

**INFORMATION SUMMARY FOR THE PUBLIC  
ENERGOATOM CENTRAL SPENT NUCLEAR FUEL STORAGE FACILITY**

Host Country:	Ukraine
Name of Insured Investor:	Central Storage Safety Project Trust, a Delaware statutory trust (the “Insured”).
Private Insurer Participation:	Private market political risk insurance is not available for this Project on terms sufficient for the Project’s viability.
Project Description:	Development and construction of the Central Spent Nuclear Fuel Storage Facility (the “Facility”), located in the Chernobyl Exclusion Zone.
Investment Amount:	The investment amount is \$250 million.
Investment Type:	The investment type is debt. Specifically, the Insured will lend \$250 million to the Foreign Enterprise.
Proposed Insurance:	OPIC will issue Breach of Contract for Capital Markets political risk insurance (“BOC Coverage”), a form of expropriation coverage that insures against the risks of (1) nonpayment of an arbitral award by the Foreign Enterprise and the Government of Ukraine (“GOU”), and (2) denial of justice (“DOJ”) by the GOU.
Total Project Costs:	Approximately \$410 million.
Foreign Enterprise:	State Enterprise National Nuclear Energy Generating Company (the “Foreign Enterprise”)
<b>Policy Review:</b>	
U.S. Economic Impact:	The Project is not expected to have a negative impact on the U.S. economy or employment. U.S. procurement associated with the Project is expected to have a positive impact on U.S. employment. U.S. procurement associated with this Project is for storage, transfer and transportation canisters, engineering services, labor, and related equipment being supplied by Holtec International (“Holtec”). The Project is expected to have a positive, five-year U.S. balance of payments impact.
Developmental Effects:	This Project is expected to have a highly developmental impact by creating a safe environment for processing, storing, and safeguarding significant quantities of nuclear spent fuel. Once fully operational, the Project will store an estimated 169,000 tons of spent nuclear fuel per year on average. The spent nuclear fuel storage capabilities created by the Project will help reduce Ukraine’s reliance on Russia for this service. The Project will result in almost \$50 million in annual avoided costs for the Foreign Enterprise, while ensuring that the spent nuclear fuel is stored safely and appropriately monitored. These annual cost savings will significantly benefit the fiscal position of both the Foreign Enterprise and Ukraine. The Project will help Ukraine achieve several key objectives, including increasing its energy security, improving its energy infrastructure, and improving its fiscal position.
Environment:	<b>Screening:</b> The Project has been reviewed against OPIC’s categorical prohibitions and determined to be eligible. The Project has been screened as Category A because of the potential for increased radiation exposure of workers and the public from normal operations and transportation activities and from transportation and Facility accidents. The most significant potential health effects resulting from public and worker exposure radiation exposure are latent cancer fatalities, non-fatal cancers, and genetic effects.

**Applicable Standards:** OPIC’s environmental and social due diligence indicates that the Project will have impacts that must be managed in a manner consistent with the following International Finance Corporation’s (“IFC”) 2012 Performance Standards (“PS”):

- PS 1: Assessment and Management of Environmental and Social Risks and Impacts;
- PS 2: Labor and Working Conditions;
- PS 3: Resource Efficiency and Pollution Prevention; and
- PS 4: Community Health, Safety, and Security.

In addition, the Project is subject to Ukrainian regulations, including regulations related to nuclear safety, which are based on international standards and guidelines of the International Atomic Energy Agency (“IAEA”). Key, applicable IAEA Standards address management systems, safety fundamentals, safety assessments, radiation protection and safety of radiation sources, site evaluation for nuclear installations, safe transport of nuclear materials, radioactive waste, storage of spent nuclear fuel, decommissioning of facilities, and preparedness and response for nuclear or radiological emergencies.

**ESIA Disclosure:** The Environmental Impact Assessment, Feasibility Study and supplemental materials for the Project were disclosed on OPIC’s website on June 28, 2017. The public comment period ended on August 14, 2017. No comments were received by OPIC.

**Site Visits:** OPIC’s environmental and social due diligence included site visits to the Holtec manufacturing facility in Turtle Creek, Pennsylvania, the Foreign Enterprise headquarters in Kiev, Ukraine and the Project site located in the Chernobyl Exclusion Zone. During the site visit to Holtec’s cask manufacturing facility in Turtle Creek, OPIC reviewed the safety features built into the cask design and their compliance with the U.S nuclear regulatory requirements. In addition, OPIC conducted a tour of Holtec’s cask manufacturing facility. During the meetings with the Foreign Enterprise in Kiev, OPIC team reviewed the Project details and radiation safety features with the Foreign Enterprise’s Technical Director and his technical team. OPIC also met with the State Nuclear Regulatory Inspectorate of Ukraine (“SNRIU”) to get feedback on the Foreign Enterprise’s safety performance.

