



**SE Ignalina NPP**

# **Overview of the INPP building demolition design / procedure descriptions development, and procurement of demolition work in 2020–2025**



Decommissioning of Ignalina NPP is  
co-financed by the European Union

# *Improvement of infrastructure – dismantling / demolition of unused objects and site renewal is one of the strategic objectives of INPP*



In order to implement Ignalina Nuclear Power Plant Final Decommissioning Plan (hereinafter – FDP) objectives – the area of the enterprise will be improved in such a way that the territory will be renewed and returned to its original condition considering the rational use of decommissioning funds. The buildings that are not applicable for the secondary use are planned to be demolished in the nearest future, according to the funding provided for this purpose.





## Controlled area, supervised area and sanitary protection zone

The INPP territory is divided into controlled area, supervised area and sanitary protection zone.

**Controlled area** – a defined area in which specific rules for protection against ionizing radiation and (or) radioactive contamination are applied, and access to which is controlled.

**Supervised area** – a defined area not designated as a controlled area but for which occupational exposure conditions are kept under review, even though specific protection measures or safety provisions are not normally needed. In the case of Ignalina NPP as Nuclear Facility (NF), the boundary of the supervised area coincides with the boundary of physical security (fencing).

**Sanitary protection zone** – a sanitary protection zone defined around a nuclear facility. Size requirements of sanitary protection zones of nuclear facilities, as well as the special land use conditions applied to the mentioned zones are determined by the Law of the Republic of Lithuania on special land use conditions.





# In the year 2020, INPP is planning to purchase protected area buildings demolition work, including design services

## Building 161 – Bitumen warehouse

Total building area – 456 m<sup>2</sup>

Height – 9.6 m

Building volume – 3335 m<sup>3</sup>

Built up area – 495 m<sup>2</sup>

## Building 161/1 – Two metal tanks site

Tanks volumes – 100 and 120 m<sup>3</sup>

Site area – 134 m<sup>2</sup>

Building category – **special**

Buildings are located at the INPP supervised area

## It is planned to purchase

Buildings demolition design development services and demolition work

## Performance of work

According to BSR-1.5.1-2015 “Decommissioning of Nuclear Facilities”:

Demolition technologies shall be selected in such a way that the demolition work do not damage the communications and engineering networks of the nuclear facility (NF), the structures, systems, components important to the NF safety, physical barriers, and (or) do not disrupt the functioning of the structures, systems and components important to the NF safety, including physical safety systems, at the same time the NF safety functionality, as well as NF emergency preparedness shall be ensured.

It shall be assessed and ensured that demolition work will not negatively affect the nuclear, radiation and physical safety and access to communication roads and transport routes on the NF site, including the operation of the NF (if any) and decommissioning of the NF which are existing on the same site.



# In the year 2020, INPP is planning to purchase buildings demolition work, including design services

## Building 75 – Oxygen gas station

Total area – 671 m<sup>2</sup>, height – 8.5 m, volume – 5926 m<sup>3</sup>

Building category – **special**

Building is located at the INPP supervised area

## Building 75A – Household building

Total area – 327 m<sup>2</sup>, height – 4.6 m, volume – 1517 m<sup>3</sup>

Building category – **non-special**

Building is located at the INPP sanitary zone

## It is planned to purchase

Demolition design development services and demolition work



In the year 2020, INPP is planning to purchase the demolition work of the complex of buildings at Mantvilų str. 6, including design services

### Industrial building No. 4

Total area – 4317 m<sup>2</sup>

Height – 8.6 m

Volume – 40906 m<sup>3</sup>

Built up area – 4460 m<sup>2</sup>

Building category – **special**



### Administrative building No. 4a

Total area – 646 m<sup>2</sup>

Height – 9.7 m

Volume – 2845 m<sup>3</sup>

Built up area – 319 m<sup>2</sup>

Building category – **non-special**





In the year 2020, INPP is planning to purchase the demolition work of the complex of buildings at Mantvilų str. 6, including design services

### Cold warehouse with the ramp No. 5

Total area – 1300 m<sup>2</sup>

Height – 6.5 m

Volume – 4124 m<sup>3</sup>

Built up area – 313 m<sup>2</sup>

Building category – **non-special**



### Compressor building No. 6

Total area – 280 m<sup>2</sup>

Height – 6 m

Volume – 2318 m<sup>3</sup>

Built up area – 313 m<sup>2</sup>

Building category – **special**



In the year 2020, INPP is planning to purchase the demolition work of the complex of buildings at Mantvilų str. 6, including design services



### **Building 6A – Household building**

Total area – 418 m<sup>2</sup>  
Height – 3.4 m  
Volume – 1784 m<sup>3</sup>  
Built up area – 524 m<sup>2</sup>

