates post-2020. The increase of estimates did not result in an equal increase of the programme's envelope since Bulgaria committed to cover the increase to a large extent.

The mid-term evaluation report thus confirmed that ***no additional funding is needed*** in the current MFF (2014-2020) to achieve the objectives stated in the respective Council regulations and that the programmes should be continued after 2020.

National contribution levels are currently not established in the legal basis, which creates residual uncertainties. Appropriate national, relative to EU, contributions and defining a clear and formalised framework for 'co-financing' is expected to encourage greater national ownership and economy-seeking on the part of beneficiaries. The progress accomplished so far assures that greatly improved safety levels will be achieved at the sites as a result of EU funding in this MFF.

Knowledge sharing amongst the three beneficiaries has positively impacted the programmes and contributed to the latest successes.

Future developments

In the next period major expected developments in the field include:

- in Bulgaria: the steady progress of construction of the National Disposal Facility, the management of legacy waste and the start of major D&D works in the reactor building;

- in Slovakia: the final dismantling of the reactor cores;

- in Lithuania: the steady progress of defueling and the preparations for dismantling the irradiated graphite core, which is a first of a kind project of an unprecedented scale.