

Chernobyl's Spent Nuclear Fuel Storage Facility - World's Largest - Enters the Post-Construction *Integrated Testing Phase*



Vito Bagdonavicius, ISF-2 Commissioning Manager

On August 1, 2017, the State Nuclear Regulatory Inspectorate of Ukraine [SNRIU] approved Holtec-built Chernobyl's giant fuel storage facility [called ISF-2] for an *integrated systems test*. This cold testing phase is expected to transition to hot pre-commissioning testing in December of this year leading to fuel loading beginning in March 2018. The constructed facility, a proud symbol of Holtec's construction management expertise, may be viewed at: <http://filex.holtec.kiev.ua/en/package/373090612>.

A complex dry storage program begun in 1997 by EBRD that Holtec took over after Areva's withdrawal in 2007 features the world's largest fuel dismemberment facility (pictured on the top left) including a *hot cell* for RBMK fuel. Back-fitting the state-of-the-art systems in the existing Processing Building, with its substantially obsolesced and long disused equipment and machinery ravaged by over a decade of Ukraine's fierce winters, turned out to be far more complex than was initially envisioned. The plethora of daunting technical and regulatory challenges that had to be overcome and hundreds of thousands of person-hours applied to reach this final regulatory approval makes August 1 a memorable day in the annals of our Company.

In addition to leading the world in size, the ISF-2 project has bestowed new technologies to the nuclear industry that includes the first *double wall canister* design (now adopted by other users) and a Forced Gas Dehydration system (in use at over two dozen nuclear plants) that has turned out to be indispensable to dry waterlogged RBMK fuel. The achievement of this major milestone owes in large measure to the unstinting support of the Chernobyl's and EBRD's leadership and the perseverance of Holtec's engineering and manufacturing organizations, our

Chernobyl project team and our principal contractors - Ukraine's UTEM, Germany's BNG and Italy's Maloni.

"We salute our ultimate client, the Assembly of Donorsⁱ, on whose behalf the EBRD administers this project, for reposing their confidence in our Company to navigate this project through the many unique challenges that had thwarted its success in the past," says Holtec's Senior Vice President Riaz Awan.

Visiting the site on the day of the regulator's approval, EBRD's Director of Nuclear Safety Department, Mr. Vince Novak and ISF-2 Operations Team Leader Mr. Steve White, were suitably impressed with the project's status with Mr. Novak stating, "The commencement of the testing today authorized by the Ukrainian Nuclear Regulator is of course a significant milestone and clearly represents a tremendous joint effort that has been achieved."

Chernobyl's General Director, Mr. Igor Gramotkin concurred stating, "I am impressed with the progress that has been made by Holtec . . . I am extremely pleased."

"This is a red-letter day for our silent heroes numbering over 200 who have toiled and continue to toil tirelessly at the Chernobyl site, and at our operation centers in Kiev, Camden, Pittsburgh and Orrville (Ohio)," write Messrs. Viebrock and Bagdonavicius in their joint message to the geographically dispersed Holtec work force dedicated to the ISF-2 project.



*Riaz Awan, Senior Vice President,
Holtec International & Executive
Sponsor of the ISF-2 Project*



*James Viebrock, ISF-2 Project
Director*

ⁱ The assembly of donors consists of: NSA, Belgium, Canada, Denmark, European Union, Finland, France, Germany, Italy, Japan, the Netherlands, Norway, Russia, Sweden, Switzerland, the United Kingdom, Ukraine and the United States.