Building category – **non-special**



### **Access point**

Total area – 30.27 m<sup>2</sup>  
Height – 3.6 m  
Volume – 159 m<sup>3</sup>  
Built up area – 44 m<sup>2</sup>

Building category – **simple structure**



### **Flammable liquids warehouse No. 7**

Total area – 36 m<sup>2</sup>  
Height – 2.8 m  
Volume – 120 m<sup>3</sup>  
Built up area – 49 m<sup>2</sup>

Building category – **simple structure**





In the year 2020, INPP is planning to purchase building reconstruction detail design development services and demolition work

## Administrative building 129

Total area of the building – 8320.99 m<sup>2</sup>, height – 26.50 m

The building is connected with the building 130/2 via gallery 174V

Building category – **special**

The building is located in the INPP controlled area

- *Currently, the technical design for demolition of the building 129, security perimeter, and reconstruction of the building 130 has been developed, on the basis of which the public procurement of the detail design development service and the reconstruction and demolition work is being organized.*



# In the year 2021, INPP is planning to purchase building demolition work, including design services

**Building 140/3 – Warehouse and household premises building with gallery which are used by the enterprise and contractors organizations**

Building area – 594 m<sup>2</sup>

Height – 5.2 m

Volume – 2760 m<sup>3</sup>

Built up area – 683 m<sup>2</sup>

Building category – **special**

The building is located in the INPP supervised area

**It is planned to purchase**

Demolition design development services and demolition work



# In the year 2021, INPP is planning to purchase building demolition work, including design services

## **Warehouse building 260 with access area**

Total area of the building – 531 m<sup>2</sup>

Height – 6.2 m

Volume – 3483 m<sup>3</sup>

Built up area – 571 m<sup>2</sup>

Building category – **non-special**

The building is located in the INPP supervised area

## **It is planned to purchase**

Demolition procedure development services and demolition work





# In the year 2022, INPP is planning to purchase NF buildings demolition work, including design services

## **Reactor emergency core cooling system tanks buildings 117/1; 117/2 together with the overpass gallery 173/2 (from the building 101/2 to the building 117/2)**

Total area of the building – 2158,58 m<sup>2</sup> / 1766 m<sup>2</sup>

Height – 14.40; 20.40, 21.3 m

Volume – 15749 m<sup>3</sup> / 11639 m<sup>3</sup>

Built up area – 915 m<sup>2</sup> / 858 m<sup>2</sup>

The building is located in the INPP controlled area

Building category – **special**

## **It is planned to purchase**

Demolition design development services and demolition work



In the year 2023, INPP is planning to purchase building demolition work, including design services

### Transformer inspection tower (Building 103)

Total building area – 439 m<sup>2</sup>

Height – 26 m

Volume – 11660 m<sup>3</sup>

Built up area – 472 m<sup>2</sup>

Building category – **special**

The building is located in the INPP supervised area

### It is planned to purchase

Demolition design development services and demolition work



# In the year 2023, INPP is planning to purchase building demolition work, including design services

## Oil facility operating unit with oil drainage tank (Building 109)

Total building area – 748 m<sup>2</sup>, height – 7.2 m, volume – 5159 m<sup>3</sup>, built-up area – 494 m<sup>2</sup>

Building category – **special**

The building is located in the INPP supervised area

### It is planned to purchase

Demolition design development services and demolition work





# In the year 2023, INPP is planning to purchase building demolition work

## Oil warehouse with oil pipes overpass (Building 110)

Building area – 1173 m<sup>2</sup>

The building is located in the INPP supervised area

Building category – **simple structure**

### It is planned to purchase

Construction work technology design. Building demolition work



In the year 2024, INPP is planning to purchase demolition work of buildings located in the supervised area, including design services



### **Planned demolition design development services and demolition work**

Building 137 – Nitrogen and oxygen station (total area – 3703 m<sup>2</sup>) together with the following structures on the site:

Garage 137B

Oil above ground tank 137V (material – metal, building volume – 28 m<sup>3</sup>)

Coated metal products storage shelter 137G

In the year 2025, INPP is planning to purchase demolition work of buildings located in the supervised area, including design services



Turbo compressor station 138 (special building)

Cold water tank (concrete) 139B, volume – 2000 m<sup>3</sup> (simple structure)

Hot water tank (concrete) 139V, volume – 2000 m<sup>3</sup> (simple structure)



In the year 2025, INPP is planning to purchase demolition work of buildings located in the supervised area, including design services



Technical water supply pumping stations with belongings 120/1; 120/2 – special building

In the year 2025, INPP is planning to purchase demolition work of buildings located in the controlled area, including design services



Low salted water filling tanks 152/1A, 152/1B, 152/2A and 152/2B (special buildings)



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## Challenges today. Responsibility for ages



Decommissioning of Ignalina NPP is  
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