**Environmental and Social Risks and Mitigation:** Members of the public and workers could be exposed to increased radiation during normal operations of the Facility, normal transport of spent fuel assemblies from nuclear power plants (“NPPs”) in Ukraine to the Facility and during accidents. Worst case accident scenarios examined in the analysis include a “Design Basis Accident with Maximum Consequence”, which was defined as release of radiation from the Multi-Purpose Cask (“MPC”) surface, and a “Beyond Design Basis Accident”,

which was defined as damage to all fuel elements combined with MPC depressurization.

The Foreign Enterprise has demonstrated, and the SNRIU and the Insured's independent nuclear engineer have confirmed, that in normal operations and transport and during Design Basis Accidents and Beyond Design Basis Accidents, the Project will be able to meet the following radiation exposure limits:

- Personnel: Per Order No. 940 by the Chernobyl NPP State Joint Venture, 20.12.2013, the reference level (effective dose) for employees working within the Chornobyl Exclusion Zone is 11 mSv/year for external exposure and 3.0 mSv/year for internal exposure.
- Public: Per Basic Sanitary Rules for Assurance of Radiation Safety of Ukraine (OSPU DSP 6.177-2005-09-02) the reference level (effective dose) for members of the public is 1 mSv/year.

The Foreign Enterprise has adopted a four-tiered system that provides defense in depth (a multi-level system of sequential, independent provisions such that if one level were to fail then subsequent levels of protection would be available).

Tier 1 includes measures that create conditions which prevent incidents and accidents. This has been accomplished by selecting an appropriate site in the Chornobyl Exclusion Zone, development of Facility design using a conservative approach, quality assurance controls, internationally-accepted operating procedures to ensure safety, maintenance of safety-critical systems, selecting qualified and certified personnel, and establishment of a nuclear safety culture.

Tier 2 includes measures to prevent accidents which the Project has been designed to withstand. Accidents for which the Project has been designed include extreme winds and tornadoes, snowfall, temperature swings (-40 degrees Celsius to +40 degrees Celsius), explosion, earthquakes, and an airplane crash. Other events included free drop of the cask (from 9 meters), puncture, engulfing in fire, and submerging under 200-meter water depth. Measures to mitigate impacts of such accidents include timely identification of deviation from design-based limits and taking corrective actions using an efficient management system equipped with technical and organizational measures.

Tier 3 includes measures taken to respond to Design Extension Conditions (Beyond Design Based Accidents), which include destruction of fuel elements in the casks and the loss of cask integrity. The Foreign Enterprise has developed measures to prevent and control such incidents through physical barriers and recovery of fuel assemblies and then maintaining them under a permanently cooled environment.

Tier 4 measures address planning for worker and public protection through an emergency response framework, which will be coordinated with Chornobyl Exclusion Zone management. Project facilities will be under surveillance around

	<p>the clock and mock drills will be conducted to test the effectiveness of the emergency response framework.</p> <p>The Holtec cask system provides the main containment and shielding technical control for the Project. Similar Holtec systems have been licensed for use in the United States and Europe. Holtec’s quality assurance/quality control system will apply to all equipment and systems in the Project that are important to safety.</p> <p>The Foreign Enterprise is continuously supervised by SNRIU, and SNRIU and the Foreign Enterprise is routinely audited by IAEA and Euratom.</p>
<p>Social Assessment:</p>	<p>The Project will have impacts that must be managed in a manner consistent with the following International Finance Corporation’s (IFC) 2012 Performance Standards (PS), OPIC’s Environmental and Social Policy Statement, and applicable local laws.</p> <p>OPIC’s statutorily required language regarding the rights of association, organization and collective bargaining, minimum age of employment, and prohibition against the use of forced labor will be supplemented with provisions concerning non-discrimination, hours of work, the timely payment of wages, and hazardous working conditions. Standard and supplemental contract language will be applied to all workers of the Project, including contracted workers.</p> <p>The Foreign Enterprise has in place a human resources management system that meets the applicable standards. The system includes ethics policies, public and employee grievance mechanisms, health and safety policies, and a collective bargaining agreement that applies to all Foreign Enterprise employees. Contracted workers on the Project will be covered by the relevant contracting company’s human resources policies and employment contracts, which are expected to be commensurate to the risks of the Project.</p> <p>Initial stakeholder consultation occurred in Slavutich, Ivankiv, and Polissya in 2008, and the Foreign Enterprise disclosed its plans for construction and operations of the Facility. In addition, the Project’s details were disclosed in national newspapers. Since 2008, public comments and enquiries have been solicited through the Foreign Enterprise’s website. The Foreign Enterprise has an established website where it commits to posting updates on Project developments and to maintaining a channel through which the public may request additional information. This website also hosts information on accessing the public grievance mechanism.</p> <p>This review covers the commensurate human rights risks associated with spent nuclear fuel rod storage within the Chernobyl Exclusion Zone in Ukraine.</p>